Supporting Statement: U.S. Department of Energy Customer Electricity Data Access and Control Questionnaire OMB Control Number 1910-5164

This supporting statement provides additional information regarding the Department of Energy (DOE) request for processing of the proposed information collection, Customer Electricity Data Access and Control Questionnaire. The numbered questions correspond to the order shown on the Office of Management and Budget (OMB) Form 83-I, "Instructions for Completing OMB Form 83-I."

A. Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the information collection.

Many consumers have insufficient access to their electricity usage data. Among those who do have access to their data, some are denied necessary control to share it with third parties who might help them develop energy savings strategies. Because of these inadequacies, building and home owners are unable to capitalize on energy savings opportunities, determine savings that could result from building improvements, or verify savings if improvements have been undertaken. An example of a missed opportunity is the increasing number of companies that offer software tools to help homeowners and commercial building owners visualize and understand their energy consumption data. Often these tools cannot be used because many of the nation's 3,000+ utilities offer limited access to energy usage data or only provide it in inflexible formats, such as embedded in non-machine readable PDFs. The National Institute of Standards and Technology (NIST) is working with industry to develop standard machine-readable formats for energy information, but does not have an effective way to track how many consumers have access to their own information delivered according to these standards.

In 2011, a joint memo from the White House, U.S. Department of Energy (DOE), U.S. Department of Agriculture (USDA), U.S. Department of the Interior (DOI) and National Institute of Standards and Technology (NIST) announced that DOE would undertake as part of the grid modernization initiatives the production of a "crowd-sourced" map (a map in which the aggregate content is generated from the contributions of many individuals) to track progress on efforts to improve consumer access to and control of their energy usage data. To meet this objective, DOE has developed a questionnaire for utilities to provide information about their data access services.

The authority for the data collection is derived from the following provisions:

Section 13(b) of the Federal Energy Administration Act of 1974 (FEA Act), as amended, codified at 15 U.S.C. § 772(b) , outlines the types of individuals subject to the data

collection authority delegated to the Administrator and the general parameters of the type of data, which can be required.

Section 1301 of the Energy Independence and Security Act of 2007 (EISA), as amended, codified at 42 U.S.C. § 17381, outlines the policy on modernization of electricity grid. Provision (8) specifically provides the justification for pursuing this information collection.

2. <u>Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection</u>

DOE has constructed a web-based questionnaire device that generates "crowd-sourced" national maps based on information gathered from electricity providers. The maps inform local, state, corporate and federal agencies of areas within the country where individuals and businesses have limited access to their energy usage data or limited ability to share their data with third parties for auditing. This assists consumers and other stakeholders developing strategies for improving overall access to energy usage data and design of energy savings programs.

DOE uses this information to support activities of the State Energy Efficiency Action Network (SEE Action) Customer Information and Behavior Working Group. SEE Action (seeaction.energy.gov) is a state and local effort facilitated by DOE and the Environmental Protection Agency that helps states, utilities, and other local stakeholders take energy efficiency to scale. The Customer Information and Behavior Working Group works with state and local governments to change residential energy consumption behavior by using information and feedback. The information generated by this collection also informs the effort to create a Home Energy Score to educate homebuyers on the energy savings they can expect when purchasing a home. DOE also uses this information to fashion education efforts to be undertaken by smartgrid.gov, such as raising awareness of opportunities and challenges to installing smart meters.

To collect the necessary information to populate the maps, DOE will send an email to qualified representatives from each electricity provider requesting that they complete the questionnaire. The Energy Information Administration (EIA) and Edison Electric Institute (EEI) have agreed to cooperate with DOE to identify or contact the entire respondent universe.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Responses are submitted electronically via an online questionnaire device (http://en.openei.org/wiki/OpenEI:Utility_data_access_questionnaire). The National Renewable Energy Laboratory (NREL) collects the responses through a web portal for processing and storage. The responses automatically populate a data set, which is then analyzed and processed to generate a series of maps. Because the collection is done electronically and the results are automatically published, utilities are able to quickly view and verify their results.

4. Describe efforts to identify duplication.

DOE carefully searched for surveys conducted by other agencies that might duplicate the Customer Electricity Data Access and Control Questionnaire. This search resulted in a list of electric power-related data collections that provide some information about consumer access to electricity usage data, both in the Federal government and in private industry.

Based on analysis of these collections DOE concludes that the "Customer Electricity Data Access and Control Questionnaire" is a unique program. Neither industry nor the U.S. government collects comprehensive information regarding customer access and control of electricity usage data. Furthermore, we discovered no evidence that similar presentation of the information collected (a series of national maps that visually represent customer access and control of electricity usage data) is currently available to the public.

5. <u>If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.</u>

According to EIA, there are more than 3,000 electricity providers nationwide that make up the respondent universe for this collection. Of those, many qualify as small businesses. To minimize the burden on these organizations, DOE has consulted with the U.S. Energy Information Administration (EIA), Edison Electric Institute (EEI) and National Rural Electric Cooperative Association (NRECA) as well as various energy experts to simplify and streamline the questionnaire. The user-friendly web portal for carrying out the questionnaire further reduces the burden by reducing the need for mail or telephone calls.

6. <u>Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.</u>

This information collection request is specifically designed to make consumers aware of what energy use information they currently have available to them. The data gathered is autoprocessed by NREL, reviewed by DOE and used to inform electricity consumers and the broader public for the purpose of determining their energy savings options. Access to this information is critical for estimating market opportunities for third party energy management professionals to work with consumers to maximize their energy saving opportunities. Preventing DOE from providing this information would deny consumers and various industry-related firms' access to information that helps reduce the national energy cost burden. Furthermore, DOE would be limited in its ability to expedite expansion of a smart grid, facilitate much-needed energy savings and meet the Vice President's goal of growing the green job workforce through retrofitting efforts. Constraining the frequency of the data collection to less often than once per year would reduce DOE's ability to document rapid changes occurring in the electricity industry.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines. (a) requiring respondents to report information to the agency more often than quarterly; (b) requiring respondents to

prepare a written response to a collection of information in fewer than 30 days after receipt of it; (c) requiring respondents to submit more than an original and two copies of any document; (d) requiring respondents to retain records, other than health, medical government contract, grant-in-aid, or tax records, for more than three years; (e) in connection with a statistical survey, that is not designed to product valid and reliable results that can be generalized to the universe of study; (f) requiring the use of statistical data classification that has not been reviewed and approved by OMB; (g) that includes a pledge of confidentially that is not supported by authority established in stature of regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; (h) requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

The data are being collected consistent with the guidelines in 5 CFR 1320.5.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5CFR 320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken in response to the comments. Specifically address comments received on cost and hour burden. Describe efforts to consult with persons outside DOE to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or report.

This proposed agency information collection was published for comments in the Federal Register Thursday, May 24, 2012, Volume 77, Number 101, page 31000 (60-day Notice) and Thursday, February 14, 2013, Volume 78, Number 31, pages 10613-10614 (30-day Notice).

DOE received only 1 response during the 60-day Federal Register Notice period. That response was a request from Paul Zummo for a copy of the collection instrument. It was posed as follows:

I am a research analyst with the American Public Power Association, the trade association that represents the nation's 2,000 publicly owned electric utilities. We are determining whether or not we would like to comment on the item from the Federal Register Notice of May 24, Vol. 77 No. 101, with regards to the DOE's openei.org site (comments due July 23, 2012). It would help if we could look at the questionnaire that utilities complete on the site. As we are not a utility, we do not have access to the questionnaire. Could you possibly send me a PDF or Word copy of the questionnaire, or direct me to the link where we can take a look at it?

DOE response: DOE provided the collection instrument and no subsequent comments were made.

9. Explain any decision to provide any payment or gift to respondents, other than reenumeration of contractors or grantees.

No payments or gifts are made to respondents for completing this questionnaire.

10. <u>Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.</u>

DOE will clearly communicate to respondents that it is responsible for treating information according to U.S. law and regulations. Those considered are:

- 1. The Freedom of Information Act (FOIA), (5 U.S.C. 552)
- 2. The Department of Energy, Freedom of Information Act (FOIA) Regulations, (10 C.F.R. 1004)
- 3. The Paperwork Reduction Act, (44 U.S.C. 35)

Most elements collected are considered public information and are publicly released. The following statement will appear on the questionnaire website:

"The information reported will be considered public information and may be released in identifiable form. All information gathered will be subject to the Freedom of Information Act and the Paperwork Reduction Act."

The information collection instrument and database have undergone a Privacy Impact Assessment and have been approved by DOE cyber security staff.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why DOE considers the questions necessary, the specific uses to be made of the information., the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

There are no questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. The statement should indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, DOE should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample fewer than 10 potential respondents is desirable.

DOE estimates the total number of unduplicated respondents would be approximately 3,261. Two potential respondents have tested the questionnaire device. A total burden estimate of 20 minutes includes ten minutes to complete the questionnaire, six minutes for research and four minutes for follow-up on survey responses in the event there is a need to clarify any responses or edit information reported by DOE. Therefore, the overall annual burden for the entire respondent

universe for this questionnaire is estimated to be 1087 hours. Use of the web-based questionnaire application helps to minimize respondent burden.

Qualified employees should require little to no research time to respond to the questionnaire.

DOE is aware this is possibly an over-estimate of the burden for the following reasons:

- Some responses will not require all sections to be filled out based on clientele and services offered.
- Some responses will not require research or follow-up.

The total cost to the respondent universe is estimated to be \$72,676.82 (1087 burden hours times \$66.86 per hour). An average cost per hour of \$66.86 is used because that is the estimated average loaded (salary plus benefits) cost for an EIA employee in 2011. DOE assumes that the questionnaire respondent workforce completing surveys is comparable with the EIA workforce.

Total number of unduplicated respondents: 3261 Reports filed per person: 1 per EIA Utility ID

Total annual responses: 3261 Total annual burden hours: 1087

Average Annual Burden Per Collection: 1087 hours

Per Applicant: 20 minutes

13. <u>Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information.</u>

There are no capital and start-up cost components or operations and maintenance costs associated with this data collection. The information is maintained in the normal course of business. Therefore, other than the cost of burden hours, there are no additional costs for generating, maintaining, and providing the information.

14. Provide estimates of annualized cost to the Federal government.

Total cost per year for maintenance of the website and program support is estimated to be \$7,210 for 12 months (100 hours per year at a rate of \$72.10 per hour). An average cost per hour of \$72.10 is used because that is the estimated average loaded (salary plus benefits) cost for an American Association for the Advancement of Science (AAAS) Fellowship in 2012. The questionnaire support workforce is comparable with the AAAS Fellowship workforce. The total cost to the Federal government for a three year continuation is estimated to be \$51,630.

15. Explain the reasons for any program changes or adjustments reported in Items 13 (or 14) of OMB Form 83-I.

This is a request to reinstate an expired information collection. DOE has modified the collection instrument to better achieve the goals set forth in the original information collection request. The current collection instrument is designed to simplify the questions and collect more precise information.

Burden Hours increased due to the increase in length of the questionnaire. The estimate for completing the previous questionnaire was four minutes. Because questions were added, the estimated length of time required to complete the questionnaire has increased to ten minutes. The agency estimates that there will be 3,261 respondents per year so the additional six minutes of time to complete the questionnaire equates to an additional 326 annual burden hours for the collection.

Additional costs reflect maintenance expenses over the 3-year continuation period.

16. <u>For collections whose results will be published, outline the plans for tabulation and publication.</u>

The "Customer Electricity Consumption Data Access and Control Questionnaire" began releasing results in March 2012, in accordance with a request from the White House for timely data collection. Results are published to the NREL-managed DOE-funded website, OpenEI.org. Visitors to the website can find each of the maps available for viewing along with complementary information such as consumer tips for energy savings options.

Data will automatically be integrated into the map as the responses are received, processed and verified (as previously described). Changes made to responses will be tracked such that records could be generated with time stamps designating the period at which the data was collected.

17. <u>If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.</u>

DOE will display the expiration date on the questionnaire.

18. Explain each exception to the certification statement identified in Item 19 of OMB Form 83-I.

This submission meets all certification requirements of the "Certification for Paperwork Reduction Act Submissions," for OMB Form 83-11.