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Supporting Statement for Emergency Collection of Distribution Transformer Inventories

# Part A: Justification

**OMB No. 1910-XXXX**

*Collection Instrument:*

*PCII Survey*

August 2023

U.S. Department of Energy

Washington, DC 20585

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## Introduction

**Provide a brief introduction of the Information Collection Request. Include the purpose of this collection, note the publication of the 60-Day Federal Register Notice, and provide the list of forms within this collection.**

Pursuant to the Office of Management and Budget (OMB) procedures established in 5C.F.R Part 1320, Controlling Paperwork Burdens on the Public, the U.S. Department of Energy (DOE) is requesting that the proposed information of collection, Distribution Transformer Inventories, be processed as an Emergency Clearance Information Collection Request (ICR) as referenced in 5 C.F.R. § 1320.13, Emergency processing.

DOE has determined that the information must be collected prior to the time periods established under Part 1320 of the regulation, and that this information is essential to DOE’s ability to comply with its legal obligations under the Defense Production Act of 1950, Public Law 81-774, and Presidential Policy Directive 21, and to fulfill DOE’s role as Emergency Support Function #12 under FEMA’s National Response Framework. Specifically, DOE requires emergency approval for this collection to address a nation-wide distribution transformer supply shortage so that it can effectively respond to extreme weather this hurricane season.

## A.1. Legal Justification

**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.**

The Department of Energy (DOE) requires emergency approval for this collection of information to comply with its legal obligations under the Defense Production Act of 1950, Public Law 81-774 and Presidential Policy Directive 21, and to fulfill DOE’s role as Emergency Support Function #12 under FEMA’s National Response Framework. Specifically, DOE requires emergency approval for this collection to address a nation-wide distribution transformer supply imbalance.

On June 6, 2022, President Biden issued a determination pursuant to section 303(a)(5) of the Defense Production Act of 1950, as amended (50 U.S.C. 4533), that transformers and electric power grid components are industrial resources, materials, or critical technology items essential to the national defense.

Presidential Policy Directive 21 (PPD-21), Critical Infrastructure Security and Resilience (February 2013), establishes national policy on critical infrastructure security and resilience advancing a national unity of effort to strengthen and maintain secure, functioning, and resilient critical infrastructure. PPD-21 identifies DOE as the sector specific agency responsible for the energy sector in this directive and requires DOE to work with energy infrastructure owners and operators to take proactive steps that manage risk and strengthen the national energy security infrastructure.

FEMA’s National Response Framework details how the nation responds to all types of disasters and emergencies. Under Emergency Support Function #12, DOE, in relevant part, collects, evaluates, and shares information on energy system damage and estimations on the impact of energy system outages within affected areas.

Considering the above referenced legal authorities and the ongoing shortage of transformers, DOE has been coordinating with the National Security Council (NSC), the National Economic Council (NEC), and the Department of Homeland Security’s Cybersecurity and Infrastructure Security Agency. Although DOE has been working on solutions to address this shortage, significant information gaps remain. We are now in hurricane season, which is historically when utilities need to replace large numbers of distribution transformers if strong hurricanes hit the U.S. Furthermore, the summer brings risk of damage from wildfires. More intense summers can reduce the life of distribution transformers, and after record high temperatures this summer, there is additional concern on transformer impact. The electric utility trade associations estimated that their members have, on average, about two hurricanes worth of inventory, but that rough estimate does not take into account regional variation, the types of distribution transformers, and which categories of utilities have the lowest inventories.

To adequately prepare for peak hurricane season and the potential use of extraordinary authorities such as the Defense Production Act, DOE, NSC, and NEC require more data on the current distribution transformer inventories. Data must be requested of utilities no later than September 1.

## A.2. Needs and Uses of Data

**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.**

American energy sector stakeholders including utilities and equipment manufacturers have reported to DOE that while the supply of transformers is dwindling, demand, manufacturing lead times, and costs are dramatically increasing. DOE has verified this through various forms of research indicating that prior to 2020 demand for distribution transformers was 2-4%. During 2020 – 2021, there was 10% demand softening as projects were deferred due to COVID situation. Backlog of deferred projects alongside structural acceleration accounts for the current demand spike of 5-8%. As a result, the procurement lead times have increased by approximately 443%.

These conditions have resulted in supply chain constraints and continuing threats that are already slowing and likely to further endanger electricity grid expansion, economic growth in geographic areas that need to be serviced by new or expanded electricity delivery, grid hardening projects in the face of more frequent and extreme weather conditions, and post-emergency electricity delivery service recovery.

In the short term, the collected information will help DOE respond to emergencies that may arise during hurricane season. For example, before exercising authority under Title I of the Defense Production Act to prioritize delivery of limited distribution transformer supplies to specific utilities, DOE requires a baseline understanding of current inventories by region. The information will also help DOE assess where existing “transformer spare” sharing arrangements might be strained, putting timely restoration and recovery at risk. This is critical to identifying effective Federal response strategies under the National Response Framework, Emergency Support Function #12.

Furthermore, the collected information will help DOE refine mitigation efforts to address the supply chain challenges. The information will enable DOE to better understand and quantify the need and identify opportunities, working with equipment manufacturers and utilities, to drive innovative solutions. There is no (reliable, up-to-date) transformer inventory data on a regional or national level. This insight will help inform federal investment decisions and better align the Department’s efforts with the industry needs.

## A.3. Use of Technology

**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.**

One hundred percent (100%) of information collected will be submitted electronically. The information will be collected via the Protected Critical Infrastructure Information Management System (PCIIMS) internet portal managed by the Cybersecurity and Infrastructure Security Agency (CISA) of the Department of Homeland Security (DHS). The portal includes a [webpage](https://www.cisa.gov/resources-tools/programs/protected-critical-infrastructure-information-pcii-program/submit-critical-infrastructure-information) describing who can submit Critical Infrastructure Information (CII) for protection under the Critical Infrastructure Information Act of 2002, what kind of information can be submitted, and how to submit that information.

The burden on recipients is reduced by electronic reporting systems, which ensure submitted information is protected and managed in accordance with the provisions of the Critical Infrastructure Information Act of 2002.

## A.4. Efforts to Identify Duplication

**Describe efforts to identify duplication.**

Similar information by the respondents is not available from other sources. In discussions with DOE, industry has indicated that reliable, consolidated sources of this information are not available.

There is no unified information available as it pertains to the current inventory, projected demand, and other aspects related to transformers. Every electric utility has its own practices for documenting its transformer inventory and forecasting future needs (i.e., asset management). In addition, this information is in constant flux as companies adapt to increasing demand from natural disaster, climate change, and other stressors.

## A.5. Provisions for Reducing Burden on Small Businesses

**If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

This information collection request has no identified impact on small businesses and organizations. All utilities have a process for asset management and this information is readily available.

## A.6. Consequences of Less-Frequent Reporting

**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.**

If the collection is not conducted, DOE’s ability to efficiently respond to electricity sector emergencies during peak hurricane season and other extreme weather events that may occur soon will be severely impaired.

## A.7. Compliance with 5 CFR 1320.5

**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; or**

**(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.**

There are no special circumstances. The package is consistent with OMB guidelines.

## A.8. Summary of Consultations Outside of the Agency

**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.**

Due to the expedited timeframe for collecting this information, DOE is requesting a waiver for requesting comments from the public via the *Federal Register*. Notwithstanding the urgency, DOE coordinated with the White House and the Cybersecurity and Infrastructure Security Agency. DOE also held two convenings with electric trade associations to discuss the supply chain constraints on distribution transformer and the availability of data of asset management.

## A.9. Payments or Gifts to Respondents

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

There is no remuneration given for submission of any of the information in this collection.

## A.10. Provisions for Protection of Information

**Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

The information will be collected electronically via the Protected Critical Infrastructure Information Management System (PCIIMS) internet portal managed by the Cybersecurity and Infrastructure Security Agency (CISA) of the Department of Homeland Security (DHS). The portal includes a [webpage](https://www.cisa.gov/resources-tools/programs/protected-critical-infrastructure-information-pcii-program/submit-critical-infrastructure-information) providing detailed program information, instructions, and additional information resources for information submitters.

The use of PCIIMS ensures submitted information is protected and managed in accordance with the provisions of the Critical Infrastructure Information Act of 2002.

## A.11. Justification for Sensitive Questions

**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.**

No such sensitive questions are present, intended or otherwise anticipated in this collection.

## A.12A. Estimate of Respondent Burden Hours

**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.**

The estimated burden, expressed in burden hours, is the sum of burden, as estimated by DOE experts with industry knowledge, for the process that a typical utility will take to fulfill the request. There are approximately 3,000 utilities in the United States. DOE estimates that approximately 20% or around 600 utilities will respond to this request.

DOE estimates the burden hours (per respondent) for reading rules, questions and identifying internal resources to answer the questions to be half (.5) hour, gathering the information to be (1) hour, and filling out documents and submitting information to agency to be half (.5) hour.

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| --- | --- |
| **Table A1. Estimated Respondent Hour Burden** |  |
| **Form Number/Title (and/or other Collection Instrument name)** | **Type of Respondents** | **Number of Respondents** | **Annual Number of Responses** | **Burden Hours Per Response** | **Annual Burden Hours** | **Annual Reporting Frequency** |
|  Electric Utilities | Investor-owned utilities, municipalities, cooperatives and tribal electrical utilities |  600 | 600 |  2 | 1,200 |  1 |
| **TOTAL** |  |  600 | 600 |  2 | 1,200 |  1 |

## A.12B. Estimate of Annual Cost to Respondent for Burden Hours

**Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included under ‘Annual Cost to Federal Government’.**

Per the Bureau of Labor Statistics (USDL-22-1892, September 20, 2022, <http://www.bls.gov/news.release/ecec.nr0.htm>), private industry employer costs averaged $63.98 per hour worked for the professional, scientific, and technical services industry. Wages and salaries averaged $45.16 per hour worked and represented 70.6 percent of total compensation costs, while benefit costs averaged $18.82 and accounted for the remaining 29.4 percent.

|  |  |
| --- | --- |
| **Table A2. Estimated Respondent Cost Burden** |  |
| **Type of Respondents** | **Total Annual Burden Hours** | **Hourly Wage Rate** | **Total Respondent Costs** |
| Investor-owned utilities, municipalities, cooperatives and tribal electrical utilities | 1,200 |  63.98 | 76,776 |
| **TOTAL** | **1,200** |  | **76,776** |

## A.13. Other Estimated Annual Cost to Respondents

**Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information.**

There are no additional costs to be incurred by the respondents, beyond their time. The requested information is customary and a part of usual business operations for utilities.

## A.14. Annual Cost to the Federal Government

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

The estimated cost to the Government for this collection is $51,219. This amount was calculated by multiplying the hourly rate for the procurement and program personnel reviewing the responses by the total number of responses (600) by average review time of one hour plus survey preparation time 100 hours for the total of 700 hours. Cost per hour ($73.17) is based on an average of General schedule GS-12 and GS-13 hourly rate of $53.07 for 2023, plus the 36.25% civilian personnel full fringe benefit rate taken from OMB Memo M-08-13.

## A.15. Reasons for Changes in Burden

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

This is a new emergency collection and thus this is not applicable.

## A.16. Collection, Tabulation, and Publication Plans

**For collections whose results will be published, outline the plans for tabulation and publication.**

DOE will not publish individual data. Aggregated data may be published in the future.

## A.17. OMB Number and Expiration Date

**If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.**

This collection is not seeking approval to not display the expiration date for OMB approval of this information. DOE will display the OMB Control number and expiration date upon OMB’s approval of the information collection.

## A.18. Certification Statement

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

The Department is not requesting any exceptions to the Certification Statement.