



*Independent Statistics & Analysis*  
U.S. Energy Information  
Administration

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# Supporting Statement for Electric Emergency Incident and Disturbance Report

**Part A: Justification**

**OMB No. 1901-0288**

*Form OE-417, Electric Emergency Incident and Disturbance Report*

May 3, 2018



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## Introduction

The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the U.S. Department of Energy (DOE). It collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding regarding energy and its interaction with the economy and the environment.

EIA is requesting a three-year extension with changes for Form OE-417, “Electric Emergency Incident and Disturbance Report.” The survey collects information on electric power emergencies, incidents, and disturbances. Response to this survey is mandatory and the survey is sponsored by the DOE Office of Electricity Delivery and Energy Reliability.

Entities within the jurisdiction of North American Electric Reliability Corporation (NERC) are required to report emergencies or qualifying events per the EOP-004-2 Reliability Standard. Currently reporting entities in the U.S. may submit a Form OE-417 in place of a NERC EOP-004-2; however, there were some criteria that required reporting under the EOP-004-2 standard that were not covered by Form OE-417. This caused confusion amongst industry stakeholders about which form to file and required industry stakeholders to train personnel on both the EOP-004-2 standard and Form OE-417.

## Terms of Clearance

“Prior to the next submission of this information collection, DOE is encouraged to work with FERC to explore options to promote data sharing in order to reduce any redundant recordkeeping and reporting burdens on the public.”

Per the Terms of Clearance (TOC) from the Notice of Action dated 3/17/2015, the U.S. Office of Management and Budget (OMB) required DOE to work with the Federal Energy Regulatory Commission (FERC) and NERC to integrate and align questions between the current NERC EOP-004-2 Reliability Standard, the draft NERC EOP-004-3 Reliability Standard, and Form OE-417. DOE worked closely with the NERC Standards Drafting Committee and FERC officials throughout the 2016 and 2017 period. The coordination effort between DOE, NERC, and FERC is discussed in further detail in section A.8. The resulting integration of the two forms satisfies the TOC and reduces reporting burden to industry stakeholders.

FERC and NERC have certified that Form OE-417 will meet NERC’s EOP-004 submittal requirements for U.S. NERC reporting entities.

## A.1. Legal Justification

### Legal Authority

The authority for these data collections is provided by the following provisions:

15 U.S.C. §772 outlines the types of individuals subject to the information collection authority delegated to the [Secretary] and the general parameters of the type of data which can be required. 15 U.S.C. §772(b) states:

“All persons owning or operating facilities or business premises who are engaged in any phase of energy supply or major energy consumption shall make available to the [Secretary] such information and periodic reports, records, documents, and other data relating to the purposes of this Act, including full identification of all data and projections as to source, time, and methodology of development, as the [Secretary] may prescribe by regulation or order as necessary or appropriate for the exercise of functions under the Act.”

15 U.S.C. 764(b) states that to the extent authorized by 15 U.S.C. §764(a), the Administrator shall;

- (1) advise the President and the Congress with respect to the establishment of a comprehensive national energy policy in relation to the energy matters for which the Administration has responsibility, and, in coordination with the Secretary of State, the integration of domestic and foreign policies relating to energy resource management;
- (2) assess the adequacy of energy resources to meet demands in the immediate and longer range future for all sectors of the economy and for the general public;
- (3) develop effective arrangements for the participation of State and local governments in the resolution of energy problems;
- (4) develop plans and programs for dealing with energy production shortages; ...
- (5) promote stability in energy prices to the consumer, promote free and open competition in all aspects of the energy field, prevent unreasonable profits within the various segments of the energy industry, and promote free enterprise;
- (6) assure that energy programs are designed and implemented in a fair and efficient manner so as to minimize hardship and inequity while assuring that the priority needs of the Nation are met;
- (9) collect, evaluate, assemble, and analyze energy information on reserves, production, demand, and related economic data;
- (12) perform such other functions as may be prescribed by law."

As the authority for invoking 15 U.S.C. §764(b), above, 15 U.S.C. §764(a) states:

“Subject to the provisions and procedures set forth in this Act, the [Secretary] shall be responsible for such actions as are taken to assure that adequate provision is made to meet the energy needs of the Nation. To that end, he shall make such plans and direct and conduct such programs related to the production, conservation, use, control, distribution, rationing, and allocation of all forms of energy as are appropriate in connection with only those authorities or functions-

(1) specifically transferred to or vested in him by or pursuant to this chapter;

(3) otherwise specifically vested in the Administrator by the Congress.”

Additional authority for this information collection is provided by 15 U.S.C. §790(a) which states;

“It shall be the duty of the Director to establish a National Energy Information System... [which] shall contain such information as is required to provide a description of and facilitate analysis of energy supply and consumption within and affecting the United States on the basis of such geographic areas and economic sectors as may be appropriate... to meet adequately the needs of...”

(1) the Department of Energy in carrying out its lawful functions;

(2) the Congress;

(3) other officers and employees of the United States in whom have been vested, or to whom have been delegated energy-related policy decision-making responsibilities;

(4) the States to the extent required by the Natural Gas Act [15 U.S.C. 717 et seq.] and the Federal Power Act [16 U.S.C. 791a et seq.].

"At a minimum, the System shall contain such energy information as is necessary to carry out the Administration's statistical and forecasting activities, and shall include... such energy information as is required to define and permit analysis of;

(1) the institutional structure of the energy supply system including patterns of ownership and control of mineral fuel and non-mineral energy resources and the production, distribution, and marketing of mineral fuels and electricity;

(2) the consumption of mineral fuels, non-mineral energy resources, and electricity by such classes, sectors, and regions as may be appropriate for the purposes of this chapter;

(5) industrial, labor, and regional impacts of changes in patterns of energy supply and consumption;

(6) international aspects, economic and otherwise, of the evolving energy situation; and

(7) long-term relationships between energy supply and consumption in the United States and world communities.”

Additional authority for invoking 15 U.S.C §790(a) is provided by the 16 U.S.C. §2601 which states:

The Congress finds that the protection of the public health, safety, and welfare, the preservation of national security, and the proper exercise of congressional authority under the Constitution to regulate interstate commerce require - . . .

(2) a program to improve the wholesale distribution of electric energy, the reliability of electric service, the procedures concerning consideration of wholesale rate applications ... the participation of the public in matters ... and to provide other measures with respect to the regulation of the wholesale sale of electric energy;

## A.2. Needs and Uses of Data

The electric power industry in the United States consists of traditionally regulated entities (also known as electric utilities), as well as non-traditional participants that include unregulated entities and electric power marketers. As of late 2015, there were over 2,000 traditionally regulated and unregulated entities and power marketers. However, the physical operation of the entire electrical system is handled by 107 Balancing Authorities (BA) located within the United States.

Form OE-417 enables DOE to monitor electric emergency incidents and disturbances in the United States (including all 50 States, the District of Columbia, Puerto Rico, U.S. Virgin Islands, and the U.S. Territories). By integrating the North American Energy Reliability Corporation (NERC) Form EOP-004 into Form OE-417, NERC will be able to utilize Form OE-417 to improve the reliability of the Bulk Electric System by monitoring events of reporting entities. The information will assist the government by helping to prevent the physical or virtual disruption of the operation of the critical electrical energy infrastructure.

DOE is the lead agency responsible for Emergency Support Function (ESF) #12 – Energy, under the National Response Framework, and the Sector Specific Agency (SSA) for Energy under Presidential Policy Directive (PPD) 21 and PPD 41. DOE’s Office of Electricity Delivery and Energy Reliability (OE) uses Form OE-417, “*Emergency Incident and Disturbance Report*” to monitor major incidents or potential incidents on electric power systems, and to conduct after-action investigations on significant interruptions of electric power or threats to the electric system reliability, which helps DOE meet its ESF #12, SSA, and national security responsibilities. The information is also used in developing legislative recommendations and reports to Congress; as well as inform Federal efforts developing policies to respond to electrical disturbances and protect critical national infrastructure.

The information submitted is also used by the DOE’s Office of Energy Policy and System Analysis, the Energy Information Administration, and other DOE offices with a need-to-know designation to analyze significant interruptions or potential interruptions of electric power.

## A.2.1 Overview of Data Uses

Form OE-417 enables DOE and NERC to monitor electric emergency incidents and disturbances so the U.S. Government may take steps to help prevent the physical or virtual disruption of the operation of critical electric power infrastructure. Form OE-417 is an alert mechanism and enables DOE to quickly respond to energy emergencies that may impact the nation's energy infrastructure. The analysis of the incident/disturbance data allows for the development of strategies to mitigate or prevent future electric power disruptions. As such, the timely initial filing of Schedule 1 of this form within 1 hour of the emergency incident is extremely important.

Emergency electric incidents and disturbances that lead to interruptions of power, such as rotating blackouts, could lead to disruptions of critical infrastructure. Critical Infrastructure that can be affected by electric incidents and disturbances include natural gas or petroleum product pipelines, petroleum refineries, water supplies, and telecommunications systems. The national security, economic prosperity, and the well-being of the U.S. depends on the continuing reliability of the nation's increasingly complex electric power infrastructure. Along with examining issues associated with insufficient capacity reserves, tracking disturbances that impact integrated generation and transmission facilities is an important task. Form OE-417 is a critical alert mechanism for informing DOE so that physical and virtual disruption of any critical infrastructure can be prevented or mitigated. Form OE-417 data was utilized in recent events such as the power outages caused by hurricanes Harvey, Irma, Nate, and Maria during the 2017 Hurricane Season. During these hurricanes DOE was alerted when there were major power outages. Form OE-417 allowed DOE to assess the specific cause of outages, how many customers were affected and the demand loss, as well as estimated time to restoration.

Form OE-417 is designed to identify and track emergency incidents from:

- Entities that have Balancing Authorities (BA) and/or regional Reliability Coordinator (RC) functions. They are responsible for the physical operations and reliability coordination.
- All electric utilities' physical and electronic (cyber) security, suspected, malicious, or intentional threats.

### A.2.2.1 Overview of Data Collection

Form OE-417 does not follow a reporting schedule because the requirement to report is event driven.

Reporting coverage for Form OE-417 includes all 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Territories. DOE is maintaining the reporting functions for electric utilities, BA, and RCs. Incident events reporting, such as suspected or actual threats, vandalism, and/or cyber-attacks or total loss of power, is required for all respondents. However, it is the expectation that few, if any, reports would be filed in any given year by most respondents. There are 119 NERC-established BA<sup>1</sup> and RC<sup>2</sup> entities that are responsible for the physical operations and reliability coordination of business

<sup>1</sup> There are 107 Balancing Authorities (BA) in the contiguous United States. Balancing Authorities are a defined NERC Functional Entity and is defined by NERC as the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

entities that file the form. All of these functions are located within existing electric utilities or in those business entities that were established by the Federal Energy Regulatory Commission (FERC).

The entities that have BA responsibilities are considered the primary filer of Form OE-417. They report information on individual load and counts of customers lost that come from the electric utilities found within their area. (Many of these electric utilities are full requirement or partial requirement customers of other electric utilities - they do not generate, but receive their power under one or more contracts; which are usually long-term agreements). DOE accepts joint filing activity where the BA and these electric utilities file a combined report or all information passed to the BA who then files a single report. An example of this activity would be cooperative power suppliers (generating and transmission) filing for their member distribution cooperatives. Another example would be joint filings by BA and the controlling RC. DOE requests notification from those entities that plan to file jointly and those electric utilities that want to file separately. Notification can be done at the time of the filing.

DOE continues to have the option to conduct special investigations of incidents affecting the electric power industry. Such investigations could involve one or more electric utilities, BAs, or other entities participating in the electric power industry. Any utility or business entity that participates in the electric power industry could be notified by DOE that they would need to provide technical information concerning a particular incident.<sup>3</sup> These special investigations are infrequent and the report of the investigations are released to the public.<sup>4</sup>

The following information to be collected on emergency events includes important details covering each major part of an electric power disturbance incident:

- 1) Cause(s) of an incident
- 2) Impact(s) of incident
- 3) Action(s) taken

### Uses of Data:

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<sup>2</sup>There are 12 Reliability Coordinators within the contiguous United States. The Reliability Coordinator is the entity with the highest level of authority and who is responsible for the reliable operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.

<sup>3</sup> The Federal Energy Administration Act of 1974 (Pub. L. No. 93-275) and the DOE Organization Act (Pub. L. No. 95-91) provide other authorities.

<sup>4</sup> The Department of Energy has initiated four special studies about incidents that happened in the 1990s. The three studies are: The Cold Weather Snap of 1992, The Electric Power Outages in the Western United States, July 2-3, 1996 (DOE/PO-0050), and the Report of the U.S. Department of Energy's Power Outage Study Team (DOE/PO - March 2000 Final Report); and the Final Report on August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations, April 2004

The information is used by the Department of Energy:

- To track electrical emergency incidents and disturbances on a timely basis;
- To answer queries from the Congress, the White House, the Department of Homeland Security, the Federal Bureau of Investigation, the Federal Emergency Management Agency, State Energy Offices, State Offices of Emergency Management, the electric power industry, and the general public;
- To monitor the electric power industry by providing situational awareness of electricity disruptions that could cause additional impacts;
- As input to Office of Electricity Delivery and Energy Reliability's Electric Disturbance Events (OE-417) Annual Summaries<sup>5</sup>;
- As input to the Energy Information Administration's Electric Power Monthly's Appendix B Major Disturbances and Unusual Occurrences<sup>6</sup>; and
- To identify incidents that may require a technical examination of the underlying problems that lead to the event.

The public summaries of Form OE-417 data users include electricity-related trade associations; independent system operators; electric utility companies; unregulated power companies; energy service providers; wholesale electricity traders; electrical equipment companies; numerous local, State, and Federal government agencies; environmental associations; consumer groups; financial analysts; and the news media. These organizations use this data for a variety of purposes including trend analysis, research on electricity disturbances, and as facts for public interest news stories.

### A.2.2.2. Summary of Modifications to Survey

Changes to Form OE-417:

- Included questions from the North American Electric Reliability Corporation (NERC) Form EOP-004 "Event Reporting Form" into Form OE-417 to reduce the burden on respondents and streamline responses. For NERC reporting entities registered in the United States; NERC has approved that Form OE-417 meets the submittal requirements for NERC and with the integration of additional questions from Form EOP-004, respondents will be able to complete Form OE-417 to satisfy both DOE and NERC requirements.
- Added a note indicating that "NERC has determined that, for U.S. NERC reporting entities, the new OE-417 form meets NERC's submittal requirements" (i.e. Form EOP-004) in the instructions.
- Reintroduced E-mail submissions; however, online submissions will remain the preferred method. Rewording of descriptions describing the criteria and timing for when a report should be filed.

<sup>5</sup> The Annual Summary of Form OE-417 events is available at: [https://www.oe.netl.doe.gov/OE417\\_annual\\_summary.aspx](https://www.oe.netl.doe.gov/OE417_annual_summary.aspx)

<sup>6</sup> Electric Power Monthly, Appendix B. Major Disturbances and Unusual Occurrences: <http://www.eia.gov/electricity/monthly/>

- Named the three categories of submission: Emergency Alert; Normal Report; System Report to provide better clarity and easy reference under “Criteria for Filing”.
- Aligned alert criteria 5 and 6 with NERC Form EOP-004 terminology.
- Addition of twelve new questions to reflect the 12 additional information that NERC collects or will collect from the criteria to be consistent with the reporting requirements for Form EOP-004 under “Criteria for Filing” section. The additional questions criteria are in a new category of submission called “System Report:”:
  - Damage or destruction of a Facility within its Reliability Coordinator Area, Balancing Authority Area or Transmission Operator Area that results in action(s) to avoid a Bulk Electric System Emergency.
  - Damage or destruction of its Facility that results from actual or suspected intentional human action.
  - Physical threat to its Facility, excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the Facility. Or suspicious device or activity at its Facility.
  - Physical threat to its Bulk Electric System control center, excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the control center, or suspicious device, or activity at its Bulk Electric System control center.
  - Bulk Electric System Emergency resulting in voltage deviation on a Facility; A voltage deviation of equal to or greater than 10% of nominal voltage sustained for greater than or equal to 15 continuous minutes.
  - Uncontrolled loss of 200 Megawatts or more of firm system loads for 15 minutes or more from a single incident for entities with previous year’s peak demand less than or equal to 3,000 Megawatts
  - Total generation loss, within one minute of: greater than or equal to 2,000 Megawatts in the Eastern or Western Interconnection or greater than or equal to 1,400 Megawatts in the ERCOT Interconnection.
  - Complete loss of off-site power (LOOP) affecting a nuclear generating station per the Nuclear Plant Interface Requirements.
  - Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).
  - Unplanned evacuation from its Bulk Electric System control center facility for 30 continuous minutes or more.
  - Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability affecting its staffed Bulk Electric System control center for 30 continuous minutes or more.
  - Complete loss of monitoring or control capability at its staffed Bulk Electric System control center for 30 continuous minutes or more.
- Re-termed line numbers 1 – 20 to line letters A – T to prevent confusion between line numbers and alert criteria.

- Added an alert status category called “System Report” was added, which will be filed by the later of 24 hours after the recognition of an incident or by the end of the next business day. This is to align with Form EOP-004. 4:00pm local time will be considered the end of the business day.
- The Electric Emergency Incident and Disturbance Report section, lines J, K, L were reorganized into “Cause, Impact, and Action Taken” for clarity and ease of use and additional items were added to align with NERC’s EOP-004 Reliability Standard.
- The burden per response for completing Form OE-417 is reduced from 2.16 hours to 1.8 hours based on findings from the results from cognitive research conducted by the U.S. Energy Information Administration.
- Form and instructions were updated to specify maintaining the continuity of the “Bulk Electric System” versus “the electric power system” in the “Criteria for Filing” section Line 8. This change is based on a comment provided during the 60-day comment period.
- The words “lines 13-17” were replaced with “lines M-Q” under the “Response Due” section, to match updated line labels on the form. This change is based on a comment provided during the 60-day comment period.
- A section was added to allow respondents to select whether the information provided in the Form is submitted to the North American Electric Reliability Corporation (NERC) and/or the Electricity Information Sharing and Analysis Center (E-ISAC).

The information collection in this supporting statement has been reviewed in light of applicable information quality guidelines. It has been determined that the information will be collected, maintained, and used in a manner consistent with the Office of Management and Budget (OMB), Department of Energy (DOE), Energy Information Administration (EIA), and North American Electric Reliability Corporation (NERC) information quality guidelines.

### A.3. Use of Technology

DOE introduced an online version of Form OE-417 form in January 2011 to give respondents an electronic reporting option. Since 2011, the online data system has been consistently updated and now features the ability for respondents to completely manage and tailor their Form OE-417 submission process to meet their unique needs.

The electronic reporting system features the ability to submit forms directly to the North American Electric Reliability Corporation (NERC) and the Electricity Sector Information Sharing and Analysis Center (E-ISAC) to meet NERC Reliability Standard requirements and all users receive a copy of his or her submitted form by email.

The online system has been upgraded in the past several years to support the ability of companies to manage all respondents from a single organization, in that, one company can have a user account for each individual responsible for filling out Form OE-417, with each user account under the organization’s account. The organization then has total visibility of all forms previously submitted and in-process of being drafted. The system can automatically populate data fields for updated submissions related to extended electric power disturbance events. In addition, the reporting system also automatically fills-in

the name and contact information for registered users. This reduces reporting burden so that a respondent only needs to report the data values that changed from the last submission.

DOE posted the form and instructions on the websites of the Office of Electricity Delivery and Energy Reliability (OE) and the Energy Information Administration (EIA). DOE is developing optional training modules and quick reference guides to further explain the features of the online system. In addition to submitting the form online respondents have the ability to submit by email or fax.

#### A.4. Efforts to Identify Duplication

DOE has determined that other sources cannot replace or approximate the timeliness or information coverage of the current Form OE-417.

The Federal Energy Regulatory Commission (FERC) has certified the North American Electric Reliability Corporation (NERC) to operate as the Electricity Reliability Organization under the Federal Power Act. Previously, FERC approved NERC Reliability Standard EOP-004-2, event reporting that requires entities under its jurisdiction to submit either an OE-417 or an EOP-004-2 event report on the occurrence of an event. It is expected that FERC will continue to certify that, for U.S. NERC reporting entities, Form OE-417 meets NERC's EOP-004 submittal requirements, including future versions of the EOP-004. DOE has worked closely with the NERC Standards Drafting Committee to integrate and align questions between the EOP-004 and Form OE-417.

The information collected on EOP-004-2 is the minimum subset information necessary for NERC to complete its Reliability Oversight mission. The EOP-004-2 Attachment 2 form does not collect the specific information collected on events through the current Form OE-417. DOE collects data to support both the notification of the Secretary of Energy to emergency energy events, as well to support emergency response and restoration activities under the Federal Emergency Management Agency (FEMA) Emergency Support Function 12 – Energy. FERC collects data to support regulatory and compliance activities under its jurisdiction. Additionally, entities are not required to submit EOP-004-2 Attachment 2 forms to the Department of Energy, thus creating a situational awareness gap for Federal Entities if Form OE-417 was not recertified. Finally, NERC has not publicly released system disturbance data collected under EOP-004-2 since 2009. NERC stopped publicly reporting the system disturbance event reports that they received in 2009. The event history can be found at the bottom of this page under System Disturbance Reports: <http://www.nerc.com/pa/rrm/ea/Pages/EA-Program.aspx>.

Form OE-417 is the critical alert mechanism for informing DOE about electrical emergency incidents or disturbances so the physical and virtual disruption of the operation of any critical infrastructure can be prevented. DOE officials address the information reported on a real-time basis. They inform policymakers and others about the significance, as appropriate. Form EIA-930 collects data on the operations of balancing authorities across the US. The posted data are used to monitor the current status and trends of the electric power industry, and to support enhancement of electric system operations. The data collected on Form OE-417 are on discrete system events, such as physical attacks, electrical islanding, and losses of electricity customers are not captured on Form EIA-930's hourly submissions.

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

The DOE is mindful of the need to minimize burden on small business, and designs its information collections so that small operations are not unduly affected. DOE has worked closely with NERC to reduce overall burden to potential respondents and Form OE-417 is not expected to impact small business.

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

DOE needs to be informed of all electric power disturbances and incidents meeting the threshold levels identified earlier so that it can take appropriate actions. Less frequent reporting will not provide the Federal government with the information it needs to fulfill its mandates.

The rapid evolution of information technology in the electric power industry has national security implications due to the interdependent networks of physical and information infrastructures.<sup>7</sup> Information technology has changed the way the Nation's business is transacted, the way government operates and the way government addresses national security.

Form OE-417 is the critical alert mechanism for informing DOE about electrical emergency incidents or disturbances so the physical and virtual disruption of the operation of any critical infrastructure can be prevented. DOE officials address the information reported on a real-time basis and inform relevant interagency partners, as appropriate including the Department of Homeland Security, the Federal Emergency Management Agency, and the Federal Bureau of Investigations, as well as the White House and others to provide information about the significance of an electricity disturbance.

Form OE-417 provides important real-time alert information to DOE, trend information, and is used in historical publications. Schedule 2 of Form OE-417 collects detailed information on system events, including specific locations of events (such as specific transmission circuits or substations impacted) or the sequence of events (for a physical attack event). This specific data would not be collected within Form EIA-930 data collection, which focuses on automated data collection of system operating data on a wide-area basis.

## A.7. Compliance with 5 CFR 1320.5

The data being collected are consistent with the guidelines in 5 CFR 1320.5, except for requiring respondents to initially report information soon after an incident or disturbance. See items A.2 and A.6 for justification for timing of reporting. A final report is due to DOE 72 hours after an initial report.

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<sup>7</sup> Emergency electric incidents and disturbances leading to interruptions of power, such as rotating blackouts, could lead to disruptions of critical infrastructures such as natural gas or petroleum product pipelines, water supplies, and telecommunications systems. The national security, economic prosperity and social well-being of the nation depends on the continuing reliability of our increasingly complex and interdependent infrastructures, a key one of which is electric power.

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

A request for comments from interested persons was solicited in a Federal Register Notice (FRN) describing the proposed extension and proposed modifications to each form. The notice was published in the Federal Register, 82 Fed. Reg. 157, 38899 (August 16, 2017). The notice and proposed versions of the survey forms were posted on EIA's website. Four comments were received in response to the August 16, 2017 FRN. The comments and EIA responses are contained in the Public Comments File.

DOE has worked closely with the NERC Standards Drafting Committee to integrate and align questions between Form EOP-004 and Form OE-417. As of July 2017, DOE held conference calls to discuss revisions to Form OE-417 on the following dates: September 7, 2016; November 17, 2016; December 7, 2016; January 19, 2017; February 6, 2017; and March 9, 2017. These conference calls were held with the industry chair of the NERC Standards Drafting Committee as well as other industry members of the Committee and NERC Staff. The conversations on January 19, 2017; February 6, 2017; and March 9, 2017 also included representatives from the Federal Energy Regulatory Committee (FERC) as the FERC Board of Commissioners approves revisions to the NERC Form EOP-004 Reliability Standard, including the current EOP-004-3 standard under consideration. As a result, the revised Form OE-417 is expected to meet the current and draft EOP-004 requirements.

DOE has also had conversations regarding updates to Form OE-417 with the Electricity Information Sharing and Analysis Center (E-ISAC) and FERC. On February 23 and June 5, 2017 DOE provided updates and answered questions during Webinars with the Bulk Electric System Security Metrics Working Group, which is comprised of industry trade associations, E-ISAC, NERC, and industry representatives. On February 7, 2017 DOE also explained Form OE-417 updates during an E-ISAC Monthly Briefing to E-ISAC members, including asset owners and operators. On July 6, 2016 DOE held a conversation with the FERC Office of Electric Reliability about the Form OE-417.

EIA's Survey Development Team conducted 20 telephone interviews with Form OE-417 respondents resulting in cognitive findings used to generate informed changes to Form OE-417. In addition, DOE worked with Oak Ridge National Laboratory, Idaho National Laboratory, and Pacific Northwest National Laboratory to review and revise Form OE-417 questions about cyber events.

## A.9. Payments or Gifts to Respondents

No payments or gifts are made to the respondents.

## A.10. Provisions for Protection of Information

Form OE-417 instructions will include the following statement regarding data confidentiality.

The information reported on Schedule 1 will be considered "public information" and may be publicly released in company or individually identifiable form.

Information reported on Schedule 2 of the form will not be disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. § 552, the DOE

regulations, 10 C.F.R. § 1004.11, implementing the FOIA, the Trade Secrets Act, 18 U.S.C. § 1905 and Critical Energy Infrastructure Information regulations as defined by the Federal Energy Regulatory Commission pursuant to section 215A(d) of the Federal Power Act, as amended. DOE will protect the information against unauthorized disclosure in accordance with its confidentiality and security policies and procedures.

In accordance with the Federal Energy Administration Act, the DOE provides company-specific protected data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another component of DOE; to any Committee of Congress, the U.S. General Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any non-statistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

The data collected on Form OE-417, Electric Emergency Incident and disturbance Report, will be used by DOE to meet its overall national security and National Response Framework responsibilities.

### A.11. Justification for Sensitive Questions

There are no questions of a sensitive nature.

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

#### Training Assumptions:

- 2,395 Respondents – 12 U.S. reliability coordinators, 107 balancing authorities, and 2,276 regulated utilities.
- During year 1 to 3 – a 2.0 hour refresher training (to include training on the on-line form) per BA/RC and utility respondent; 4,790 hours.
- Total training time per year – 4,790 hours

**Table 1: Training Hours Assumptions**

Total Number of Respondents	Training Hours Per Respondent	Total Training Hours
2,395	2.0	4,790

#### Reporting Assumptions:

- 200 Reports per year -The burden assumed in 2014 OMB submission was 300 reports annually. Based on the level of actual reporting (228 events in 2014, 145 events in 2015, and 143 events in 2016) the burden estimate has been calculated at 200 reports annually to accommodate normal, possible updates, and final filings for events.
- Schedule 1 - 200 reports x 10 minutes = 2,000 minutes or 33 hours
- Schedule 2 - 200 reports x 1.5 hours = 300 hours
- Schedule 2 Follow-up (additional follow-up for significant reports) - 20 respondents; 20 reports x .5 hour = 10 hours
- Annual total for responses = 343 hours per year
- Notifications to DOE about suspected or actual criminal actions (cyber-attacks, threats, vandalism) are not considered accountable burden events. DOE has general and specific obligations for national security and law enforcement actions/support under various Presidential Directives, memorandum of agreements and inter-agency understandings.

**Table 2: Reporting Assumptions**

Number of Reports	Hours for Schedule 1	Hours for Schedule 2	Follow Up hours	Annual total hours for responses
200	33	300	10	343

Using the above estimates, the average estimated annual burden with training estimates, per year, is 5,133 hours (4,790 training hours + 343 response hours).

**Table 3: Burden Summary Table**

EIA Form Number/Title	Annual Reporting Frequency	Number of Respondents	Annual Number of Responses
OE-417 sched 1	1	200	200
OE-417 sched 2	1	200	200
OE-417 sched 2 Follow up	1	20	20

The estimated annual cost to all combined respondents of the reporting burden is \$378,097 (5,133 hours x \$73.66)

There are no capital or start-up costs associated with this data collection for reporting and record keeping. The information collected on Form OE-417 is information that is collected and maintained by electric power producers in their normal course of business. Therefore, other than burden hours there are no additional costs for annual reporting and record keeping.

An average cost per hour of \$73.66 is used because that is the average loaded (salary plus benefits) cost for a DOE employee. DOE assumes that the survey respondent workforce completing Form OE-417 is comparable with the DOE workforce.

### A.13. Annual Cost to the Federal Government

The annual costs based on contractor invoices, including personnel, development/maintenance, collection, processing, analysis, and publication are estimated to be approximately \$375,288—an increase of around \$213,000 from 2014. Table 4 provides a comparison of 2017 actual costs to 2014 actual costs, and an overview of estimated hours for various survey management functions, including System Development, Maintenance, and Support of Form OE-417 online system (which includes processing and helping users address system issues), Project Management of Online System projects, and Annual Form follow-up hours. The increased cost from 2014 to 2017 is due to system updates that were required to modify the electronic data collection system for the updated version of the form as well as the consolidation of all activities related to the development, maintenance, analysis and publication of Form OE-417 to a single support contract task. Other factors that affected the increase in overall system costs were due to overall support contract cost increases, increased usages of the online system, as well as enhancement and usability improvements to the collection and processing system. DOE anticipates that the annual cost for Form OE-417 in 2018, and each successive year thereafter, is expected to be approximately \$325,000 - \$375,000 per year. Federal oversight of Form OE-417 is handled by the Program Manager for Situational Analysis as part of regularly assigned duties in the course of normal business, thus there is no additional costs for Federal employees.

**Table 4: Estimated Hours and Actual Costs for Survey Functions**

	OE-417 System Development Maintenance, and Support Hours	Project Management of Online System Projects Hours <sup>8</sup>	Annual Form Follow-up Hours <sup>9</sup>	Annual Cost to the Federal Government
2014 Estimate	1,280	40	25	\$162,000
2017 Estimate	3,018	100	50	\$375,288

<sup>8</sup> This activity is undertaken in the normal course of business within the Office of Electricity Delivery and Energy Reliability

<sup>9</sup> This activity is undertaken in the normal course of business within the Office of Electricity Delivery and Energy Reliability

## A.14. Changes in Burden

Table 5 Changes in Burden

EIA Form Number/Title	Annual Reporting Frequency	Number of Respondents (Previously Approved)	Number of Respondents (Requested)	Annual Number of Responses (Previously Approved)	Annual Number of Responses (Requested)	Burden Hours Per Response (Previously Approved)	Burden Hours Per Response (Requested)	Annual Number of Responses			Annual Burden Hours				
								Annual Burden Hours (Previously Approved)	Annual Burden Hours (Requested)	Change Due to Agency Discretion	Change Due to Agency Estimate	Total Change in Responses	Change Due to Agency Discretion	Change Due to Agency Estimate	Total Change in Burden
Training Hours	1	2,924	2,395	2,924	2,395	2	2	6,523	4,790	0	-529	-529	0	-1,733	-1,733
Schedule 1	1	0	200	0	200	0.17	0.17	0	33	200	0	200	33	0	33
Schedule 2	1	0	200	0	200	2	1.5	0	300	200	0	200	300	0	300
Schedule 2 Supplement Filings	1	0	20	0	20	1	0.5	0	10	20	0	20	10	0	10
<b>TOTAL</b>		<b>2924</b>	<b>2,815</b>	<b>2,924</b>	<b>2,815</b>			<b>6,523</b>	<b>5,133</b>	<b>430</b>	<b>-529</b>	<b>-109</b>	<b>343</b>	<b>-1,733</b>	<b>-1,390</b>

## A.15. Reasons for Changes in Burden

Table 5 shows that the total respondent burden decreased by 1,390 hours from 6,523 hours to 5,133 hours since the 2014 submission, due to a decrease in survey respondents from the 2014 clearance.

### Respondents

The number of annual responses was incorrectly inputted in ROCIS on the previous submission of this ICR. The number of respondents for training (2,924) was used in 2014 as the total number of annual responses, so, this did not include the 300 estimated submissions for Schedule 1, another 300 estimated submissions for Schedule 2, and the 25 estimated respondents for submitting supplemental Schedule 2 reports. The number in ROCIS should have been 3,549 to account for all of these responses. This error is accounted for and shown as 0 for respondents and responses previously approved in Table 5.

The number of respondents for training decreased from 2,924 to 2,395 due to a decrease in the number of utilities that ceased operations since 2014. The estimated number of respondents reporting (Schedule 1 and 2) has declined continuously over the past three years, so DOE revised its estimate. Based on the level of actual reporting (228 events in 2014, 145 events in 2015, and 143 events in 2016), the burden estimate was reduced by 100 reports (although not listed in Table 5) from 300 to 200 annually. Similarly, the number of responses and burden hours for Schedule 2 Supplemental reports decreased from 25 to 20 because the number of supplemental reports declined below 15 in both 2016 and 2017.

### Burden

Though the previous submission contained the incorrect number of responses, the burden hours were correct. DOE's estimate that it will take 2 hours for training and 0.17 hours for respondents to complete Schedule 1 of the report remains the same. Based on EIA cognitive research<sup>10</sup> from 2017, EIA learned that the average time it takes a respondent to complete Schedule 2 is 1.5 hours—down from 2 hours in 2014. This is shown as an increase of 300 hours ( $1.5 \times 200$ ) in Table 5 because zero hours was submitted to OMB for review and approval in 2014. The burden per response for filing a Schedule 2 supplemental report was reduced from 1 hour to 30 minutes. Supplemental reports are simple updates to the original submission that state how many people are still affected from the event. When using the online submission system, all previously completed information from the initial report is pre-populated when beginning an updated or final submission. This is a new feature that reduces burden however, because this ICR approval is the first for Schedule 1 and 2 (strictly accounting purposes), the burden reduction cannot be realized.

<sup>10</sup> EIA conducted 20 telephone interviews with Form OE-417 respondents between March 2017 and April 2017 to check the burden per response estimate. The research revealed that the average time it takes respondents to gather the information to complete Schedule 2 of Form OE-417 is 66 minutes (1.1 hours). The average time it takes respondents to record the information in Form OE-417 is 22 minutes (0.37 hours) showing the burden for Schedule 2 is 1.5 hours (approximately 90 minutes total).

Table 6: ICR Summary of Burden

	Requested	Program Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate	Previously Approved
Annual Number of Responses	2,815	420	-529	2,9
Annual Time Burden (Hr)	5,133	343	-1,733	6,5

A.16. Collection, Tabulation, and Publication Plan

Table 7: Electric Power Data Collection by Schedule

Form	Frequency of Reporting	Form Due Date	Elements Collected
OE-417, Schedule 1	Per critical incident	1 hour after incident	Emergency alert check-off
OE-417, Schedule 1	Per other types of incidents	6 hour after incident	Normal Report check-off
OE-417, Schedule 1	Per other types of incidents	24 hours after the recognition of the incident OR by the end of the next business day, whichever is later	System Report check-off
OE-417, Schedule 1	As changes to key information, such as cause or number of impacted customers, becomes available	After initial submission of Schedule 1 as necessary	Update check-off
OE-417, Schedule 1 and 2	Per any incident	72 hours after the incident	Final report check off and Narrative details - more detailed estimates of impact and any

			attachments
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**Table 8: Schedule 1 Publication Plan**

Source	Elements Published
<a href="#">Office of Electricity Delivery and Energy Reliability's Electric Disturbance Events (OE-417) Annual Summaries page</a>	<ul style="list-style-type: none"> <li>• Date Incident Began</li> <li>• Time Incident Began</li> <li>• Date Final Report Received / Incident Ended</li> <li>• Time Final Report Received / Incident Ended</li> <li>• North American Electric Reliability Corporation Region</li> <li>• Incident Type</li> <li>• Incident Sub-classification</li> <li>• Demand Loss</li> <li>• Peak Customers Affected</li> </ul>
<a href="#">Electric Power Monthly: Appendix B</a>	<ul style="list-style-type: none"> <li>• Geographical Location by State</li> <li>• Company Name</li> <li>• Amount of Demand (Load) Lost</li> <li>• Count of Customers Affected</li> <li>• Time and Date of Incident</li> <li>• Length of Incident Until Restoration (amount of time)</li> <li>• Type of Incident</li> </ul>

*Note: Information provided under Schedule 2 of Form OE-417 is not included in the published summaries*

\* Information on Schedule 2 will not be disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act, e.g., exemptions for confidential commercial information and trade secrets, certain information that could endanger the physical safety of an individual, or information designated as Critical Energy Infrastructure Information.

### A.17. OMB Number and Expiration Date

The OMB Number 1901-0288 and expiration date will be displayed on all the data collection forms and instructions.

### A.18. Certification Statement

Form OE-417 meets all certification requirements of the "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.