

**GENERAL INFORMATION**

**PURPOSE**

The Department of Energy (DOE), under its relevant authorities, has established mandatory reporting requirements for electric emergency incidents and disturbances in the United States. DOE collects this information from the electric power industry on Form OE-417 to meet its overall national security and Federal Emergency Management Agency's National Response Plan responsibilities. DOE will use the data from this form to obtain current information regarding emergency situations on U.S. electric energy supply systems. DOE's Energy Information Administration (EIA) will use the data for reporting on electric power emergency incidents and disturbances in monthly EIA reports. The data also may be used to develop legislative recommendations, reports to the Congress and as a basis for DOE investigations following severe, prolonged, or repeated electric power reliability problems.

**REQUIRED RESPONDENTS**

The Electric Utility that operates a Control Area and/or Reliability Coordinators and other Electric Utilities, as appropriate, must use this form to submit mandatory reports of electric power system incidents or disturbances to the DOE Operations Center that operates on a 24-hour basis, 7 days a week. In Alaska, Hawaii, Puerto Rico, the U.S. Virgin Islands, and the U.S. Trust Territories, local utilities will file Form OE-417. For those electric utilities located in the United States, but for whom control area oversight responsibilities are handled by electrical systems located across an international border, those U.S.-based utilities will be required to file the Form OE-417. A foreign utility, handling U.S. control area responsibilities, may wish to file this information voluntarily to the DOE. Any U.S.-based utility in this international situation needs to inform DOE that these filings will come from a foreign-based electric system.

Form OE-417 must be submitted to the DOE Operations Center within one hour if one of the following apply:

1. Actual physical attack that causes major interruptions or impacts to critical infrastructure facilities or to operations
2. Actual cyber or communications attack that causes major interruptions of electrical system operations
3. Complete operational failure or shut-down of the transmission and/or distribution electrical system
4. Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system
5. Uncontrolled loss of 300 Megawatts (MW) or more of firm system loads for more than 15 minutes from a single incident
6. Load shedding of 100 MW or more implemented under emergency operational policy
7. System-wide voltage reductions of 3 percent or more
8. Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system

Form OE-417 must be submitted to the DOE Operations Center within six hours if one of the following apply and none of the eight categories above apply:

9. Suspected physical attacks that could impact electric power system adequacy or reliability; or vandalism which targets components of any security systems
10. Suspected cyber or communications attacks that could impact electric power system adequacy or vulnerability
11. Loss of electric service to more than 50,000 customers for 1 hour or more
12. Fuel supply emergencies that could impact electric power system adequacy or reliability

**SANCTIONS**

DOE is authorized to collect the information on Form OE-417 under the Federal Energy Administration Act of 1974 (Pub. L. No. 93-275, 15 U.S.C. 761 et seq.) as amended, the Federal Power Act (16 U.S.C 791a et seq.), the DOE Organization Act (Pub. L. No. 95-91, 42 U.S.C. 7101 et seq.) as amended, and the Public Utility Regulatory Policies Act of 1978, Sect. 209 (Pub. L. No. 95-317, 92 stat. 3117, 16 U.S.C. 824a-2). The timely submission of Form OE-417 by those required to report is mandatory under Section 13(b) of the Federal Energy Administration Act of 1974 as amended. Failure to respond may result in a penalty of not more than \$2,750 per day for each civil violation, or a fine of not more than \$5,000 per day for each criminal violation. The government may bring a civil action to prohibit reporting violations, which may result in a temporary restraining order or a preliminary or permanent injunction without bond. In such civil action, the court may also issue mandatory injunctions commanding any person to comply with these reporting requirements. **Title 18 U.S.C. 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

**METHODS OF FILING RESPONSE**

(Retain a completed copy of this form for your files.)

**E-mail:** Submit your form via e-mail as an attachment to doehqeoc@hq.doe.gov.

**FAX:** FAX your Form OE-417 to the following facsimile number: (202) 586-8485. (Use if no other method is available.)

**Telephone:** Call and report the information to the following telephone number: (202) 586-8100.

**CONTACT**

**Emergency Contact:**

**DOE Operations Center**  
Telephone Number: (202) 586-8100  
FAX Number: (202) 586-8485  
E-mail: doehqeoc@hq.doe.gov

For additional information write to the following address:  
Director, Office of Electricity and Energy Reliability  
(OE-1)  
1000 Independence Ave, SW  
Washington, DC 20585

For questions regarding the Form OE-417:  
Alice Lippert  
Telephone Number (202) 586-9600  
FAX Number: (202) 586-2623  
E-mail: alice.lippert@hq.doe.gov

**CONFIDENTIALITY**

The information reported on this form on Schedule 1, lines 4, 5, 6, 7, 8 and 9 will be kept confidential. For Schedule 2, all information provided will be kept confidential and not 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, and the Trade Secrets Act, 18 U.S.C. §1905. The Department of Energy (DOE) will protect your information in accordance with its confidentiality and security policies and procedures.

The Federal Energy Administration Act requires the DOE to provide company-specific confidential 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 General Accounting 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 nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Disclosure limitation procedures are applied to the statistical data published from OE-417 confidential survey information to ensure that the risk of disclosure of identifiable information is very small.

All other Information reported on Form OE-417 will not be treated as confidential and may be publicly released in identifiable form. In addition to the use of the information by EEA for statistical purposes, the information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

**INSTRUCTIONS (Page 1 of 6)**

**BACKGROUND**

Emergency electric incidents and disturbances leading to interruptions of power, such as rolling 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 depend on the continuing reliability of our increasingly complex and interdependent infrastructures.

In addition to these interdependencies, 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. Information technology has changed the way the Nation's business is transacted, the way government operates, and the way government addresses national security. The Form OE-417 is the critical alert mechanism for informing DOE of electrical emergency incidents or disturbances that may physically or virtually disrupt the operation of any critical infrastructure in the electric power industry.

**GENERAL INSTRUCTIONS**

The Form OE-417 alerts the Department of Energy to electrical emergency incidents and disruptions. The ability of DOE to quickly respond to energy emergencies that may impact the Nation's infrastructure and to help alleviate or prevent further disruptions depends on industry's prompt response. As such, the initial timely filing of this form is of paramount importance. Many electric utilities have received approval to operate the Control Area and/or Reliability Coordinator functions from the North American Electric Reliability Council (NERC). In addition, electric utilities also have computer centers and physical security departments. (Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) are established by the Federal Energy Regulatory Commission and are considered electric utilities.)

All electric utilities that operate Control Area Operator (CAO) and Reliability Coordinator (RC) functions will report on the Form OE-417. The electric utilities that are CAOs are considered the primary filers of this form. However, all electric utilities also have filing responsibilities to provide information to a CAO when necessary for their reporting obligations and to file Form OE-417 in cases where a CAO will not be involved. DOE would welcome any joint filing activity where the CAO and the electric utilities under their electrical oversight file a combined report or all information is passed to the CAO who then files a single report. CAOs' and RCs' can also file notifications for joint filings. EEA requests that it be notified for those that plan to file jointly and of those electric utilities that want to file separately. The electric utility's computer centers and physical security departments can (and should) file directly with DOE on the selected areas identified in the Form OE-417 instructions. (This information does not have to flow directly into the officials running the CAO and RC and then be forwarded to DOE.)

**WHEN TO FILE**

Form OE-417 must be submitted to the DOE Operations Center within 1 hour if one of the following categories apply:

1. Actual physical attack that causes major interruptions or impacts critical infrastructure facilities or operations
2. Actual cyber or communications attack that causes major interruptions of electrical system operations
3. Complete operational failure or shut-down of the transmission and/or distribution electrical system
4. Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system
5. Uncontrolled loss of 300 Megawatts (MW) or more of firm system loads for more than 15 minutes from a single incident
6. Load shedding of 100 MW or more implemented under emergency operational policy
7. System-wide voltage reductions of 3 percent or more
8. Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system

Form OE-417 must be submitted to the DOE Operations Center within 6 hours if one of the following apply and none of the eight categories above apply:

9. Suspected physical attacks that could impact electric power system adequacy or reliability; or vandalism which targets components of any security systems
10. Suspected cyber or communications attacks that could impact electric power system adequacy or vulnerability
11. Loss of electric service to more than 50,000 customers for 1 hour or more
12. Fuel supply emergencies that could impact electric power system adequacy or reliability

**Emergency Alert Report – Schedule 1 is due within 1 hour of the time of system disruption for any of the incidents 1-8 above.** (Check boxes on page 1 of the form to choose the type or types of incidents that occurred.) Check Emergency Alert as the Alert Status on line 1 of the form. Then complete and submit the form. Line-by-line instructions are available in the SPECIFIC INSTRUCTIONS portion of this form. Refer to the Quick Reference Guide included herein for a short summary of the form instructions. Please complete all applicable fields on Schedule 1 before submitting the initial Emergency Alert Report within 1 hour of the incident or disturbance. If all relevant information for Schedule 1 is not available within 1 hour of the incident or disruption, provide as much information as is known and submit the report. If significant additional information becomes available after submission, particularly on a line where "Unknown" was checked on the initial Emergency Alert, please add the new information, check Update as the Alert Status (line 1) on the form, and then resubmit the form.

If the incident or disturbance is having a critical impact on operational events, respondents must balance their operational requirements during the incident with this mandatory reporting requirement. In such instances, telephone notification to the DOE Operations Center (202-586-8100) is acceptable, pending submission of the completed form.

**Normal Alert Report – Schedule 1 is due within 6 hours of the incident or disturbance if any of the incidents 9-12 is checked on the form AND none of the boxes for incidents 1-8 are checked.** Check Normal Alert as the Alert Status on Line 1 of the form. Then complete and submit the form. Line-by-line instructions are available in the SPECIFIC INSTRUCTIONS portion of this form. Refer to the Quick Reference Guide included herein for a short summary of the form instructions. Please complete all applicable fields on Schedule 1 before submitting the initial Normal Alert Report within 6 hours of the incident or disturbance. If all relevant information for Schedule 1 is not available within 6 hours of the incident or disruption, provide as much information as is known and submit the report. If significant additional information becomes available after submission, particularly on a line where "Unknown" was checked on the initial Emergency Alert, please add the new information, check Update as the Alert Status (line 1) on the form, and then resubmit the form.

**Update Report – Schedule 1 Update Report should be filed if significant information (or changes) regarding a reported incident or disturbance becomes available after the initial Emergency Alert or Normal Alert Report was submitted. Add the new information and/or changes to the original submission and resubmit the form, checking Update as the Alert Status on line 1 of the form.**

**INSTRUCTIONS (Page 2 of 6)**

**Final Report** – An updated Form OE-417 Schedule 1 and a Schedule 2 are both due within 48 hours of the event to provide complete disruption information.

1. Complete and revise Schedule 1 as necessary and check Final as Alert Status on line 1.
2. On Schedule 2 provide a narrative description of the event and actions taken to resolve the incident. There are several specific subject blocks of space shown on the Schedule that are provided to gather the specific information. Include, as appropriate, the cause of the incident or disturbance, the equipment damaged, critical infrastructures interrupted, and affect on other electrical systems. Equivalent documents containing this information can be supplied to meet this requirement; these include the NERC Disturbance Report and the voluntary National Critical Infrastructure Protection System Form.
3. Refer to the Quick Reference Guide included herein for a short summary of the form instructions.

**SPECIAL INVESTIGATIONS**

Under its authorities, DOE may instigate a special investigation into incidents affecting the electric power industry that involve more than CAOs and Reliability Coordinators. DOE may contact any utility, business entity, or energy concern that participates in the electric power industry for technical information concerning a particular incident. These special investigations are infrequent.

**SPECIFIC INSTRUCTIONS**

**Schedule 1. Emergency Incident and Disturbance Information**

1. For line 1, **Alert Status**, check whether the report is a: **Emergency Alert** (due within 1 hour); **Normal Alert** (due within 6 hours); **Update** (should be filed if significant information (or changes) on an incident or disturbance becomes available after the initial Emergency Alert or Normal Alert Report was submitted; or **Final Report** (due within 48 hours).
2. For lines 2 and 3, **Organization Name** and **Address of Principal Business Office**, enter the legal name and the address of the main office of the organization filing the report.
3. For lines 4, 5, 6, 7, and 8, **Name, Title, Telephone Number, FAX Number, and E-mail Address**, enter the name, title, telephone number, fax number and e-mail address of the contact person. This person will be the person that DOE will contact if there is a need for any follow-up information concerning the incident.
4. For line 9, **Teleconferencing Number**, (required only if teleconference is ongoing or planned) enter the phone number; check whether a teleconference is ongoing or planned for this incident or disturbance. If yes and a passcode is needed to join the teleconference, enter the passcode number. Check whether the teleconference has a video option. If DOE determines that the event needs to be formally tracked by the Government, DOE will notify the respondent that on-going coordination is needed and will request that teleconferencing coordination information be supplied on this line for the event.
5. For line 10, **Geographic Area(s) Affected**, enter the name of the State(s) and political subdivision(s) (i.e., city, town, county, etc.) affected by the incident. Please identify in general terms the largest area affected by the incident. (This does not represent a requirement to list all the cities and towns in a region or State.) If you are unsure what geographic areas are affected at the time of the initial submission of Schedule 1 of the form, check the unknown box; when the geographic locations are determined fill in this data on line 10 of the form and re-submit the form, checking the Update or Final Alert Status box on line 1, as applicable.
6. For line 11, **Date/Time Incident Began (mm-dd-yy/hh:mm)**, enter the month, day, and year and the local time, in 24-time format, that the incident began.
7. For line 12, **Estimated Date/Time of Restoration (mm-dd-yy/hh:mm)**, if known, enter the month, day, and year and the local time, in 24-time format, that power was or will be restored. If this is not known when the form is initially submitted, check the unknown box; when the date and time of restoration can be estimated or determined, fill in this data on line 12 of the form and re-submit the form, checking the Update or Final Alert Status box on line 1, as applicable.
8. For line 13, **Date/Time Incident Ended (mm-dd-yy/hh:mm)**, enter the month, day and year and the local time, in 24-time format, when the potential for further disruption of the system from this incident no longer existed.
9. For line 14, **Did the incident/disturbance originate in your system/area?** If known, check the Yes or No box; otherwise check the unknown box. If the unknown box is checked at the time of initial submission, and later this is determined, check the Yes or No box as applicable when re-submitting the form as either an Update or Final report.
10. For line 15, **Estimate of Amount of Demand Involved (Megawatts)**, enter the amount of total demand involved over the entire incident. In the preliminary alert, if amount is unknown and you are unable to make an estimate, then leave this blank. Provide the actual number or an estimate in any update notice or final report. -
11. For line 16, **Estimate of Number of Customers Affected**, enter the **total number** of customers affected during the entire incident or disturbance which could be more than the peak number in the case of rolling blackouts. If this number cannot be estimated when the form is initially submitted, check the unknown box; when the number of customers can be estimated, fill in this data on line 16 of the form and re-submit the form, checking the Update or Final Alert Status box on line 1, as applicable.
12. For line 17, **Internal Organizational Tracking Number**, indicate the internal tracking number assigned by the reporting organization to this incident, if one exists. If not, the calendar date of when the incident begins will be used as a tracking number.

**INSTRUCTIONS** (Page 3 of 6)

13. For column 18, **TYPE OF EMERGENCY**, check all of the options that apply:

**Major physical attack:** This is a major attack on any part of your system whether physical or electronic that you suspect was a deliberate attack or sabotage that disrupted system operations and had the intent to harm the national security of the United States. If you suspect the motive of the attack was burglary or vandalism, please check Vandalism instead of assuming a National Security Attack.

**Major cyber attack:** This is a major attack on your computer systems which has compromised the confidentiality or integrity of sensitive data or made part or all of the system unavailable to perform its missions.

**Major Transmission System Interruption:** This is a transmission system event that has occurred and required action(s) to relieve voltage or loading conditions; or transmission separation or islanding has occurred.

**Major Generation Inadequacy:** This is when insufficient generation exists to meet demand, or unexpected problems or inadequacies develop that impact operational and/or system reliability.

**Major Distribution System Interruption:** This is when significant uncontrolled loss of load has occurred, or an unexpected controlled loss of load is required.

**Other:** Check if the type of emergency is known, but not one of those listed above or if the type of emergency is unknown.

14. For column 19, **CAUSE OF INCIDENT**, check all of the options that may apply:

**Complete Electrical System Failure:** check if total system failure occurred.

**Electrical System Separation – Islanding:** check if Islanding has occurred.

**Inadequate Electric Resources to Serve Load:** check if resource constraints have been identified or are expected to happen that limit the availability of power sources to serve load or if electric resources are not available.

**Actual or Suspected Malicious or Intentional:** check if there is reason to suspect that the disruption was intentionally caused (or that there was an attempt), check all of the following that may apply:

**Physical:** for disruption of the system caused by physical means such as destruction of property or an attack on any security system.

**Cyber/Computer/Telecom:** for disruption of the electrical system and/or communication system caused by electronic means.

The criteria for reporting of vandalism have been separated into two parts. The primary requirement is defined by the severity of impact.

- i. Incidents of vandalism or threat actions that attempt to or circumvent significant security systems which protect key components used to operate the Nation's electric power systems have to be reported at all times.
- ii. A secondary requirement is also imposed on reporting of all other types of attempts or damage inflicted upon security protection within the electric power industry (e.g., cutting of locks and fences), but the obligation to report at this level and the duration of time period for which these reports have to be filed is not a continuous obligation and will be adjusted by DOE. The expectation is that this requirement will not be activated for much/all of the three-year clearance cycle. If activation is required, DOE will notify the respondents that this reporting threshold has to be met and will identify the duration of reporting at that level. The notification will be done by e-mail message to the respondents and by an alert to the energy critical infrastructure protection centers. The threat or other determinations that obligates DOE to activate this lower reporting level are directly linked to national security concerns.

**Transmission Equipment:** check if failure of or damage to transmission equipment occurred, causing disruption to service or reliability.

**Loss of Part or All of a High Voltage Substation or Switchyard:** check if substations or switchyards (230+ kV AC or 200+ kV DC) were adversely affected.

**Weather or Natural Disaster:** check if severe weather (thunderstorms, ice storms, etc.) or natural disasters (hurricanes, floods, tornadoes, solar activity, etc.) have caused service disruption.

**Operator Action(s):** check if service or reliability disruption is attributable to operator action.

**Fuel Supply Deficiency:** check if an existing or anticipated fuel supply emergency situation occurred.

**Unknown Cause:** check if the cause of the disruption is unknown.

**Other:** Check if the cause of the disruption is known, but not one of those listed above.

**INSTRUCTIONS (Page 4 of 6)**  
**SPECIFIC INSTRUCTIONS (Continued)**

15. For column 20, **ACTIONS TAKEN**, check all that may apply:

**Shed Firm Load:** check if, in order to maintain the bulk electric supply system, system operators called for load shedding of 100 MW or greater of firm-load customers' demand, or if firm load customers were disconnected from the bulk electric supply system during emergency conditions.

**Reduced Voltage:** check if system wide voltage reductions of 3 percent or greater were implemented.

**Made Public Appeals:** check if public appeals to reduce the use of electricity for purposes of maintaining the continuity of the bulk electric power system were issued. Check only if appeals were issued during emergency conditions. Do not check if appeals were energy conservation related.

**Implemented a Warning, Alert, or Contingency Plan:** check if existing short-term contingency plans were implemented to reduce demand, maximize generation to maintain the bulk electric supply system, and/or address other reliability issues.

**Shed Interruptible Load:** check if, in order to maintain the bulk electric supply system, system operators called for load shedding of 100 MW or greater of pre-selected interruptible load customers' demand, or if those interruptible customers were disconnected from the bulk electric supply system during emergency conditions. Do not check if terminations were under contract agreements during normal operations.

**Repaired/Restored:** check if system was repaired or restored.

**Other:** check if other actions were taken

**Schedule 2. Narrative Description.**

**Narrative:** provide a brief narrative (one page or less if feasible) of the event and actions taken to resolve it. Include, as appropriate, the cause of the incident or disturbance, the equipment damaged, critical infrastructures interrupted and any affect on other systems. Make sure to identify any electrical system separation (identify islanding boundaries for linked capacity and load), and to name the generators and voltages of lines that were lost (by types of generators and voltage size groupings- with terminal ending points, and the name of lost high voltage substations or switchyards (**230+ kV AC or 200+ kV DC**)).

16. For Section 21, Narrative. This narrative must be provided within 48 hours of the incident using Schedule 2 and the latest information on Schedule 1. If the event is still on going, it may be necessary to provide another update (updating both schedules) when the incident has been resolved. Updates may be produced at any time during their tracking of the event.

**Filing Requirements by Electric Utilities and Their Functional Activity by Form Line Item**

<b>Informational Group</b>	<b>Electric Utilities (That are not approved by NERC to be a CAO or granted RC oversight authorities)</b>	<b><u>Control Area Operators (For electric utilities that operate the CAO function)</u></b>	<b>Reliability Coordinators (For electric utilities that operate the RC functions)</b>	<b>Computer, Physical, and Telecommunication Security Support Centers (Operated within the reporting Electric Utility)</b>
<b>Organization Filing</b>	Lines 1-3	Lines 1-3	Lines 1-3	Lines 1-3
<b>Name of Official that Needs to be Contacted</b>	Lines 4-9	Lines 4-9	Lines 4-9	Lines 4-9
<b>Incident and Disturbance Data</b>	Lines 10-17	10-15, and 17	10-14, and 17	10, 11, 12, 14, and 17
<b>Type of Emergency (18)</b>	Identify Source, if known	Identify Source, if known	Identify Source, if known	Major Physical, Major Cyber, and Other
<b>Cause of Incident (19)</b>	All	All	All	Suspected Malicious or Intentional – Physical, Cyber or Computer or Telcom, Operator Action, Unknown Cause, and Other
<b>Action Taken (20)</b>	Identify Any or All	Identify Any or All	Identify Any or All	Other
<b>Narrative</b>	21	21	21	21

**Exclusions from Filings**

Line Items not required to be filed	None	None (15 and 16 may be supplied by other utilities)	15-16	15-16, 18, and 20
Elements (from Line Items 18, 19, or 20) that are not required to be filed	Filings describing Suspected Malicious or Intentional – Physical, Cyber or Computer or Telcom can be done by the utility's computer center or their security department	Filings describing Suspected Malicious or Intentional – Physical, Cyber or Computer or Telcom can be done by the utility's computer center or their security department	Suspected Malicious or Intentional – Physical, Cyber or Computer or Telcom, Major Generator Inadequacy and Major Distribution System Interruption	Weather or Natural Disaster, Transmission Equipment, Inadequate Electric Resources to Serve Load, and Fuel Supply Deficiency

**GLOSSARY (Page 5 of 6)**

**Complete Operational Failure:** An emergency event where an electrically isolated or interconnected electrical system suffers total system collapse that results in the shutdown of the transmission and/or distribution electrical system. If communications are affected, then reporting is done as soon as practical after restoration of an operational control center.

**Computer Disruption:** Disruption to the electric power system(s) and/or communications systems caused by the infiltration of the system via computer.

**Control Area:** An electrical system bounded by interconnection (tie-line) metering and telemetry that control generation directly to maintain its interchange schedule with other Control Areas and contribute to frequency regulation of the interconnection.

**Control Area Operator (CAO):** Electric power system or combination of electric power systems to which a common automatic generation control scheme is applied to match the power output of the generators within the electric power system(s) and capacity and energy purchased from entities outside the electric power system(s). A CAO maintains scheduled interchange with other control areas, maintains the frequency of the electric power system(s) within reasonable limits, and provides sufficient generating capacity to maintain operating reserves.

**Cyber/computer/telecom:** Cyber/computer systems are those used in a power entity organization for electric power operations, power marketing or corporate IT (information technology) functions.

**Cyber Disruption:** Disruption to the electric power system(s) caused by unauthorized access to computer software and communications systems.

**Electrical System Separation – Islanding: Part** or parts of the utility grid remain(s) operational in an otherwise blacked out area.

**Firm Load:** Power provided to customers that is continuously available on demand and which is subject to interruption only under extreme circumstances.

**Fuel Supply Emergency:** Existing or anticipated fuel supply situations that could threaten continuity of the bulk electric power supply system, including:  
1) Fuel inventories or hydro project water storage levels at 50 percent or less of normal, with a projected continued downward trend.  
2) Emergency generation requiring abnormal use of a particular fuel with the potential to reduce supply or stocks to a level that threatens the reliability or adequacy of electric service.

**Interruptible Load:** Those loads (power provided to customers) that, by contract, can be interrupted in the event of a deficiency on the supplying system. Reporting on the Form OE-417 is limited to those interruptions implemented under emergency operational policy or contingency plans.

**Major Distribution System Interruption:** Loss of load has occurred in a controlled or uncontrolled fashion that exceeds the reporting thresholds.

**Major Generation Inadequacy:** When there is insufficient generation to meet demand, forcing a service interruption or disruption.

**Major Transmission Interruption:** The disruption of the movement or transfer of electric energy over an interconnected group of lines and associated equipment between points of supply and points at which it is transformed for delivery to other electric systems that will deliver it in their distribution systems to end-use consumers. Major interruptions are those disruptions that impact the reliability of the electrical system that cannot be addressed by use of alternate transmission paths or cause the potential of additional system disabling contingencies. These transmission events require action(s) to relieve voltage or loading conditions, or transmission separation or islanding has occurred.

**Reliability Coordinators:** Entities that provide the security assessment and emergency operations coordination for a single group of Control Areas.

**Telecommunications:** Critical telecommunications are those systems that are essential for the power industry system operation including wireline and wireless, both voice and data.

**Who Should Report:** For the purpose of this form, it covers a corporation, person, agency, or other legal entity or instrumentality that control, own and/or operate facilities for the generation, transmission, distribution, sale of electric energy, or oversee ancillary service operations. The facilities of these energy concerns and/or their oversight of operational practices are devoted to public interest or use. These energy concerns are also identified as cooperatives; municipalities; federal, state, and local governmental political sub-divisions (including public power districts); regional transmission organizations; and investor-owned utilities.

**REPORTING BURDEN**

The public reporting burden for Schedule 1 is estimated to average 5 minutes per response and 2 hours for Schedule 2, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. In addition DOE estimates there will be additional burden for initial training requiring 4 hours and refresher training requiring 1 hour annually for each entity subject to reporting on Form OE-417. Send comments regarding this burden estimate of any other or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Statistics and Methods Group (EI-70), 1000 Independence Avenue S.W., Washington, D.C. 20585-0670, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503-0008. A person is not required to respond to the collection of information unless the form displays a valid OMB number.

**QUICK REFERENCE GUIDE** (Page 6 of 6)

**WHEN TO REPORT**

When to Report	Incident	File if Meets Criteria
1 hour	1. Actual physical attack	If causes major interruption or major negative impact on critical infrastructure facilities or to operations.
1 hour	2. Actual cyber or communications attack	If causes major interruptions of electrical system operations.
1 hour	3. Complete operational failure of electrical system	If isolated or interconnected electrical systems (transmission or distribution) suffer electrical system collapse.
1 hour	4. Electrical System Separation (Islanding)	If part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system.
1 hour	5. Uncontrolled loss of firm system load	If 300 MW or more for greater than 15 minutes from a single incident.
1 hour	6. Load shedding	If 100 MW or more implemented under emergency operational policy.
1 hour	7. Voltage reductions	3 percent or more applied system-wide.
1 hour	8. Public appeal to reduce use of electricity	If in emergency condition only to reduce demand.
6 hours	9. Suspected physical impairment which targets any security system or impacts electric power system reliability	If any component of any physical security system is vandalized, damaged by an attack, or is suspected to have been altered.
6 hours	10. Suspected cyber computer or communications system impairment	If the attempt is believed to have or did happen.
6 hours	11. Loss of electric service	If greater than 50,000 customers for 1 hour or more.
6 hours	12. Fuel supply emergencies	Fuel inventories or hydro project water storage levels at 50 percent or less of normal, with projected continued downward trend; emergency generation requiring abnormal use of a particular fuel.

**WHO MUST REPORT**

Entity – Functional Responsibility	What is Excluded
Electric Utilities	There are no exclusions allowed. All items need to be addressed.
Control Area Operators (CAO)	Reporting on the count of customers (and the amount of load, if the CAO is based at a Regional Transmission Organization or Independent System Operator) is required only for the Final Report. A CAO located in vertically integrated utilities, a municipality, federal utility, state-owned or cooperative will report the amount of load and counts of customers.
Reliability Coordinators (RC)	Reporting on the count of customers is excluded.
Local Utilities in Alaska, Hawaii, Puerto Rico, the U.S. Virgin Islands, and the U.S. Trust Territories	If the local electrical system is less than 300 MW, then only file if incident types 1, 2, 3 or 4 are met.
Computer, telecommunication, and physical security offices that support the CAO, RC, and electric utility or that are located within the entity	These support centers or offices will file information on incident types 1, 2, 9 or 10 in direct submissions to DOE. These support centers or offices will address no other incident types.

**WHEN TO SUBMIT**

Schedule	Time Limit
Submit Emergency Alert - Schedule 1	Within 1 hour after incident or disturbance begins if any type of incident 1-8 is checked on Schedule 1.
Submit Normal Alert - Schedule 1	Within 6 hours after incident or disturbance begins if incident type checked on Schedule 1 is 9-12 and not any type of 1-8 incident.
Submit Update - Schedule 1	As applicable after initial submission if significant new information is available or if significant changes occurred since submission.
Submit Final - Schedule 1	Within 48 hours after incident or disturbance begins.
Submit Narrative – Schedule 2	Within 48 hours after incident or disturbance begins.

**HOW TO SUBMIT**

To Whom	How
DOE Operations Center (OC)	<a href="mailto:doehqeoc@hq.doe.gov">doehqeoc@hq.doe.gov</a>
OC Telephone	(202) 586-8100
OC E-mail	<a href="mailto:doehqeoc@hq.doe.gov">doehqeoc@hq.doe.gov</a>
OC Fax	(202) 586-8485 (only when other methods are not available)

**NOTICE:** This report is **mandatory** under Public Law 93-275. Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For the sanctions and the provisions concerning the confidentiality of information submitted on this form, see General Information portion of the instructions. **Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

**RESPONSE DUE:** Submit a Schedule 1 as an Emergency Alert report within 1 hour if for incidents 1-8 below. All other initial reports are due within 6 hours of the incident. Submit updates as needed and a final report (Schedules 1 and 2) within 48 hours.

**SCHEDULE 1 -- ALERT NOTICE** (page 1 of 3)

<p><b>Criteria for Filing</b> (Check all that apply)</p> <p>If any box 1-8 on the right is checked, this form must be filed within 1 hour of the incident; check Emergency Alert (for the Alert Status) on Line 1 below.</p> <p>If any box 9-12 on the right is checked AND none of the boxes 1-8 are checked, this form must be filed within 6 hours of the incident; check Normal Alert (for the Alert Status) on Line 1 below.</p> <p>If significant changes have occurred after filing the initial report, refile the form with the changes and check Update (for the Alert Status) on Line 1 below.</p> <p>48 hours after an incident occurs refile the form with the latest information and check Final (for the Alert Status) on Line 1 below.</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Actual physical attack that causes major interruptions or impacts to critical infrastructure facilities or to operations</li> <li>2. <input type="checkbox"/> Actual cyber or communications attack that causes major interruptions of electrical system operations</li> <li>3. <input type="checkbox"/> Complete operational failure or shut-down of the transmission and/or distribution electrical system</li> <li>4. <input type="checkbox"/> Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system</li> <li>5. <input type="checkbox"/> Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident</li> <li>6. <input type="checkbox"/> Load shedding of 100 Megawatts or more implemented under emergency operational policy</li> <li>7. <input type="checkbox"/> System-wide voltage reductions of 3 percent or more</li> <li>8. <input type="checkbox"/> Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system</li> <li>9. <input type="checkbox"/> Suspected physical attacks that could impact electric power system adequacy or reliability; or vandalism which target components of any security systems</li> <li>10. <input type="checkbox"/> Suspected cyber or communications attacks that could impact electric power system adequacy or vulnerability</li> <li>11. <input type="checkbox"/> Loss of electric service to more than 50,000 customers for 1 hour or more</li> <li>12. <input type="checkbox"/> Fuel supply emergencies that could impact electric power system adequacy or reliability</li> </ol>
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LINE NO.	ORGANIZATION FILING				
1.	Alert Status (check one)	Emergency Alert <input type="checkbox"/> 1 Hour	Normal Alert <input type="checkbox"/> 6 Hours	Update <input type="checkbox"/> As required	Final <input type="checkbox"/> 48 Hours
2.	Organization Name				
3.	Address of Principal Business Office				
NAME OF OFFICIAL THAT NEEDS TO BE CONTACTED FOR FOLLOW-UP AND ANY ADDITIONAL INFORMATION					
4.	Name				
5.	Title				
6.	Telephone Number	( )-( )-( )			
7.	FAX Number	( )-( )-( )			
8.	E-mail Address				
9.	Teleconference Number	( )-( )-( )	Passcode [ ]	Video [ ]	
INCIDENT AND DISTURBANCE DATA					
10.	Geographic Area(s) Affected				Unknown <input type="checkbox"/>
11.	Date/Time Incident Began (mm-dd-yy/hh:mm) using 24-hour clock	____ - ____ - ____ / ____ : ____ mo dd yy hh mm			
12.	Estimated Date/Time of Restoration (mm-dd-yy/ hh:mm) using 24-hour clock	____ - ____ - ____ / ____ : ____ mo dd yy hh mm			Unknown <input type="checkbox"/>
13.	Date/Time Incident Ended (mm-dd-yy/ hh:mm) using 24-hour clock	____ - ____ - ____ / ____ : ____ mo dd yy hh mm			
14.	Did the incident/disturbance originate in your system/area? (check one)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unknown <input type="checkbox"/>	
15.	Estimate of Amount of Demand Involved (Megawatts)				Unknown <input type="checkbox"/>
16.	Estimate of Number of Customers Affected				Unknown <input type="checkbox"/>
17.	Internal Organizational Tracking Number (if applicable)				



**SCHEDULE 1 -- ALERT NOTICE** (page 2 of 3)

18. Type of Emergency Check all that apply	19. Cause of Incident Check if known or suspected	20. Actions Taken Check all that apply
Major Physical Attack [ ]	Complete Electrical System Failure [ ]	Shed Firm Load [ ]
Major Cyber Attack [ ]	Electrical System Separation – Islanding [ ]	Reduced Voltage [ ]
Major Transmission System Interruption [ ]	Inadequate Electric Resources to Serve Load [ ]	Made Public Appeals [ ]
Major Generation Inadequacy [ ]	Actual or Suspected Malicious/Intentional Physical [ ] Cyber/Computer/Telecom [ ] Vandalism [ ]	Implemented a Warning, Alert, or Contingency Plan [ ]
Major Distribution System Interruption [ ]	Transmission Equipment [ ]	Shed Interruptible Load [ ]
Other [ ]	Loss of Part or All of a High Voltage Substation or Switchyard (230 kV + for AC 200 kV+ for DC). [ ]	Repaired/Restored [ ]
	Weather or Natural Disaster [ ]	Other [ ]
	Operator Action(s) [ ]	
	Fuel Supply Deficiency (e.g., gas, oil, water)[ ]	
	Unknown Cause [ ]	
	Other [ ]	

The timely submission of Form OE-417 by those required to report is mandatory under Section 13(b) of the Federal Energy Administration Act of 1974 (FEAA) (Public Law 93-275), as amended. Failure to respond may result in a penalty of not more than \$2,750 per day for each civil violation, or a fine of not more than \$5,000 per day for each criminal violation. The government may bring a civil action to prohibit reporting violations, which may result in a temporary restraining order or a preliminary or permanent injunction without bond. In such civil action, the court may also issue mandatory injunctions commanding any person to comply with these reporting requirements. **Title 18 U.S.C. 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

A person is not required to respond to collection of information unless the form displays a valid OMB number. Data reported on Form OE-417 in Schedule 1, lines 4, 5, 6, 7, 8, and 9 are considered to be confidential. Schedule 2 is considered confidential. **All other data are not confidential.** (See form General Instructions for a full list of legal citations covering data collection authorization.)

**SCHEDULE 2. -- NARRATIVE DESCRIPTION** (page 3 of 3)

Provide a description of the event and actions taken to resolve it. Include as appropriate, the cause of the incident/disturbance, equipment damaged, critical infrastructures interrupted and effects on other systems. Be sure to identify: the name of any lost high voltage substations or switchyards, whether there was any electrical system separation (and if there were, what the islanding boundaries were), and the name of the generators and voltage lines that were lost (shown by capacity type and voltage size grouping). If necessary, copy and attach additional sheets. Equivalent documents, containing this information can be supplied to meet the requirement; these include the NERC Disturbance Report and the voluntary National Critical Infrastructure Protection System Form. Along with the filing of Schedule 2, a final (updated) Schedule 1 needs to be filed. Check the Final box on line 1 for Alert Status on Schedule 1 and submit this and the completed Schedule 2 no later than 48 hours after the event.

21. Narrative:

**Name of Generator(s) and  
Voltage Line(s) system  
reference (terminal points)**

(For these losses, please group by  
generator type and voltage size)

**Identify Name of Lost High  
Voltage Substation(s) and/or  
Switchyards**

(230 kV + for AC -- 200 kV+ for DC)

**Identify Electrical System  
Separation: Islanding  
Boundaries**

(DOE needs a basic  
description/understanding of the  
linked generating resources to load  
pockets.)

