



OE-417 ELECTRIC EMERGENCY INCIDENT AND DISTURBANCE REPORT

QUESTIONS

If you have any questions about Form OE-417 after reading the instructions, please contact the survey manager Brian Copeland at (202) 586-1178, FAX Number (202) 586-2623 or E-mail: OE417@OE.NETL.DOE.GOV.

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

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

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 Framework 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.

HOW TO SUBMIT

Online: An online form is now available at <http://www.oe.netl.doe.gov/oe417.aspx>. There is a separate set of instructions for using the online form available at https://www.oe.netl.doe.gov/docs/OE417_submission_instruction_s.pdf. The online form is now the preferred delivery method.

Instructions on how to report via e-mail, facsimile, or telephone are printed on Schedule 1 of Form OE-417.

E-mail: If you experience problems using the online form, you may submit your form via e-mail as an attachment to doehqec@hq.doe.gov.

Fax: If you experience problems submitting via the online submission form or email, you may fax the form to the following facsimile number. (202)586-8485.

Telephone: If you experience problems submitting via online, email, or fax, please call and report the information to the following telephone number: (202) 586-8100.

COPIES OF SURVEY FORMS AND INSTRUCTIONS

Copies in portable document format (PDF) and word format (DOC) are available on OE's website. You may access the materials by following the steps:

- Go to OE-417 website at <http://www.oe.netl.doe.gov/oe417.aspx>.
- Click on the hypertext link for the Online Form, Online Filing Instructions, Survey Form or the Form Instructions.

GENERAL INSTRUCTIONS

Form OE-417 is mandatory pursuant to Section 13(b) of the Federal Energy Administration Act of 1974 (Public Law 93-275). The form is considered an emergency form filed only when at least one of the criteria for filing the form, on page one of the form, is met.

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 Balancing Authority and/or Reliability Coordinator functions from the North American Electric Reliability Corporation (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.)

WHO MUST SUBMIT

1. **Balancing Authorities (BA), Reliability Coordinators (RC), some Generating Entities, and Electric Utilities**, including those located Puerto Rico, the Virgin Islands, Guam or other U.S. possessions are responsible for completing all relevant portions of the form when any of the criteria are met requiring the filing of Form OE-417.
 - a. All electric utilities must provide information to a BA when necessary for their reporting obligations and file Form OE-417 in cases where a BA will not be involved.

Note: this includes U.S. based utilities for whom balancing authority oversight responsibilities are handled by electrical systems located across an international border.
 - b. Foreign utilities, handling U.S. balancing authority responsibilities, may wish to file this information voluntarily to the DOE. Any U.S.-based utility in this international situation must inform DOE that these filings will come from a foreign-based electric system.

2. **Computer centers and physical security departments of**

electric utilities may file directly with OE on the selected areas identified in the Form OE-417 instructions.

Note: This information does not have to flow directly into the officials running the BA and RC and then be forwarded to DOE.

3. **Joint filing:** BAs' and RCs' can file notifications for joint filings. BAs can also file a combined report with electric utilities under their electrical oversight or all information is passed to the BA who then files a single report.

Note: OE requests that it be notified of those entities that plan to file jointly and of those electric utilities that want to file separately.

FUNCTIONAL RESPONSIBILITY OF FILING ENTITIES

All entities must file on all line items except for the following exclusions:

- **Electric Utilities** - There are no exclusions allowed, all items need to be addressed.
- **Balancing Authority (BA)** - Reporting on the count of customers (and the amount of load, if the BA is based at a Regional Transmission Organization or Independent System Operator) is required only for the Final Report. A BA 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. If the RC has an agreement with the Regional Transmission Organization to supply the customer counts, the RC can supply this information.
- **Generating Entities** - Entities who have 300 MW or more of generation dedicated to one or more end-use customers (e.g. retail or industrial customers) are required to file the form under criterion number 5.
- **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 BA, RC, and electric utility or that are located within the entity - These support centers or offices can file information, in lieu of the emergency offices, 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

Form OE-417 is considered an emergency form. Schedule 1 of the form must be submitted to the DOE Operations Center that operates on a 24-hour basis, 7 days a week only when at least one of the twelve criteria on page one of the form is met. Depending on the nature of the situation, the Schedule 1 of the Form OE-417 must be filed either within one hour or six hours if one or more of the twelve criteria apply

Criteria for Filing:

Within One Hour: Schedule 1 must be filed if one or more of

the following criteria 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

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

Within Six Hours: Schedule 1 must be filed if one or more of the following criteria apply and none of the eight criteria 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

Update Report – Schedule 1 should be re-submitted 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.

Within 48 hours a Final Report must be filed. 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.

- Complete and revise Schedule 1 as necessary and check "Final" as Alert Status on line 1.

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; this includes the NERC Interconnection Reliability Operating Limit and Preliminary Disturbance Report

SPECIFIC INSTRUCTIONS

[Definitions](#) of electric power industry terminology and other terms are available on the EIA website and in Appendix B, the Glossary for these instructions. Refer to the above for details on accessing the EIA website. Please refer to these definitions before completing the survey form.

Schedule 1

Criteria for filing Examine the Criteria for Filing on page 1 of the form to determine if a form needs to be filled out. Check all criteria (boxes 1–12) that apply to the situation or incident. If any of criteria 1-8 apply to the incident, then a report must be filed within one hour of the time of the incident or disruption, checking the Emergency Alert box on Line 1. If any of the boxes 9-12 are checked AND none of the boxes 1-8 have been checked, then the form must be filed within 6 hours checking the Normal Alert box on the Alert Status (line 1). An updated Schedule 1 also should be submitted with Schedule 2 as the Final Report, 48 hours after the incident or disturbance occurred.

Organization Filing section Lines 1 – 3

- **Line 1, Alert Status:** check the Emergency Alert box if at least one of criteria 1-8 apply; check Normal Alert box if only one or more of criteria 9-12 apply; check Update box if this filing is a re-submission due to important changes or corrections from the prior submission; check Final box to indicate this is the final report submitted for the incident, which should be filed 48 hours after the incident or disturbance began.
- **Lines 2 and 3:** enter the name and address of the organization filing the report.

Incident and Disturbance Data -- Completely fill out all parts of Lines 4-13 that apply

- **Line 4 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 4 of the form and re-submit the form, checking the Update or Final Alert Status box on line 1, as applicable.
- **Line 5 Date/Time Incident Began (mm-dd-yy/hh:mm),** enter the month, day, and year and the local time, in 24-hour time format, that the incident began.
- **Line 6 Date/Time Incident Ended (mm-dd-yy/hh:mm),** enter the month, day and year and the local time, in 24-hour time format, when the potential for further disruption of the system from this incident no longer existed.
- **Line 7 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.

- **Line 8 Estimate of Amount of Demand Involved (Peak Megawatts),** enter the amount of the peak demand involved over the entire incident. In the Emergency or Normal 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.
- **Line 9 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 9 of the form and re-submit the form, checking the Update or Final Alert Status box on line 1, as applicable.
- **Line 10 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.
- **Line 11 Type of Emergency** – check all options that apply:
 - **Major Physical Attack:** A major attack on any part of your system whether physical or electronic suspected of being a deliberate attack or sabotage that disrupts system operations and had the intent to harm the national security of the United States. **Note:** If burglary or vandalism is suspected check Vandalism under Line 12 instead.
 - **Major Cyber Attack:** A major attack on 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:** An event has occurred that required action(s) to relieve voltage or loading conditions; or transmission separation or islanding has occurred.
 - **Major Generation Inadequacy:** Insufficient generation exists to meet demand, or unexpected problems or inadequacies develop that impact operational and/or system reliability.
 - **Major Distribution System Interruption:** A 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.
- **Line 12, Cause of Incident,** check all of options that 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 Attack:** check if there was an actual attack or 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.

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

i. Report incidents that include vandalism or threat actions which 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 reporting requirement on vandalism will not be activated for much/all of the three-year clearance cycle. This secondary requirement would be 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 reviewed by DOE. If this becomes a reporting requirement, DOE will notify the respondents that the reporting threshold has to be met and will identify the reporting population for the duration of reporting at that level. The notification will be done by e-mail to the respondents and by an alert to critical energy infrastructure protection centers. The threat or other determination that obligates' DOE to activate this lower reporting level is 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.
- **Line 13, Actions Taken,** check all of options that apply:
 - **Shed Firm Load:** check if, in order to maintain the bulk power 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 power 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 power system, and/or address other reliability issues.
- **Shed Interruptible Load:** check if, in order to maintain the bulk power 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 power 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
- **For items that are unknown,** check the "unknown" box, and update that Line when the information becomes available in as an update filing or final report.

Schedule 2

When to File: Schedule 2 must be filed 48 hours after the incident or disturbance occurred. Schedule 2 should be filed with an updated Schedule 1.

- **Lines 14-18** Name of Official that needs to be contacted for follow up. Fill in contact information on official to contact for follow up.
- **Line 19 Narrative:** Provide a description of the incident and actions to resolve it.
- Provide an estimate when restoration of customers who are able to receive power will be complete.
- Provide the information on generators, lines system reference, substations, system separation, etc available at the time of the one hour filing.
- Provide details of any unit, process, system or critical component failures. Use additional sheets if necessary

SPECIAL INVESTIGATIONS

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

PROVISIONS REGARDING CONFIDENTIALITY OF INFORMATION

The information reported on Schedule 1 will be considered "public information" and may be publicly released in company or individually identifiable form, and will not be protected from disclosure in identifiable form.

All information on Schedule 2 of the form will be protected and 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, and the Trade Secrets Act, 18 U.S.C. §1905. The DOE will protect the information in accordance with its confidentiality and security policies and procedures.

The Federal Energy Administration Act requires the DOE to provide 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 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 nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

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

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 Federal Emergency Management Agency's National Response Framework responsibilities.

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 (Public Law No. 95-91, 42 U.S.C. 7101 et seq.) as amended, and the Public Utility Regulatory Policies Act of 1978, Sect. 209 (Public Law 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.

FILING FORMS WITH THE FEDERAL GOVERNMENT AND ESTIMATED REPORTING BURDEN

Respondents are not required to file or reply to any Federal collection of information unless it has a valid OMB control number. The public reporting burden for Schedule 1 is estimated to average 5 minutes per response and 2 hours for Schedule 2, including reviewing the form and instructions, gathering information, and submitting the form during an emergency situation. In addition DOE estimates there will be additional burden for refresher training of approximately 1 hour annually for each entity subject to reporting on Form OE-417. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to: Office of Electricity Delivery and Energy Reliability, OE-30, Infrastructure Security and Energy Restoration Division, 1000 Independence Avenue, S.W., Washington, D.C. 20585; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

APPENDIX A

QUICK REFERENCE GUIDE

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.
Balancing Authority (BA)	Reporting on the count of customers (and the amount of load, if the BA is based at a Regional Transmission Organization or Independent System Operator) is required only for the Final Report. A BA 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. If the RC has an agreement with the Regional Transmission Organization to supply the customer counts, the RC can supply this information
Generating Entities	Entities who have 300MW or more of generation dedicated to one or more end-use customers (e.g. retail or industrial customers) are required to file the form under criteria number 5.
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 BA, RC, and electric utility or that are located within the entity	These support centers or offices can file information, in lieu of the emergency offices, 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 1-8 incidents.
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	
How	E-mail Address / Phone Number
Online Submission Form	http://www.oe.netl.doe.gov/oe417.aspx
DOE Emergency Operations Center (EOC) E-mail	doehgeoc@hq.doe.gov
DOE EOC Telephone	(202) 586-8100
DOE EOC Fax	(202) 586-8485 (only when other methods are not available)

Balancing Authority (BA): 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.

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.

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

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.

Electric Utility: Any entity that generates, transmits, or distributes electricity and recovers the cost of its generation, transmission or distribution assets and operations, either directly or indirectly, through cost-based rates set by a separate regulatory authority (e.g., State Public Service Commission), or is owned by a governmental unit or the consumers that the entity serves.

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.

Generating Entity: Any combination of physically connected generators, reactors, boilers, combustion turbines, and other prime movers operated together to produce electric power.

Independent System Operator (ISO): An independent entity that coordinates regional transmission in a manner that is non-discriminatory against any transmission owners, operators or users, and ensures a safe and reliable electric system.

Interruptible Load: This Demand-Side Management category represents the consumer load that, in accordance with contractual arrangements, can be interrupted at the time of annual peak load by the action of the consumer at the direct request of the system operator. 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.

Regional Transmission Organization (RTO): Independent entities that control and operate regional electric transmission grids free of any discriminatory practices.

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.

Transmission Operator: The entity responsible for the reliability of its “local” transmission system, and that operates or directs the operations of the transmission facilities.

Voltage Reduction: Any intentional reduction of system voltage for reasons of maintaining the continuity of service of the bulk electric power supply system.