



Department of Health

**Food Safety  
Program**

**Bureau of Environmental Health  
and Radiation Protection**

*"To protect and improve the health of all Ohioans"*

# Power Outage in a Food Service Operation

## I. Assessment

In the event of an interruption of electrical service in a food service operation, appropriate responses must be taken after an assessment of multiple factors, including but not limited to:

- The complexity and scope of the food service operation;
- The duration of the electrical service interruption;
- The impact on critical infrastructure and services (example: refrigeration equipment); and
- The availability of alternative procedures that can be used to meet the Ohio Uniform Food Safety Code.

## II. Response

The following are temporary alternative procedures that may be considered to address specific affected food service operations during an extended interruption of electrical service:

- Cold Food Holding: Refrigeration equipment is inoperable.
  - Alternative procedures:
    - Keep refrigeration/freezing equipment doors closed.
    - Note the time the power outage begins. Refer to the food lists on pages 3-4 in this document for disposition of Time/Temperature Controlled for Safety (TCS) food, and discard foods as applicable.
    - Pack TCS food in commercially made ice or dry ice (use precautions for using dry ice by using insulated gloves and venting the area before entering).
    - Relocate products in cases to walk-in boxes, freezers, or refrigerated trucks if safe temperatures cannot be maintained in the cases.
    - Do not put hot food in refrigeration equipment.
- Ventilation: Mechanical ventilation is inoperable to remove smoke, steam, condensation, and fumes.
  - Alternative Procedures:
    - Discontinue all cooking operations.
- Lighting: Lack of artificial lighting for personal safety, food preparation, food handling, cleaning equipment/utensils, and cleaning the premises.
  - Alternative Procedures:
    - Limit operation to daylight hours. Restrict operations to those that can be safely conducted in available natural light.
    - Provide adequate lighting using other power sources (e.g. battery-operated lantern, flashlight, etc.) if fire codes allow. Limit operation to those procedures that can be safely conducted using alternative lighting.
- Cooking Equipment: Cooking equipment is no longer functional.
  - Alternative Procedures:
    - Evaluate time and temperature of cooked foods to determine if they should be discarded. Discard TCS foods that were in the cooking or re-heating process but did not reach a safe final temperature.
    - Discontinue cooking operations.

- Hot Food Holding: Equipment for holding TCS food hot is inoperable.
  - Alternative Procedures:
    - Note the time the power outage begins. Discard all TCS food after 4 hours from being removed from temperature control (below 135° F).
    - Use an alternate heat source such as “canned heat” and monitor temperatures hourly.  
*Note: If power returns within 4 hours, promptly reheat food to 165° F.*
- Dishwashing Equipment: Mechanical equipment for cleaning and sanitizing utensils and tableware is inoperable.
  - Alternative Procedures:
    - Wash, rinse and sanitize utensils in three compartment sink, if hot water is still available.
    - Use single-service utensils and tableware.
    - Discontinue operations that generate soiled utensils and tableware.
- Water: The well serving the establishment no longer produces water.
  - Alternative Procedures:
    - See “Interruption of Water Service” procedures.
- Sewage Disposal: Sewage ejector pump(s) or other electrical equipment is no longer functional.
  - Alternative Procedures:
    - Discontinue all operations. Contact the local health department for alternative options.
- Electric Hot Water Heater: No hot water.
  - Alternatives:
    - Restrict operation to serving only foods that do not require preparation, hand washing, or utensil washing, such as pre-packaged foods.
    - Discontinue operation until power is restored.

### III. Recovery

Recovery involves the necessary steps for re-opening and returning to a normal safe operation. **A food service operation that was ordered or otherwise required to cease operations may not re-open until authorization has been granted by the local health district.**

If the location was vacated during the power outage, upon return it is possible that the refrigeration equipment may be fully functioning and the food may be at proper temperature. However, ***if the duration of the power outage and the highest temperature of the food cannot be verified, then all TCS food must be discarded. TCS Foods may still be contaminated even if they smell or look ok.***

#### **Key areas to consider for returning to normal operation when power is restored:**

- Electricity, potable water, and/or gas services have been fully restored.
- All circuit breakers have been properly re-set as needed.
- All equipment and facilities are operating properly including: lighting, refrigeration (back to operating temperature of 41° F or below), hot holding, ventilation, water supply, sewage pumps, hot water heaters, toilet facilities, ware washing machines and hand washing facilities.
- Food contact surfaces, equipment and utensils are cleaned and sanitized prior to resuming food-handling operations. This includes ice bins in ice machines where ice has melted during the interruption.
- Flush all water lines, change filters, etc.

**Disposal of Food:** Small volumes of food can be denatured (e.g. with bleach, a detergent or other cleaning product to render it unusable) or alternatively destroyed and placed in an outside refuse bin for removal. To discard large volumes of food, the food service operation should contact a disposal company for immediate transportation to a licensed landfill or food recycling facility.

**REFRIGERATED FOODS:** When to save and when to discard

<b>MEAT, POULTRY, SEAFOOD</b>	<b>Above 40°F &gt; 2 hours</b>
Raw or leftover cooked meat, poultry, fish, or seafood; soy meat substitutes	Discard
Thawing meat or poultry	Discard
Salads: Meat, tuna, shrimp, chicken or egg salad	Discard
Gravy, stuffing, broth	Discard
Lunchmeats, hot dogs, bacon, sausage, dried beef	Discard
Pizza – with any topping	Discard
Canned hams labeled "Keep Refrigerated"	Discard
Canned meats and fish, opened	Discard
Casseroles, soups, stews	Discard
<b>CHEESES</b>	<b>Above 40°F &gt; 2 hours</b>
Soft Cheeses: blue/bleu, Roquefort, Brie, Camembert, cottage, cream, Edam, Monterey Jack, ricotta, mozzarella, Muenster, Neufchatel, queso	Discard
Hard Cheeses: Cheddar, Colby, Swiss, Parmesan, provolone, Romano	Safe
Processed Cheeses	Safe
Shredded Cheeses	Discard
Low-fat Cheeses	Discard
Grated Parmesan, Romano, or combination (in can or jar)	Safe
<b>DAIRY</b>	<b>Above 40°F &gt; 2 hours</b>
Milk, cream, sour cream, buttermilk, evaporated milk, yogurt, eggnog, soy milk	Discard
Butter, margarine	Safe
<b>EGGS</b>	<b>Above 40°F &gt; 2 hours</b>
Fresh eggs, hard-cooked in shell, egg dishes, egg products	Discard
Custards and puddings, quiche	Discard
<b>FRUITS</b>	<b>Above 40°F &gt; 2 hours</b>
Fresh fruits, cut	Discard
Fruit juices, opened	Safe
Canned fruits, opened	Safe
Fresh fruits, coconut, raisins, dried fruits, candied fruits, dates	Safe

<b>VEGETABLES</b>	<b>Above 40°F &gt; 2 hours</b>
Fresh mushrooms, herbs, spices	Safe
Greens, pre-cut, pre-washed, packaged	Discard
Vegetables, raw	Safe
Vegetables, cooked; tofu	Discard
Vegetable juice, opened	Discard
Baked potatoes	Discard
Commercial garlic in oil	Discard
Potato Salad	Discard
Casseroles, soups, stews	Discard
<b>SAUCES, SPREADS, JAMS</b>	<b>Above 40°F &gt; 2 hours</b>
Opened mayonnaise, tartar sauce, horseradish	Discard if above 50°F >8 hrs.
Peanut butter	Safe
Jelly, relish, taco sauce, mustard, catsup, olives, pickles	Safe
Worcestershire, soy, barbecue, hoisin sauces	Safe
Fish sauces, oyster sauce	Discard
Opened vinegar-based dressings	Safe
Opened creamy-based dressings	Discard
Spaghetti sauce, opened jar	Discard
<b>BREAD, CAKES, COOKIES, PASTA</b>	<b>Above 40°F &gt; 2 hours</b>
Bread, rolls, cakes, muffins, quick breads, tortillas	Safe
Refrigerator biscuits, rolls, cookie dough	Discard
Cooked pasta, rice, potatoes	Discard
Pasta salads with mayonnaise or vinaigrette	Discard
Fresh pasta	Discard
Cheesecake	Discard
Breakfast foods – waffles, pancakes, bagels	Safe
<b>PIES, PASTRY</b>	<b>Above 40°F &gt; 2 hours</b>
Pastries, cream filled	Discard
Pies: custard, cheese-filled or chiffon; quiche	Discard
Pies, fruit	Safe

Source: [www.foodsafety.gov](http://www.foodsafety.gov)

**FROZEN FOODS:** When to save and when to discard

<b>FOOD</b>	<b>Still contains ice crystals and feels as cold as if refrigerated</b>	<b>Thawed. Held above 40 °F for over 2 hours</b>
<b>MEAT, POULTRY, SEAFOOD</b>		
Beef, veal, lamb, pork, and ground meats	Refreeze	Discard
Poultry and ground poultry	Refreeze	Discard
Variety meats (liver, kidney, heart, chitterlings)	Refreeze	Discard
Casseroles, stews, soups	Refreeze	Discard
Fish, shellfish, breaded seafood products	Refreeze. However, there will be some texture and flavor loss.	Discard
<b>DAIRY</b>		
Milk	Refreeze. May lose some texture.	Discard
Eggs (out of shell) and egg products	Refreeze	Discard
Ice cream, frozen yogurt	Discard	Discard
Cheese (soft and semi-soft)	Refreeze. May lose some texture.	Discard
Hard cheeses	Refreeze	Refreeze
Shredded cheeses	Refreeze	Discard
Casseroles containing milk, cream, eggs, soft cheeses	Refreeze	Discard
Cheesecake	Refreeze	Discard
<b>FRUITS</b>		
Home or commercially packaged	Refreeze. Will change in texture and flavor.	Refreeze. Discard if mold, yeasty smell or sliminess develops.
Juices	Refreeze	Refreeze. Discard if mold, yeasty smell or sliminess develops.
<b>VEGETABLES</b>		
Home or commercially packaged or blanched	Refreeze. May suffer texture and flavor loss.	Discard after held above 40 °F for 6 hours.
Juices	Refreeze	Discard after held above 40 °F for 6 hours.
<b>BREADS, PASTRIES</b>		
Breads, rolls, muffins, cakes (without custard fillings)	Refreeze	Refreeze
Cakes, pies, pastries with custard or cheese filling	Refreeze	Discard
Pie crusts, commercial and homemade bread dough	Refreeze. Some quality loss may occur.	Refreeze. Quality loss is considerable
<b>OTHER</b>		
Casseroles – pasta, rice based	Refreeze	Discard
Flour, cornmeal, nuts	Refreeze	Refreeze
Breakfast items – waffles, pancakes, bagels	Refreeze	Refreeze
Frozen meal, entree, specialty items (pizza, sausage and biscuit, meat pie, convenience foods)	Refreeze	Discard

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