



Guidance Document for Interruption of Electrical Service in Food Service Operations

I. Assessment

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

- The complexity and scope of food service operations.
- The duration of the emergency event.
- The impact on other critical infrastructure and services (example: refrigeration).
- 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.

Affected Operations:

A. Refrigeration: Refrigeration equipment inoperable.

Alternative Procedures:

- Note the time the power outage begins.
- Monitor and record food temperatures every 2 hours (see Food Lists below for disposition of Time/temperature for safety food (TCS)).
- Keep refrigeration equipment doors closed.
- 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 product in cases to walk-in boxes, freezers, or refrigerated trucks if safe temperatures cannot be maintained in the cases.
- Do not put hot food into refrigeration equipment.

REFRIGERATED FOODS

When to save and when to discard:

FOOD	Held above 40 °F for over 2 hours	FOOD	Held above 40 °F for over 2 hours
MEAT, POULTRY, SEAFOOD Fresh or leftover meat, poultry, fish, or seafood	Discard	Fresh fruits, coconut, raisins, dried fruits, candied fruits, dates	Safe
Thawing meat or poultry	Discard	SAUCES, SPREADS, JAMS Opened mayonnaise, tartar sauce, horseradish	Discard if above 50 °F for over 8 hrs.
Meat, tuna, shrimp, chicken or egg salad	Discard	Peanut butter	Safe
Gravy, stuffing	Discard	White wine Worcestershire sauce	Discard
Lunchmeats, hot dogs, bacon, sausage, dried beef	Discard	Fish sauces (oyster sauce)	Discard
Pizza – with any topping	Discard	Hoisin sauce	Discard
Canned hams labeled "Keep Refrigerated"	Discard	Opened vinegar-based dressings	Safe
Canned meats, opened	Discard	Opened creamy-based dressings	Discard
CHEESE Soft Cheeses: blue/bleu, Roquefort, brie, Camembert, colby, cottage, cream, Edam, Monterey Jack, ricotta, mozzarella, Muenster, Neufchatel	Discard	Spaghetti sauce, opened jar	Discard
Hard Cheeses: cheddar, Swiss, Parmesan, provolone, Romano	Safe	BREAD, CAKES, COOKIES, PASTA Bread, rolls, cakes, muffins, quick breads	Safe
Processed Cheeses	Safe	Refrigerator biscuits, rolls, cookie dough	Discard
Shredded Cheeses	Discard	Cooked pasta, spaghetti	Discard
Low-fat Cheeses	Discard	Pasta salads with mayonnaise or vinaigrette	Discard
Grated Parmesan, Romano, or combination (in can or jar)	Safe	Fresh pasta	Discard
DAIRY Milk, cream, sour cream, buttermilk, evaporated milk, yogurt	Discard	Cheesecake	Discard
Butter, margarine	Safe	Breakfast foods – waffles, pancakes, bagels	Safe
Baby formula, opened	Discard	PIES, PASTRY Pastries, cream filled	Discard
EGGS Fresh eggs, hard-cooked in shell, egg dishes, egg products	Discard	Pies – custard, cheese filled, or chiffon	Discard
Custards and puddings	Discard	Pies, fruit	Safe
CASSEROLES, SOUPS, STEWS	Discard	VEGETABLES Fresh mushrooms, herbs, spices	Safe
FRUITS Fresh fruits, cut	Discard	Greens, pre-cut, pre-washed, packaged	Discard
Fruit juices, opened	Safe	Vegetables, raw	Safe
Canned fruits, opened	Safe	Vegetables, cooked	Discard
		Vegetable juice, opened	Discard
		Baked potatoes	Discard
		Commercial garlic in oil	Discard
		Potato Salad	Discard

FROZEN FOODS

When to save and when to discard:

FOOD	Still contains ice crystals and feels as cold as if refrigerated	Thawed. Held above 40 °F for over 2 hours
MEAT, POULTRY, SEAFOOD 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
DAIRY 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
FRUITS Juices	Refreeze	Refreeze. Discard if mold, yeasty smell or sliminess develops.
Home or commercially packaged	Refreeze. Will change in texture and flavor.	Refreeze. Discard if mold, yeasty smell or sliminess develops.
VEGETABLES Juices	Refreeze	Discard after held above 40 °F for 6 hours.
Home or commercially packaged or blanched	Refreeze. May suffer texture and flavor loss.	Discard after held above 40 °F for 6 hours.
BREADS, PASTRIES 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
OTHER 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

B. Ventilation: No mechanical ventilation provided to remove cooking smoke, steam, grease laden air, etc. **Alternative Procedures:**

- Discontinue all cooking operations.

C. Lighting: Lack of artificial illumination for personal safety, food preparation, food handling, cleaning equipment/utensils, cleaning the premises.

Alternative Procedures:

- Limit operation to daylight hours. Restrict operations to those that can be safely conducted in available natural light.
- Provide lighting using other power sources (i.e. battery operated lantern, flashlight, etc. if fire codes allow). Limit operation to those procedures that can be safely conducted using alternative lighting.

D. Cooking Equipment: Cooking equipment is no longer functional.

Alternative Procedures:

- Evaluate time and temperature to determine if foods should be discarded.
- Discard raw animal/TCS foods that were in the cooking or re-heating process but did not reach a safe final temperature.
- Discontinue cooking operations.

E. Hot Food Holding: Equipment for holding TCS food hot is no longer operational.

Alternative Procedures:

- Note the time the power outage begins.
- Discard all TCS food after 4 hours from being removed from temperature control (below 135°)
- Use an alternate heat source such as “canned heat” and monitor temperatures hourly. Note: If power returns within 4 hours, reheat food to 165° F.

F. Dishwashing Equipment: Equipment for cleaning and sanitizing utensils and tableware is no longer operational.

Alternative Procedures:

- Use the three compartment sink if hot water is still available.
- Use single service tableware.
- Discontinue operations that generate soiled utensils/tableware.

G. Water: The well serving the establishment no longer produces water.

Alternative Procedures:

- See “Interruption of Water Service” procedures.

H. Sewage Disposal: Sewage ejector pump(s), no longer functional.

Alternative Procedures:

- Discontinue all operations. Contact the local health department for possible options.

I. Electric Hot Water Heater: No hot water **Alternative Procedures:**

- Heat water on a gas cooking appliance.

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 the storage equipment may be fully functioning and the food may be at proper temperature. If the duration of the power outage and the highest temperature of the food cannot be verified then all TCS food must be discarded.

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 and 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 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 (such as 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 firm should contact a disposal company for immediate transportation to a licensed landfill.