



## FOOD FACILITY GUIDELINES DURING TEMPORARY POWER OUTAGE

For various reasons, California may experience random scheduled and unscheduled power outages. Appropriate decision-making before, during, and immediately after power outages is necessary to protect consumers from unsafe food and minimize product loss. Environmental Health Services (EHS) recommends that food retailers develop a plan and obtain appropriate emergency supplies **before** the need arises.

The food items of concern are those that are potentially hazardous foods (PHF). Generally, PHF are moist, perishable foods in and on which bacteria can grow most easily during the time when the food is held in the temperature danger zone (41°F to 135°F).

**A POWER OUTAGE OF 2 HOURS OR LESS IS NOT CONSIDERED HAZARDOUS TO FOOD THAT IS HELD UNDER SAFE CONDITIONS WHEN THE OUTAGE BEGINS.**

### DO THIS FIRST!

- **Write down the TIME when the power outage occurred.**
  - Your food safety "time clock" starts ticking when the power goes out.
  - Discard food products that are in the process of being cooked, but which have not yet reached the final cooking temperature.
- **Close the facility if:**
  - No hot water or adequate water pressure
  - There is no ability to properly wash, rinse, and sanitize utensils
  - Hood Ventilation and make-up air supply systems in conjunction with gas or solid fuel heating equipment are not functioning (Danger: Toxic fumes may cause injury or death)
  - Insufficient light in food preparation areas to allow for safe food preparation and cleaning and sanitizing of food contact surfaces
  - There are unsafe food temperatures (see tables below)

- **Actions that can keep food safe for several hours**

Cold Potentially Hazardous Foods	Hot Potentially Hazardous Foods
<ul style="list-style-type: none"> <li>○ Keep refrigerator and freezer doors closed as much as possible</li> <li>○ If practical, group packages of cold food together to reduce heat gain</li> <li>○ Cover open refrigerated and frozen food cases, especially vertical displays</li> <li>○ <i>Caution: The use of dry ice may result in unsafe build-up of CO<sub>2</sub> (Carbon Dioxide).</i></li> </ul>	<ul style="list-style-type: none"> <li>○ Do not place hot foods in refrigerators or freezers</li> <li>○ Use "canned heat" under foods on electric steam tables to help maintain PHF at 135°F</li> <li>○ Use ice and/or ice baths to rapidly cool small batches of hot food</li> </ul>

- **Begin taking regular food TEMPERATURE readings.**
  - Always have a food thermometer ready.
  - Check hot foods every hour and cold foods every two hours.
  - Keep a time/temperature record for every item checked in every unit.



## FOOD SAFETY FACTORS

Watch these four food conditions carefully:

- 1. Foods being cooked when power went off.**
  - Do not serve any partially cooked food.
  - If power outage is brief (under 1 hour), re-cook food to 165°F when power returns.
  - If power is out for more than 1 hour, discard all partially cooked food.
- 2. Foods being held hot (e.g., 135°F or above in a warmer)**
  - Once food is below 135°F for more than four hours, discard it.
  - If food is below 135°F for less than four hours, rapidly reheat it to 165°F on stove or in oven before serving.
- 3. Foods being held cold (e.g., 41°F or below in a refrigerator)**
  - Write down time when food rises above 41°F.
  - If food cannot be re-chilled to 41°F within four hours, discard it.
- 4. Frozen foods that thaw out**
  - If thawed food does not exceed 41°F for more than four hours, it may be refrozen. *(Note: Refreezing can make some foods watery or mushy)*

## ROAD TO RECOVERY

**After the power comes back on...**

1. Decide which foods to discard and which to salvage. Use time/temperature records and food safety factors described here.
2. Verify electrical breakers, utilities and all equipment are in working order.
3. Make sure hot water is being heated adequately for hand and ware washing.
4. Clean and sanitize food equipment and utensils as needed.
5. Call Environmental Health Services before reopening.



**Use the following tables to determine the disposition of the PHF**

**REFRIGERATED PHF**

Use the table below as a guide for handling PHF stored in refrigeration units during power outages:

Duration of Power Outage (hours)	Food Temperatures		
	45°F or below	46°F to 50°F	50°F or above
0-2	PHF can be sold	Immediately cool PHF to 45°F or below within 2 hours	PHF cannot be sold
2-3	PHF can be sold, but must be cooled to 41°F or below within 2 hours	Immediately cool PHF to 45°F or below within 1 hour	
4+	Immediately cool PHF to 41°F or below within 1 hour	PHF cannot be sold	

**PHF IN HOT HOLDING UNITS**

Use the following table to determine what to do with PHF that is held in hot holding units and is below 135°F at the time the power is restored:

Duration of Power Outage	Food below 135°F in Hot Holding Units When Power is Restored
2 hours or less	<ol style="list-style-type: none"> <li>1. May be sold if reheated to 165° F and then held at 135° F or above; or</li> <li>2. May be sold if rapidly cooled to 41 ° F or below within 2 hours following restoration of power.</li> </ol>
More than 2 hours	PHF cannot be sold

If food cannot be rapidly cooled as specified in the tables above, it cannot be sold.

If you voluntarily closed your facility, the following conditions should be verified prior to resuming food preparation and/or sale of potentially hazardous foods:

1. All unsafe potentially hazardous food has been discarded
  - If there are any questions regarding the safety of specific foods, contact your local environmental health agency
2. Electricity and gas services have been restored
3. All circuit breakers have been properly reset as needed



4. All equipment and facilities are operating properly, including:
  - Lighting
  - Refrigeration
  - Hot holding
  - Ventilation
  - Toilet facilities
5. Hot (minimum 120° F) and cold potable water, under pressure for:
  - Hand washing
  - Proper dishwashing

**If your facility was closed by EHS, it must remain closed until you obtain official approval from EHS to reopen.**

## DISPOSAL OF FOOD

**PHF that has been subjected to unsafe temperatures prior to the power outage might not be safe to eat even if the procedures in the tables on the previous page are followed.**

**WHEN IN DOUBT, THROW IT OUT!**

- If it is determined that food must be discarded, document the type and amount of food and the reason for disposal for insurance and regulatory purposes.
- Small volumes of food to be discarded can be denatured with a cleaning product (such as bleach) and placed in the outside refuse bin.
- To discard large volumes of food, contact your refuse disposal company or your local landfill operator for disposal instructions.
- If there are any questions regarding the safety of specific foods, contact EHS.

**You're ready to reopen only after making sure the food you are serving is safe.**

### **POTENTIALLY HAZARDOUS FOODS (PHF)**

Foods to be most concerned about during a power outage include various egg, milk and meat products, cut melons, and other perishables. Harmful microorganisms can grow in these foods and cause illnesses when temperatures are between 41°F and 135°F.

Examples:

- Meat and meat dishes
- Mixed dishes (soups, stews, casseroles, pasta/rice)
- Dairy and egg products (milk, eggs, cream sauces, soft cheeses)
- Cut melons, cooked vegetables (cut watermelon, honeydew, cooked peas)
- Some desserts (pumpkin pie, custard-filled pastry, cheesecake, meringue, chiffon)



### **NON-POTENTIALLY HAZARDOUS FOODS (non-PHF)**

These foods may be kept at room temperature. Harmful microorganisms usually do not grow on these foods and do not cause illnesses. Discard these foods if quality deteriorates or mold grows on them. Examples:

- Breads, dry flour, dry pasta, dry rice, sugar
- Vinegar-based dressings, ketchup, relish, mustard, condiments
- High-sugar foods (jellies, fruit pies, dried fruit, juices)
- Hard cheeses, solid butter, whole fresh fruits/vegetables

### **KEEPING COLD FOOD COLD LONGER**

- Keep refrigerator doors closed, except while checking temperatures every two hours.
- Cover open coolers with tarps or blankets.
- Avoid adding hot foods to refrigerators.
- Group chilled foods together to reduce warming. *(Note: A closed refrigerator can keep food cold for up to four hours; a closed freezer for up to two days. A half-filled freezer will warm up twice as fast as a full one.)*

## **HELPFUL HINTS**

### **Reduce the impact of a power outage by:**

- Canceling incoming food supply shipments.
- Transferring food to off-site cold storage facilities.
- Placing dry ice blocks in refrigerators/freezers. A 25-pound block of dry ice can keep a 10-cubic-foot freezer cold for up to four days. *(Note: Dry ice produces carbon dioxide gas that should be ventilated.)*