

State of Oregon Inter-agency Memo

To: State Facility Coordinators

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Subj: Rolling Blackouts

What should state agencies do before and during rolling blackouts?

Rolling blackouts or *rotating outages* occur when demand for power moves beyond the limits of a utility's power supply. After trying all other options, the utility shuts down one or more of the areas that it serves. This is to prevent failure of the whole power delivery system. An hour or two later, power is restored to those areas and shut down to others. This moving closure continues until the demand for power equals the supply. TV stations may be able to give the public some notice that outages are imminent.

These rotating outages are not likely now (August 2001). They could occur if we have an exceptional hot spell, a dry and cold winter, or an unexpected loss of major generating or power transmission resources.

However, outages can be caused at any time by storms, construction errors, or auto crashes. These accidental outages can be far worse than rolling blackouts. Accidental outages can cause high voltage surges that destroy equipment or start fires. They can last a day or more. So, it makes sense to be reasonably prepared at all times.

Preparing For Rolling Blackouts

If rolling blackouts do become more likely, agencies are advised as follows.

1. Agencies should accept that they will be at risk of rolling blackouts and accidental outages of all kinds. State emergency services and institutions providing 24 hour client housing may want to call their local power suppliers to learn whether any critical service facility is on a circuit that will be subject to rolling blackouts. State sites that do not deliver critical emergency service should not call. They should just accept that they are at risk.
2. Agencies should not buy generators, uninterruptible power supplies, or other equipment just to protect from the minor risk of rolling blackouts. They should already have installed whatever is appropriate to manage power supply risks.
3. Each state site should use this plan to respond to rolling blackouts or adapt the plan to meet the site's unique needs.
 - (a) Never call 911 unless there is an immediate emergency requiring police, ambulance, or fire fighters.
 - (b) Turn off or unplug equipment that was in service when power was lost. It is especially critical to check that equipment is off if the office is closing and to be sure all heat sources are off. The reasons to turn things off are:
 - To prevent equipment harm from surges or fluctuations when power resumes.
 - To prevent harm to people or property if equipment comes on while unattended.

- To reduce load at the time the power is restored.
- (c) Turn off the overhead lights. Leave a task light turned on to see when service is restored. Do not use candles or other flame for light in a state office.
- (d) When the risk of rolling blackouts is announced, avoid elevators as much as practical, especially early and late in the day. Morning and early evening are when peak power demands make blackouts more likely. In an elevator stopped by an outage, try the emergency phone to let people know of your situation. Whether the phone works or not, stay calm. Elevators are designed to safely cope with power loss. Sit down and take it easy for the next hour or two. Never try to climb out of the elevator.
- (e) During business hours, plan to remain at the workplace during a blackout (or request appropriate leave). A temporary power loss will impair operations, but staff should turn to those functions that can be performed. The standard state closure policy says:
- It is the state's duty to remain open to serve the public. The state must curtail or close any of its operations only under the most extreme of adverse conditions.
 - The decision to close a state office due to regional events is made by the Department of Administrative Services for Portland - Salem areas and the local Adult and Family Services Division District Manager for other areas of the state.
- (f) Avoid driving or walking outside. Loss of traffic signals may cause traffic jams and increase intersection hazards. Emergency vehicles may be responding to accidents. Stores will likely be closed, too.
- (g) Don't plan on the phones. Most office phone systems, all cordless phones, and many cell phone towers will not work when the power is off. Direct hardwired phones should work.
- (h) Never plug any portable generator into an electric outlet. You could damage property and endanger the life of a power line worker.
- (i) When power resumes, turn things on cautiously and gradually. First, wait five to ten minutes. Then, turn on a bank of lights and a desk-top computer. If they operate normally, turn on whatever is needed, but do it in stages to help assure circuits will not be overloaded before the power system stabilizes.
- (j) Do not expect everything to work when power resumes. Heating, ventilation, cooling, computer systems, and elevators may need to be manually reset. If it is time to close, assure that any exterior electronic locks are working before leaving.

Brownouts: System operators should know that during very heavy power usage, a utility could reduce voltage to avoid a blackout. A minor *brownout* would likely not be noticed in an office. A more severe brownout might appear as equipment failures. Some computer and HVAC equipment steadily test for power quality. Those may switch to back-up power or shut themselves off in a brownout. In the event of a brownout, turn off all power uses that are not necessary for safety.

Have a Personal or Family Plan for Rolling Blackouts

Some of these family suggestions apply to the workplace and some of the workplace policy makes sense at home.

1. If rolling blackouts are announced as likely, you may wish to carry a penlight in your purse, briefcase, and car. Even in daytime, restrooms may not have windows or emergency lighting. A radio and cell phone could be useful.
2. Have a plan with your family for what you will do or where you will meet if a blackout disrupts whatever your plans are. Don't count on reaching each other by phone.
3. If caught in traffic, treat every inoperable traffic light intersection as a four-way stop, but do not assume that anyone else will stop for you. Do not insist on the right-of-way. Drive with patience and courtesy. Avoid congested areas if possible.
4. Remember, credit card verifiers, fuel pumps, cash machines, and many vending machines will go out with the power.
5. Know how to manually open and close your garage doors.
6. Have an emergency plan if you rely on medical equipment. This may include a back-up power source or a plan to move to another site.
7. Know how your natural gas equipment works. If your equipment has an electronic ignition or requires a fan, it will not work until power is restored.
8. Keep the doors closed on refrigerators to help prevent food spoilage.