

## SECTION 11.21

### UTILITY FAILURE: ELECTRICAL

#### PROCEDURES TO BE FOLLOWED IN THE EVENT THAT A UTILITY FAILURE AFFECTS LOMA LINDA UNIVERSITY HEALTH

#### RESPONSE

##### All Personnel

**Ensure personal safety and check on those around you:** Loss of lighting in buildings may make movement difficult.

- **Remain Calm:** Think about your actions. Do not abandon responsibilities. Do not run. Move to an area of safety.
- **If indoors and in the dark:** Move slowly and deliberately. Use any available light source to guide your way (e.g., flashlight, phone). If you do not have any light source and it is not safe to move, stay put and call out.
- **If you have a light source:** Check on those around you in the surrounding area, especially rooms that may have no emergency lighting such as offices, classrooms, and bathrooms. Assist others in moving to a safe location with light.
- **If you are entrapped in an elevator:** Utilize the emergency call button or phone to report your entrapment to Security Control Center.
- **Do not call to report the power failure:** Contacting Security Control Center to report the power failure or inquire about the status of power prevents officers from responding to emergency calls. Security Control Center is aware of most power failures through notifications that are part of the fire alarm system.
- **Report life threatening conditions and hazardous conditions:** Report any life-threatening conditions or hazardous conditions (e.g., downed power lines, elevator entrapments, smoke, or fire) to 911 or Security Control Center.

##### Clinical Personnel

1. **Obtain emergency equipment,** such as flashlights and headlamps.
2. **Assess staff and patients:** account for staff and patients on unit or department, identify anyone that needs assistance.
3. **Maintain patient safety:** ensure that critical patient care equipment (monitors, pumps, ventilators) is plugged in to emergency red plugs and are functioning correctly. Reset medical equipment as necessary to ensure proper function.
4. **Assess refrigeration equipment:** verify that medications, lab supplies, patient food, or breast milk dependent on cold chain is in refrigeration plugged into emergency red plugs and is functioning.

5. **Notify Manager/Supervisor:** report any missing staff or patients, equipment malfunctions, loss of cold chain equipment, access control issues, or communication equipment failure to the unit manager/supervisor.
6. **Avoid calling 911 or Security Control Center,** except to report life threatening conditions or hazardous conditions.
7. **Complete Power Loss:** provide 1:1 care for critical patients. Hand ventilate patients as needed. Prepare for potential evacuation.

#### **Security Control Center**

1. Receive reports of persons needing assistance, immediate damage assessment, facility and systems status.
2. **Notify the LLUH Incident Assessment Team**
  - Initiate Incident Assessment Team conference call
  - Provide briefing and status report
  - Initiate and schedule Administrative Briefing notification
3. **Notify, as indicated:**
  - Emergency response agencies
  - Emergency Department
  - Campus Engineering/Facilities Management
  - Office of Environmental Health & Safety
  - Office of Radiation Safety
  - Emergency Management Staff
  - LLUH Administration

#### **Incident Assessment Team**

Assess the scope, cause, impact, and projected resolution of the power outage and provide communication updates.

1. Provide initial notification to Administration
2. Coordinate response with Administrator-on-Call
3. Provide regular status updates to Administration
4. Sent out employee communication as needed
5. Notify Power Interruption Research Group when outage is longer than 30 minutes
6. Send out communication when power has been restored.

#### **Power Plant**

1. Check and monitor the status of the outage with COGEN and SCE
2. If issue is with COGEN, initiate steps to resolve outage
3. Report cause, location, and scope of outage to Incident Assessment Team
4. Report ETA on power restoration when available.

#### **Facilities**

1. Check emergency generators and ensure they are functioning
2. Monitor the temperature and humidity levels in ORs
3. Respond to healthcare facility emergencies relating to the outage.

- Campus Engineering**
1. Determine estimated length of outage
  2. For University buildings with emergency generators, start generators within three hours from onset of power outage
  3. Monitor function and operation of all University building generators
  4. Respond to LLU building emergencies related to the outage.

- Security**
1. Check for elevator entrapments
  2. Notify Fire department of entrapments and reference elevator outage plan
  3. Facilitate access to areas that have lost access control due to power outage.

- Administrator-On-Call**
1. Obtain power failure updates or briefing from Incident Assessment Team.
  2. If the situation indicates:
    - Assume command.
    - Declare a Disaster Condition, in consultation with the Emergency Operations Manager or designee.
    - Assume or assign the role of Incident Commander.
    - Activate the LLUH Command Center.
  3. Ensure that necessary response and recovery actions are implemented and carried out to completion.

## PREPARATION

**Education and Training:** Training and education is provided in the annual *B.L.U.E. Book* and through department in-service training.

**Emergency Drills & Exercises:** Utility failure protocols are tested periodically in select quarterly disaster drills and exercises.

## MITIGATION

### Hazard Vulnerability Analysis (HVA):

1. A Hazard Vulnerability Analysis (HVA) is performed annually to update the priorities assigned to emergency incidents for use in emergency planning.
2. Hazard vulnerability assessment results drive priorities in preparation, training, education, and drills and exercises.

## Utility Systems Protection:

Facilities Management, Campus Engineering, and Power Plant are responsible for implementing provisions to reduce the likelihood and severity of disruptions in utility service, including:

- Electrical Distribution
- Emergency Power;
- H.V.A.C. Systems;
- Plumbing and Water Delivery System;
- Medical Gas Systems (LLUSCD);
- Medical Vacuum Systems (LLUSCD);
- Communication Systems.

### Medical Equipment

The Clinical Engineering Department is responsible to implement its program designed to reduce the incidence and severity of equipment failure and to ensure that clinical staff are knowledgeable and confident in the operation, performance and reliability of the medical equipment they use.

### LLUH Research

Departments with critical research data and specimens are responsible to ensure basic controls and policies are in place to protect their research. This will include but not be limited to:

- Facilities
- Maintenance and Testing
- Inventory
- Redundancy
- Records Management

## RECOVERY

### General Responsibility

Responsible for implementing recovery processes resulting from significant utility outages is shared by the President, CEO, COO, the Executive Vice President of Nursing, the Executive Vice President of Finance, and the Senior Vice President, Risk Management.

### Facilities Recovery

Responsibilities and procedures for facilities recovery operations are detailed in *Section 6.2* of the LLUH Emergency Operations Plan.