

Utility Outage Policy and Protocols

GUIDELINES: Planned and Emergency Utility Outage Guidelines

PURPOSE:

The purpose of these guidelines is to define and put in place protocols for roles and responsibilities in requesting, coordinating scheduling, and executing utility outages and restoration procedures for outages related to emergencies, daily operations and works/construction projects.

STRATEGIC VISION:

Strategic Goal: Resources and Business Continuity

Safeguard resources by proactively managing all outages to minimize operational impacts.

DEFINITIONS:

1. EMERGENCY UTILITY OUTAGE: An interruption in utility services that cannot be foreseen. Emergency outages are required when repairs must be accomplished immediately to safeguard property, research and occupant health.

2. EMERGENCY OUTAGE NOTIFICATION (ATTACHMENT 1): A document that is sent by Facilities Management (FM) to all personal, notifying them of the details of the Emergency Utility Outage.

3. OUTAGE PLANNING FORM (ATTACHMENT 2): A document that provides full details of a Planned Utility Outage – timing & contact information, etc. This form is initiated by FM, and is filled out by the overseer.

4. PLANNED UTILITY OUTAGE: An interruption in utility services, which can be foreseen. Planned outages include all repair works/projects with enough lead time to allow them to be accomplished on a non-emergency basis.

6. POST-OUTAGE ASSESSMENT (ATTACHMENT 3): A document sent by FM to the H&S Officer for signature after the Outage, in which the H&S Officer confirms that there are no post-Outage problems reported by building occupants.

7. PRIMARY CONTACT: TURAS coordinator with overall stewardship and accountability for a utility outage.

8. STAKEHOLDER: Individuals and groups who are involved in, and/or are impacted by, a Utilities Outage. Examples including all building occupants, TURAS Coordinator, TURAS Health & Safety Office, Fire Marshal, Facilities Management and Maintenance personnel, TURAS Line Managers, (Possibly, HSA, Garda, Fire Brigade, Ambulance)

9. EXTERNAL UTILITY: Any service provided by an outside source, which facilitates building operations.

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SCOPE:

This outage procedure covers the operation of building systems under the control of Facilities Management (FM).

Building system outages are typically required for the purposes of construction, renovation, isolation, maintenance, replacement, or repairs to existing systems, subsystems or component parts thereof.

Systems included in these guidelines include but are not limited to:

- Domestic Cold Water
- Domestic Hot Water Supply and return
- Electrical High Voltage
- Electrical Low Voltage
- I.T. systems

These guidelines do not apply to isolation valves, switches or other such devices that isolate a point of service device that shall result in only the loss of service of the specific piece of equipment, fixture or other device. In these cases, the PRIMARY CONTACT must still notify all affected STAKEHOLDERS of the impact of the outage.

Examples of such situations would include but not be limited to:

- a. Plumbing fixtures (sinks, toilets, showers, drinking fountains, etc.)
- b. Redundant devices such as pumps, fans or other equipment that are being appropriately backed-up by operational duplicate devices.
- c. Individual, radiators, unit heaters or other devices controlling a single space.
- d. Lighting and power circuits serving a single space or device including discrete electrical devices such as occupancy sensors, light fixtures, light switches and receptacles.
- e. Irrigation water services, which may be operated by the Central Services group under Facility Management or their designees.
- f. Fire protection water services, which may be operated by the Fire Department or their designees.

All utility or building system outages shall have one of two classifications, a "PLANNED OUTAGE" or an "EMERGENCY OUTAGE". The "PRIMARY CONTACT" is the person who shall remain as the single, primary point of contact throughout the outage.

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PLANNED OUTAGES:

Planned outages shall include all repair projects with enough lead time to allow them to be accomplished on a non-emergency basis, and all capital and renovation projects which require outages during construction.

All building system outages that will result in an interruption of normal system service shall be reviewed, approved, and implemented with the full knowledge and involvement of the appropriate STAKEHOLDERS including FM personnel, Building Coordinator, other personnel (Fire Marshal, etc.) as necessary. The appropriate Technical Services supervisors shall be contacted for approval for operations that affect the delivery of services to facilities. In particular all actions affecting building operations must occur with the prior knowledge and approval of the applicable Technical Services Group. SEE ATTACHMENT 6 for supervisor contact list and areas of responsibilities.

All isolation operations shall comply with proper Lockout – of the Centre and as stipulated by regulations. Lockouts shall be of the group type including a lock from the Utilities Department and one from the party performing the work. No system may be restarted or returned to service without the knowledge, approval or involvement of the appropriate Technical Services personnel. (SEE ATTACHMENT 4)

Valves associated with these guidelines also include drains, vents, bypasses and any other auxiliary devices associated with the various systems. Switches associated with these guidelines shall also include circuit breakers, switches, safety switches, disconnects.

When work activities conclude, a review of all affected equipment, valves, switches and other such devices shall be undertaken either by visual inspection or by operation in such a manner to determine that these devices have been left in the proper position for the respective system to operate normally.

Should there be a system failure or emergency situation during the outage, necessary actions shall be taken to control the situation without the need to explicitly follow the requirements of these guidelines and its procedures. Subsequent to the event, the system configuration and these guidelines shall be followed. In the event of electrical overload or similar occurrence, the building electrical loads shall be managed by Facilities Management, in accordance with the required regulation.

THE PROCESS:

1.0 Evaluate Outage

1.1 Evaluate the potential outage to determine if it would more appropriately be an Emergency Outage, or if it qualifies as an exception due to its minor nature.

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2.0 Plan Outage

2.1 The PRIMARY CONTACT shall complete the Outage Planning Form (See ATTACHMENT 2) and meet with appropriate STAKEHOLDERS to discuss:

- A. Impacts
- B. Preferred Scheduling
- C. Outage Duration
- D. Contingency plans to minimize disruption and protect the building systems and program operations.
- E. Special logistics such as room access, etc.
- F. Contact information for the designated person and their availability during outage.

3.0 Communicate Outage

3.1 The PRIMARY CONTACT shall complete the PLANNED OUTAGE NOTIFICATION and submit to Facilities Maintenance for final approval and publication. See ATTACHMENT 3.

3.2 Outage notifications using the PLANNED OUTAGE NOTIFICATION shall be issued seven (7) working days prior to the scheduled outage to the Facilities Management designee. The designee shall forward to the appropriate STAKEHOLDERS. When outages have widespread impact an additional correspondence shall be sent to the centre community by the TURAS Coordinator.

3.3 Any outage or impact to fire alarm or life safety system shall require completion of a FIRE PROTECTION SYSTEM SHUTDOWN PERMIT with the H&S officer and the Alarm Company.

The Permit must be completed by the company and/or group doing the actual work, and delivered in person (no faxed or e-mailed Permits are accepted) at least 24 hours prior to the scheduled work.

If the outage affects sprinklers and exceeds eight or more hours Facility Management, shall notify the H&S Officer and the Centre's insurance company prior to the outage and also after all works has been completed.

3.4 Notifications shall be distributed to all stakeholders depending on the level of impact. Stakeholders may include:

- A. Management/Staff
- B. Participants/students
- C. Landlord or Representative
- D. Others

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4.1 The PRIMARY CONTACT shall coordinate all aspects of the outage. Depending on the extent and complexity of the outage, this may include a constant or a periodic presence on site, and/or coordinating and communicating updates to key STAKEHOLDERS as appropriate.

4.2 If the outage is unsuccessful (i.e. the intended scope of work could not be accomplished) the PRIMARY CONTACT shall notify and/or meet the appropriate STAKEHOLDERS to correct problems and propose a rescheduled date.

Follow-through

5.1 The PRIMARY CONTACT shall notify STAKEHOLDERS, including the Facilities Management, that the shutdown was successful. FM shall check out equipment, valves, etc. as necessary.

5.2 The PRIMARY CONTACT shall ensure that the Building Coordinator completes and signs the POST-OUTAGE ASSESSMENT (ATTACHMENT 3)

EMERGENCY OUTAGE

Emergency outages can occur and are required for repairs that must be accomplished immediately to safeguard property and health. Facilities Management has a record of all personnel and personnel telephone numbers and names, who they contact as standard procedure.

The PRIMARY CONTACT handling an emergency outage shall inform the Facilities Management if outage occurs during normal working hours, and ensure all personal evacuate affected areas, if outage occurs during non-working hours. The PRIMARY CONTACT shall relay as much information as is possible at that time. The Facilities Management shall contact the appropriate STAKEHOLDERS at that time, using the Emergency Outage Notification form if circumstances permit.

RESTORATION OF SERVICE:

Every attempt shall be made to restore services as fast as possible. Services shall be restored in the general priority below:

1. Entire Building
2. Auxiliary Areas
3. Classrooms and Offices

After restoration of services, technicians representing each technical area and a representative from Facilities Management shall survey the affected building/areas and ensure that systems in the respective areas are operational and that equipment is set in its normal operating position. This includes (but is not limited to): building controls, fire alarm, electrical supply, water supply, sewers system, building emergency power systems, and building plumbing systems, I.T. systems, Wi-Fi, etc.

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The following is a brief outline of the post-event “check out of different areas” by Facilities Management:

□ **Fire Alarm:** All fire alarm panels should have battery back-up. If the power outage is less than 24 hours and there are no fire alarm events, all the systems shall continue to stay online. In the extended outage scenario, fire alarm batteries shall start recharging after power is restored. After prolonged outage event, (i.e. over 24 hours) prior to allowing personal normal access to the building, fire alarm, electrical, water, IT systems, sewers, building emergency power systems, and building plumbing systems, technicians shall verify that all the centres systems are fully operational.

□ **Controls:** After restoration of services, the lead technician shall confirm that all equipment and systems (chillers, boilers, pumps, fans and domestic water system, etc.) that were shut down during the outage are ready for start-up. Upon confirmation, these systems shall be brought on-line and the services in the building restored to the pre-event operating conditions. Simultaneously, the controls technician shall start the equipment and building check and physically visit each area of the building and confirm all the operations.

□ **Electrical:** For voltage system outages, prior to de-energizing feeders, electricians shall take the amperage readings on primary and secondary feeders. Electricians shall de-energize the electrical feeders involved in the outage and rack out breakers and ground when necessary. After work is completed, the steps above shall be followed in a reverse order prior to re-energizing the feeders. After re-energizing the feeders amperage readings shall be taken again and compared with the pre-event readings to confirm that all systems are back in operation. Critical systems such as pumps, chillers, shall be physically checked. For outages involving building voltage systems, the building main switch shall be de-energized, and shut out by the electricians prior to any work or repairs. After the outage event, the electricians shall confirm that the electrical systems are ready to be put back in. After confirmation, the electricians shall remove the locks & tags and re-energize the system. Critical building systems shall be physically checked by the electricians in the affected building.

□ **Plumbing:** After services are restored, Facility Management & contractor shall walk the affected buildings to confirm all the fixtures and systems are operational and set back to the normal operating conditions. After technicians have completed their post-event checkout as described above, the Primary Contact shall notify FM and confirm that there are no outstanding issues with any of the building occupants returning to normal daily activities.

TURAS Facilities Management

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Revised:

ATTACHMENT 1: EMERGENCY OUTAGE NOTIFICATION

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Outage Schedule / Building

Outage Start Date:		Outage End Date:	
Start time:		End time:	
Room/s affected		Rooms/s affected	

Type of Outage

	Mains Water		Mains Electricity		Alarm
	Mains Sewers		Storage Heating		
	Cold Water		Wi-Fi		
	Hot Water		Other		

Impact:

Responsibly Person/s

Primary contact	
Secondary contact	

Off-Site Contractor Contact/s

Primary contact		Position	
Phone:		Email:	
Secondary contact		Position	
Phone		Email:	

Outage approved by _____

Approved Date: _____

Outage Notice Issued by: _____

Issue Date: _____

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ATTACHMENT 2: PLANNED OUTAGE NOTIFICATION

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Outage Schedule / Building

Outage Start Date:		Outage End Date:	
Start time:		End time:	
Room/s affected		Rooms/s affected	

Type of Outage

	Mains Water	Mains Electricity	Alarm
	Mains Sewers	Storage Heating	I.T. System
	Cold Water	Wi-Fi	Salesforce.
	Hot Water	Other	

Impact:

Responsibly Person/s

Primary contact	
Secondary contact	

Off-Site Contractor Contact/s

Primary contact		Position	
Phone:		Email:	
Secondary contact		Position	
Phone		Email:	

Outage approved by _____

Approved Date: _____

Outage Notice Issued by: _____

Issue Date: _____

TURAS Facilities Management

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INSTRUCTIONS: The primary contact is to submit this form to the Coordinator when the outage is complete.

PROJECT:

DATE(S) OF OUTAGE:

BUILDINGS/ROOMS AFFECTED BY OUTAGE:

To be completed by the Coordinator:

1. Was the outage planned sufficiently?
2. Was it communicated sufficiently and in a timely manner?
3. Did the project team follow the plan?
4. Were there any issues reported by building occupants?
5. Have all services been fully restored?
6. Overall, was the outage successful?
7. What could be improved/lessons learned?

Acknowledged:

Contractor/s Name _____ Contractor/s Signature _____

Coordinator Name _____ Coordinator Signature _____

Thank you for your cooperation during the outage and for your assistance in helping us improve this process.

ATTACHMENT 4: UTILITIES CONTACT LIST AND AREAS OF RESPONSIBILITIES

1. Lighting, building electrical power, emergency contact:
Name: _____

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Address: _____
Telephone: _____
Mobile: _____

2. Fire Alarm

Name: _____
Address: _____
Telephone: _____
Mobile: _____

3. Mains Water

Name: _____
Address: _____
Telephone: _____
Mobile: _____

4. I.T. Support

Name: _____
Address: _____
Telephone: _____
Mobile: _____

5. Wi-Fi

Name: _____
Address: _____
Telephone: _____
Mobile: _____

6. Plumbing/Sewers

Name: _____
Address: _____
Telephone: _____
Mobile: _____