

APPLICATION

NYU Langone Health

PURPOSE

To provide a written plan of action for planned and/or emergency shutdowns of utility systems and essential equipment.

POLICY AND GENERAL INFORMATION

1.0 POLICY

This policy outlines procedure and actions that shall be implemented for any planned or emergency utility and/or essential equipment shutdowns affecting patient care or other essential services.

Facilities/Engineering at each campus and Real Estate shall take the lead in planning, coordinating and assessing all potential risks associated with a planned and/or emergency utility or essential equipment shutdown.

2.0 APPLICATION

NYU Langone Health (NYULH) refers to the NYU Langone Health System, NYU Langone Hospitals, NYU Grossman School of Medicine, NYU Long Island School of Medicine, the Family Health Centers at NYU Langone, and all entities controlled by any of them.

This policy applies to:

- All NYULH owned and leased facilities
- All employees, contractors, and consultants of NYULH

3.0 DEFINITIONS

Controlling contractor (Contractor): A prime contractor, general contractor, construction manager or any other legal entity which has the overall responsibility for construction of the project (e.g. planning, quality, and completion)

Facilities trade staff: Includes forepersons, mechanics, helpers, maintenance workers, etc.

Manager: The Facilities/Engineering Manager or Real Estate Manager

PM: The NYULH construction Project Manager

4.0 SCOPE

Utility systems and essential equipment include, but are not limited to the following:

- Medical gas and vacuum systems
- Major heating ventilating and air conditioning (HVAC) equipment
- Fire suppression system
- Boilers and steam supply systems
- Electrical supply and distribution systems
- Domestic hot and cold water supply systems
- All sanitary waste disposal systems
- Heating and hot water systems
- Emergency generator and fuel systems
- Elevators
- OT - Operational Technology Systems (e.g. BMS, lighting control, etc.)

5.0 UTILITY SHUTDOWN RESPONSIBILITIES

In preparation for all planned utility shutdowns, the Construction PM or the assigned Facilities/Real Estate Manager shall:

1. Develop the scope of work which identifies the system(s) or equipment requiring shutdown, the potential areas affected, the shutdown duration, proposed dates and any need for coordination or intervention of a utility company (e.g. Con Edison, National Grid, PSE&G, etc.).
2. Obtain and review the most current facility/utility drawings and documents for the systems and equipment. Buildflow web-based system is the central hub for all facilities drawings. Where applicable, the PM shall distribute these documents to the controlling contractor.
3. Coordinate with Facilities trade staff (e.g. Plumbing, Electrical Shop) or Real Estate and/or building management personnel to perform onsite tracing of the

impacted systems. This tracing is to identify and verify the valves, circuit breakers, etc. that must be isolated and/or addressed as part of the shutdown. Any planned shutdown shall be postponed until an up-to-date drawing is verified.

4. If the shutdown is part of a construction project, upon request, the PM shall engage the architect, engineer, controlling contractor and/or applicable subcontractors to assist with verification of system design, onsite tracing of the system and identification of valves, circuit breakers, etc. that need to be isolated as part of the shutdown.
5. Coordinate the development of up-to-date diagrams/plans showing the work locations, the areas impacted and the means of isolation.
6. Arrange an initial planning meeting with Facilities/Engineering, Real Estate and building management representatives, the controlling contractor and subcontractors, as appropriate. During the planning meeting, the scope of work, drawings, potentially impacted utilities/equipment/areas, shutdown duration, proposed dates and any need for coordination and intervention of a utility company (e.g. Con Edison, National Grid, PSE&G, etc.) should be reviewed.
7. The PM, Real Estate or Facilities Manager shall communicate and coordinate as appropriate to schedule and perform a “trial” short-term shutdown(s) to verify the areas, equipment and systems that will be impacted by the shutdown. The PM and/or Facilities/Real Estate Manager shall be responsible for ensuring facility leadership is notified as per Section 8 of this policy.
8. Once this “trial shut down” assessment has been completed, the PM or Facilities/Real Estate Manager shall conduct a walkthrough with Facilities/Engineering, Real Estate and building management, the controlling contractor and applicable subcontractors, the Campus Safety Officer/Designee and EH&S, and other necessary parties (e.g. Infection Prevention and Control) to complete a risk assessment and determine if Interim Life Safety Measures (ILSM) and/or Infection Control Risk Assessments (ICRA) are required.
9. There shall not be any work on live utilities, systems or equipment **without the prior approval of Facilities/Engineering and/or Real Estate leadership and**

EH&S. Such work shall be conducted in accordance with the NYULH Safety Policy 167 Control of Hazardous Energy (Lockout/Tagout).

10. Submit controlling contractor's and any applicable subcontractor's proposed Method of Procedure (MOP) to the Facilities/Engineering and/or Real Estate Manager. If necessary this shall also be distributed to Campus Safety Officer/Designee and EH&S for review. MOP should be distributed at least 2 weeks before the scheduled work.
11. Develop and implement an appropriate campus or Real Estate specific water management plan if the shutdown involves a domestic water disruption.
12. Coordinate a meeting with affected area leadership to discuss details of the shutdown and any support requested and/or needed. This meeting shall include information as to why the shutdown is needed, the proposed date and time, the projected duration, area(s) and service(s) affected, support needed, contact information, ILSM/ICRA or other safety protocols, procedures in the event of unanticipated system or area impact, etc. Subsequent communications to affected area leadership shall comply with requirements of Section 8 of this policy.
13. Provide email reminders/notification to site specific Facilities Operation, Real Estate manager(s) and building management personnel no less than 72 hours (for leased properties verify with time requirement) in advance for any shutdown or as per specific directive. All email notifications should include risk analysis and risk reduction information strategies to be implemented.
14. Routine maintenance that does not impact occupants or services may not require the 72 hour notification.
15. Requests for planned shutdown support, must be entered into the appropriate work order system. At leased sites, the PM shall coordinate with Real Estate to request support from building management.
16. Enter all required permit requests (e.g. hot work, penetration, etc.) in ATG system.

6.0 EMERGENCY UTILITY SHUTDOWN RESPONSIBILITIES

Upon notification or discovery of a need for an emergency utility shutdown, the designated Facilities/Engineering or Real Estate Manager shall be identified and shall:

1. Immediately confirm urgency, type and extent of utility or equipment interruption, impact to services, affected area(s) and any other pertinent information. If the staff or responsible person on-site believes there is impending life safety or significant property damage (e.g., fire/burning/smoke, flooding, etc.) they are authorized to perform the utility shutdown immediately and notify per Section 8.0 accordingly.
2. In consultation with Campus Safety Officer/Designee, EM+ER, EH&S and other necessary parties (e.g. Infection Prevention and Control) determine the scope of necessary repair(s), estimated duration of downtime, and if outside support will be needed for resolution or repair, etc. A risk analysis shall be completed to determine if Interim Life Safety Measures (ILSM) and/or Infection Control Risk Assessments (ICRA) are required. The effectiveness of safety measures already in place shall be confirmed.
3. Obtain, review, validate and provide (as needed) the most up-to-date facility/utility drawings and/or system information to Facilities trade staff or Real Estate contractor working on restoration
4. Coordinate a meeting with EM+ER and affected area leadership to review details of the interruption and the steps/measures put in place to mitigate loss of service. This meeting shall also include up-to-date situational details regarding the interruption, impacted area(s) and equipment, plan, schedule and scope of work needed to get system back on line, ILSM/ICRA and other safety protocols required, procedures in the event of unanticipated system or area impact, and any other operational resources impacted or needed.
5. Follow-up written communications to affected area leadership shall comply with Section 8 of this policy.
6. Where applicable, restore/reactivate system(s) in accordance with the NYULH Safety Policy 167 Control of Hazardous Energy (lockout/tagout).
7. Verify complete and successful restoration once services are restored. Communicate to affected areas and leadership accordingly.

7.0 PRE-SHUTDOWN HUDDLE – PLANNED AND EMERGENCY WORK

A “huddle or time-out” shall be executed immediately before a planned shutdown or emergency work to restore a service. The PM, designated Facilities/Engineering or Real Estate Manager shall:

1. Identify appropriate points of contact for communication and periodic notification updates for the duration of the shutdown or emergency work.
2. Verify all preparations and safety measures are in place, all required personnel and equipment needed is on site.
3. Establish and verify operation and mode of communication method (e.g. portable radios or cell phone) to be utilized during the shutdown and/or emergency work.
4. Establish clear communication and work procedures to abort or extend the shutdown or emergency work.
5. Assign staff to walk or “canvas” areas within and outside the scope of work/shutdown.
6. Perform a final field verification and communication to the affected area/program immediately before a shutdown. Field verification should be done with a use of a checklist and approved diagrams. This should be done in real time via read off confirmation to on site Facilities/Real Estate team using portable radios, cell phones and/or in-person.
7. Once utility is shut down, implement a minimum of 15-minute “stand down” before any disconnection or demolition to confirm areas affected. If unexpected areas are determined to be impacted, implement procedures to abort shut down, provide interim support to affected areas and initiate procedures to restore services as appropriate and feasible.

8.0 COMMUNICATION AND NOTIFICATION

The PM or designated Facilities/Real Estate manager shall coordinate communications and notifications for affected areas, leadership and other stakeholders. At a minimum, notifications should always include the reason for the shutdown, proposed date and time, projected duration, area or service(s) affected, support provided, safety protocols in place and contact information.

The following communication protocols shall be implemented as appropriate:

- Communication and notifications to impacted departments and personnel may be via email, webex meetings, and direct contact, etc. Email notification should always follow direct contact.
- RED+F leadership and EM+ER shall be notified of emergency shutdowns as soon as practical. RED+F, EM+ER and the managers of the affected areas will evaluate the need and frequency of subsequent communications.
- All broadcast email notifications regarding utility shutdowns shall require VP of Facilities or VP of Real Estate review and approval before distribution.
- Periodic communications should be sent to leadership and the management of affected areas for shutdowns as needed. In the event the shutdown is anticipated to extend beyond the scheduled timeframe, an update communication should be sent to affected area(s) and leadership as soon as practical. Any additional follow up coordination and communications shall be scheduled as required.
- When the utility or equipment is back online and service is restored, a closing communication shall be sent to affected departments and stakeholders (including leadership and EM+ER, where appropriate).

9.0 FACILITY/SYSTEM DRAWINGS

The Commissioning Group of the Facilities Operations Department shall be the governing body to ensure facilities drawings are up-to-date. For offsite properties, Real Estate shall take the lead and consult with Facilities Commissioning as necessary to update or generate facility drawings. The Buildflow web-based system shall be the central hub for all facilities drawings.

10.0 APPROVAL AND SIGNOFF

The Senior Directors of Facilities/Engineering and Real Estate, in consultation with the Campus Safety Officer/Designee and EH&S (as necessary), shall provide final approval and sign-off of any planned utility and essential equipment shutdowns. They shall also review and approve procedures and plans for emergency utility shutdowns as described in this policy.

High-risk and broad impact shutdowns, including medical gases, shall also require review and approval by the VP of Facilities or VP of Real Estate.

11.0 RELATED POLICIES

- 115: Fire Alarm and Water-based Fire Protection Systems: Inspection, Testing, Maintenance, and Impairments
- 120: Construction Safety Requirements
- 133: Medical Gas Outlets and Piping
- 145: Interim Life Safety Program
- 157: Electrical Safety
- 164: Pre-construction Risk Assessment
- 167: Control of Hazardous Energy (Lockout/Tagout)
- Infection Control Risk Assessment: Deviation from Established Environmental Controls or Process
- Campus/Real Estate Specific Water Management Plan

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Replaces	New
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Summary of Revisions

Revise date	Section	Changes