



UNIVERSITY OF NOTRE DAME

DEPARTMENT OF UTILITIES

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Building System Outage Policy and Procedure

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Purpose:

This policy and procedure covers the operation of building systems under the auspices of the University of Notre Dame Utilities Department. Building system outages are typically required for the purposes of construction, renovation, isolation, maintenance, replacement or repairs to existing systems, sub systems or component parts thereof. Systems included under this document include but are not limited to:

<u>Service</u>	<u>Comments</u>
Steam	70 or 10 psig
Condensate	
Domestic Cold Water (both Hard and Soft)	
Domestic Hot Water	Supply and return
Chilled Water	Supply and return
Compressed Air	Centrally or locally produced
Electricity	Primary (4,160V)
Electricity	Secondary (480/277/240/208/120V)
Natural Gas	
Vacuum Systems	Locally produced
Laboratory Gas	

Policy:

1. 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 Utilities Department personnel**. Exceptions to this policy include the following:
 - a. Isolation valves, switches or other such devices that isolate a point of service device that will result in only the loss of service of the specific piece of equipment, fixture or other device which in and of itself will not create any additional loss of service and for which the parties affected by said device have been duly informed of the impending outage, its duration and effects. Examples of such situations would include but not be limited to;
 - i. Plumbing Fixtures (sinks, toilets, showers, drinking fountains, etc.)
 - ii. Redundant devices such as pumps, fans or other equipment that are being appropriately backed-up by operational duplicate devices (note notification of an appropriate Utilities supervisor (systems, controls or distribution) is required prior to performing any work)
 - iii. Individual VAV boxes, air terminals, reheat valves, coils, radiators, fan coils, unit heaters or other HVAC devices controlling a single space.

- iv. Lighting and Power circuits serving a single space or device including discrete electrical devices such as occupancy sensors, light fixtures, light switches and receptacles.
 - b. Irrigation water services, which may be operated by the Landscape Service Department or their designees.
 - c. Fire protection water services, which may be operated by the Fire Department or their designees
 2. All operations that will result in a service outage affecting an entire system, significant portion thereof or impacting the normal operation of a facility shall be scheduled in advance and shall include a 48 hour notice to facility users and key service providers using the Utilities Department Scheduled Outage Notification Procedure.
 3. The appropriate **Utilities Building Systems, Building Controls and/or Distribution Group Supervisors shall be contacted for approval prior proper notifications and operations** that affect the delivery of services to facilities. In particular all actions affecting building HVAC operations must occur with the prior knowledge and approval of the Building Controls Group.
 4. All isolation operations shall comply with proper Lockout – Tag out procedures of the University and as stipulated by OSHA regulations. Lockouts shall be of the group type including a lock from the Utilities Department along with those performing work. No system may be restarted or returned to service without the knowledge, approval or involvement of the appropriate Utilities Department personnel.
 5. For systems with greater than 3 blocking points a blocking point list shall be developed to assist all parties in understanding and tracking the appropriate blocking points
 6. Valves associated with this policy also include drains, vents, bypasses and any other auxiliary devices associated with the various systems. Switches associated with this policy shall also include circuit breakers, knife switches, safety switches, disconnects, motor circuit protectors, and toggle switches.
 7. When work activities conclude a review of all affected 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.
 8. Should there be a system failure or emergency situation necessary actions shall be taken to control the situation without the need to explicitly follow the requirements of this policy and its procedures. Subsequent to the event the system configuration and this procedure and policy shall be followed.

Implementation:

In an effort to clearly define responsibilities for coordination of building system outages the following implementation procedures are intended to provide clarity and certainty to the process. The following University groups are most likely involved in this process and typically qualify as “University Representatives” (for the parties performing work).

- Utilities Department (Building Systems, Building Controls, Distribution Supervisors and other Utilities Administrators)
- Maintenance Department (typically Project Coordinators and Administrators)
- Office of the University Architect (Project Managers and Construction Administrators)

University Representatives shall be the responsible parties for evaluating the necessity and impact of an outage as well as leading the coordination efforts for the outage. It will be their responsibility to follow this policy and the steps outlined below. This includes assuming this responsibility when a contractor or trade shop is working under their direction on a specific project.

If a case exists whereby a trade shop is seeking an outage and there is not a specific University Representative involved the Project Coordinator responsible for overseeing that facility shall assume this role.

Should groups other than Maintenance, Utilities or the Office of the University Architect seek to perform work of any kind that would require a building system outage a designee to serve as University Representative shall be appointed to serve this role by an Administrator in any of the three aforementioned groups.

A University Representative shall be responsible for contacting a Utilities Supervisor who is a knowledgeable and authorized person(s) within the Utilities Department. Utilities Supervisors for this purpose include the following positions:

- Building Controls Supervisor
- Building Systems Manager or Supervisor
- Distribution Supervisor

Should any of the above persons be unavailable as a back up another Utilities Administrative staff member with knowledge of the system or systems in question may be contacted.

Procedure:

Building system outages shall be handled in five (5) steps

1. Evaluate the potential outage in consideration of Policy item 1 to determine if the outage qualifies for one of the exceptions described therein. If it does qualify than no outage notification is required, if not proceed to step 2.
2. The University representative for the party performing the work shall contact a Utilities Supervisor to discuss the outage, its impacts, preferred scheduling, outage duration and contingency plans to minimize disruption and protect the building system. Work may not proceed without the express approval of the Utilities Supervisor for the outage and its associated details.
3. The University representative shall prepare the appropriate notifications and submit to the Utilities Supervisor for final approval and publication. Standard template notification language can be obtained through the Utilities Department.
4. The University representative for an outage shall ensure that the building manager or representatives to be affected by a scheduled outage have been contacted directly and are aware of the impending outage. To as reasonable a degree as possible, outage scheduling that will impact the use of a building shall be coordinated with the building manager or representatives in an attempt to minimize impacts. Excessive costs or delays in addressing critical items should not be cause to modify or delay scheduling outage work.
5. Other than cases of emergency or imminent failure, outage notifications using the Utilities Department Outage Notification procedure shall be issued 48 hours (2 business days) prior to the scheduled outage to all persons identified by the Utilities Outage Notification Procedure and the building managers and representatives of the buildings to be affected.

The following is a sample of what a typical Outage Notification email might look like:

On **[Insert Day and Date here]** there will be a **[insert type of outage here]** outage for the buildings listed below beginning at **[list outage start time]**. It is anticipated that the needed repairs will be completed by **[list outage completion time]**, on the same day. **[Describe service to be affected]** in the buildings may vary more than normal during this outage. This outage is taking place to facilitate **[describe necessary repairs]**. [Describe any other services that may be affected].

The following buildings will be affected by this outage:

[List all buildings or portions thereof that will be affected]

Building Managers have been notified.

Should you have any questions or concerns regarding this outage, please feel free to contact:

[Name – Department – Phone number]

Thank You

The University Representative should tailor a specific outage email to the given outage. Assistance can be provided in crafting an appropriate notification by speaking with an Authorized Utilities Department person.