

The University of British Columbia Building Operations		SERVICE SHUTDOWNS	
Policy & Procedure			
Prepared by: Denise Pearce	Approved by:	Issue Date: February 2013	
		Replaces: June 24, 2002	

1.0 POLICY

The operation and maintenance of Campus utilities and facilities including electrical power, steam and condensate, natural gas, water and sanitary systems is the responsibility of Building Operations, which is the authority having jurisdiction over all service shutdowns.

This policy ensures that procedures are in place so that all requests for service shutdowns are identified and coordinated. The policy also ensures that users affected by the shutdown of services receive reasonable notice so that impacts on teaching and research are minimized.

2.0 DEFINITION

A 'Service Shutdown' is defined as a planned temporary interruption of a service, such as electrical power, water, gas, etc., to a facility or portion of a facility.

3.0 OBJECTIVE

The objective of these procedures is to secure a coordinated shutdown with minimal downtime. The process ensures full communication and minimal impact on the requestor, user and Building Operations

4.0 PROCEDURE

The intent of the planning portion of the shutdown procedure is to ensure that all affected personnel are communicating in a timely efficient manner. Additionally, it is important that the maintenance crews capitalize on the synergies to accomplish multiple tasks within each shutdown in order to minimize impacts on the building occupants. If maintenance crews wishes to capitalize on synergizing work they need to do while a system has been shut down, they must submit another service shutdown application. When submitting this application refer to the original shutdown in the notes section of the shutdown application.

4.1 ROLES & RESPONSIBILITIES

It is imperative that each functional group understands its global responsibilities within this procedure. Otherwise, some tasks will be duplicated while others may be omitted. To avoid any miscommunication or misunderstanding the roles and responsibilities must be clear.

4.1.1 SHUTDOWN REQUESTOR

UBC Contact, Project Manager, Lead Trade Head or Project Coordinator:

It is imperative that the requestor completes the shutdown e-request form by logging into their UBC Campus Wide Login account (CWL) and entering into the Management Systems Portal to ensure that the shutdown can be processed in a

timely fashion. Contractors or any other external parties will have to contact their UBC liaison and ask him/her to submit a request on their behalf. Requestors will have the ability to attach any relevant plans or diagrams to their e-request. Any specific deadlines or unique circumstances associated with the request should be identified. It is the responsibility of the shutdown requestor to update their contractor/client as to the status of the shutdown request.

4.1.2 SERVICE CENTRE,

The service center receives notification of all shutdown requests and is responsible for scheduling and coordinating the planning portion of the shutdown procedure. The service centre will monitor the progress of all shutdown requests and ensure that they are approved and scheduled.

4.1.3 SHUTDOWN ‘LEAD’,

During the planning phase of the shutdown, it is the responsibility of the ‘lead’ trade (the trade performing the shutdown) to review the shutdown request and conduct a technical assessment to identify which systems will be affected by the requested shutdown. While doing the technical assessment, it is the responsibility of the shutdown lead to identify other trades that will be required to assist during this shutdown. During the execution phase of shutdown, it is the responsibility of the “lead trade” to communicate with the other trades on site whose systems are impacted by the outage. It is the responsibility of the ‘lead’ trade to inform any contractors working on site of the status of the shutdown.

4.1.4 FACILITIES MANAGER,

It is the responsibility of the Facilities Manager to communicate the shutdown details to those customers impacted. They obtain approval from all affected building occupants prior to the shutdown being approved. Furthermore, the Facilities Manager promotes and educates all users to the shutdown procedure.

4.1.5 PROJECT ‘LEAD’

It is the responsibility of the project ‘lead’ (Project Manager, Project Coordinator, Lead Trade Head) to work in conjunction with the shutdown ‘lead’ during the implementation portion of the procedure to ensure proper lockouts, hand-offs, and sign-out.

4.2 TIMELINES

The Planning Portion of the procedure should take ten business days (maximum 15). The only exception is an emergency request. The anticipated time requirements within the planning portion of the request are as follows:

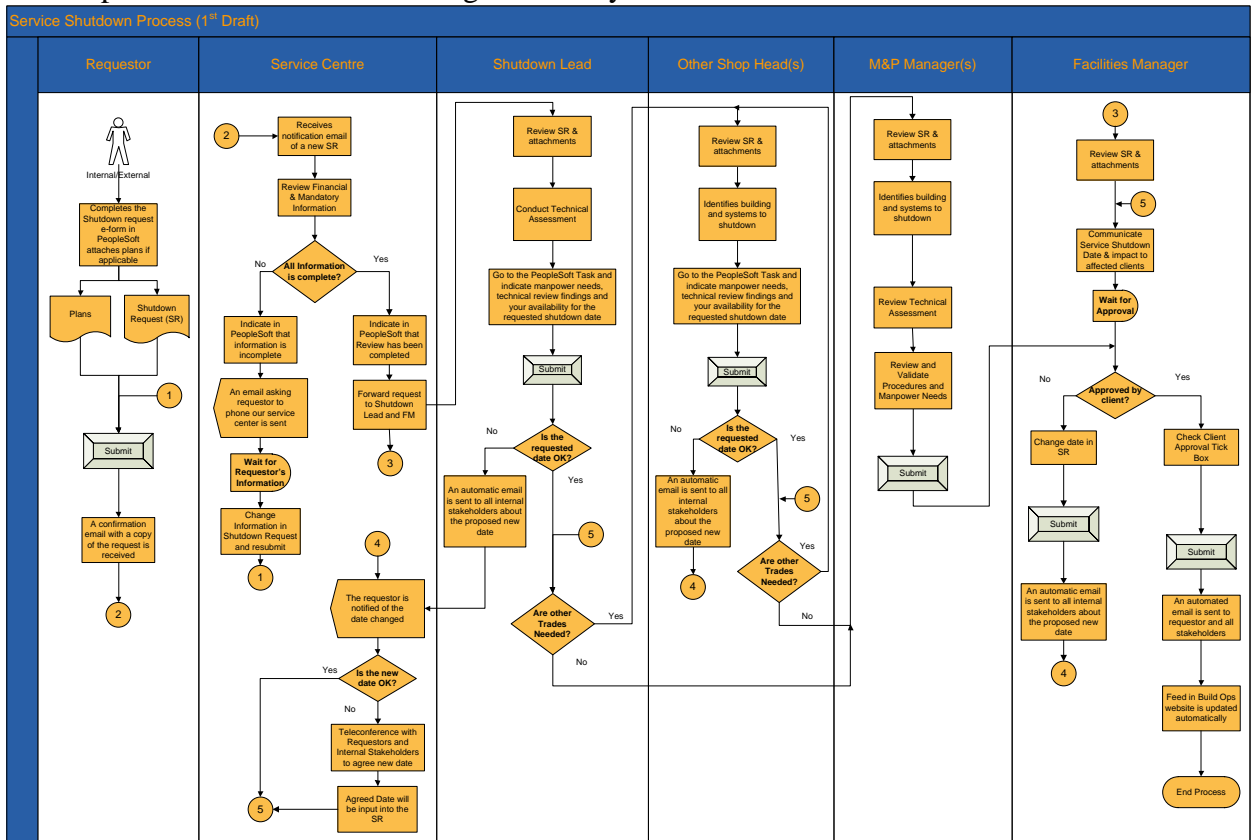
Service center to process request:	1 day,
Identification of shutdown impact:	3 days,
Adjust schedule:	1 day,
Client notification / approval	4 days(*),
Notification of approved shutdown	1 day,
<hr/> Total:	<hr/> 10 days

(*) If the shutdown request is not approved by the client then the Facilities Manager should notify the service center immediately that the shutdown cannot precede. The FM

now has an additional 5 days to obtain an approved date(s) for the shutdown to proceed (extending the total timeline to 15 days).

4.3 PLANNING

The intent of the planning portion of the shutdown procedure is to ensure that all affected personnel are communicating in a timely efficient manner.



4.3.1 SHUTDOWN REQUIRED / REQUESTED:

Identification of the requirement of a system shutdown (this could come from a maintenance job, a capital project, utilities requirement, etc...). The Requestor completes the shutdown request e-form in Peoplesoft and attaches plans if applicable. When e-form is submitted the Service Centre will receive email notification via email.

4.3.2 SERVICE CENTRE:

The service centre confirms that all information is complete on the e-request and returns back to requestor if more information is required. Once complete forwards request to Shutdown Lead and Facilities Manager.

4.3.3 IDENTIFICATION OF THE IMPACT OF SHUTDOWNS:

The BMS Operations Centre along with the Lead trade identifies which building systems will be affected by the shutdown and also estimates the time required to shutdown all of the systems and re-start those same systems once the work has been completed. The lead will indicate manpower needs, input technical review findings and confirm availability date in Peoplesoft. The 'lead' also reviews the backlog of shutdown required maintenance to identify any work that could be performed as part of this shutdown. When the requested date has been

determined as okay, the shutdown lead then forwards the request to the other required trades.

4.3.4 OTHER TRADE HEADS

Once identified as being required by the BMS Head or Lead trade, the other trade heads will receive notification of requested shutdown. They will review the shutdown request and attachments and identify impacted systems within their trade group. They will add any additional trades that may be required. They will indicate the manpower needs within their trade group, input technical review findings and confirm availability date in Peoplesoft. The request is then forwarded to the M&P manager of the Lead Trade.

4.3.5 M&P TRADE MANAGER

The M&P manager of the lead trade head will review shutdown request and all attached documentation. They will confirm the technical assessment, review and validate procedures and manpower needs. The request is then forwarded to the Facilities Manager.

4.3.6 CLIENTS APPROVAL/NOTIFICATION:

The Facilities Manager reviews the impacted areas and contacts the impacted Departments to obtain approval and/or notifies them of the shutdown. They will note any sensitive department equipment that the Lead Trade should be aware of during the shutdown. If the date of the requested shutdown is not suitable, the Facilities Manager will update the information in Peoplesoft and notification will be sent to internal stakeholders to determine if the alternative date is suitable. Once a date/time is agreed upon by all, the Facilities Manager will click the customer approved box and an automated email will be sent to requestor and all pre-determined stakeholders.

Building Operations website is updated with shutdown information.

4.3.7 LEAD TRADE

Once the shutdown has been approved, the Lead Trade will include any pre-job planning requirements in accordance with, but not limited to Building Operations Policies:

I-B-02 – Group Lock Out Policy

I-B-05 – Asbestos Policy

I-B-16 – Fumehood Policy

I-B-24 – Fall Protection

I-B-28 – Hazard Assessment Policy

I-B-41 – Fire Watch Policy

Building Shutdown sticker?

**Any pertinent forms/procedures are to be attached to the electronic shutdown request.

4.4 SHUTDOWN IMPLEMENTATION:

4.4.1 PRE-JOB:

Lead Trade (or whomever is responsible for shutting the building system(s) down) meet 'on site' with all other trades performing work within the buildings, and BMS. At this meeting the pre-job planning requirements are reviewed and the timing of the shutdown is discussed.

4.4.2 SHUTDOWN / LOCK-OUT BEGINS:

The Lead Trade notifies BMS that the shutdown has started and then proceeds to lock out appropriate equipment per the pre-job planning requirements.

4.4.3 WORK BEGINS:

The lead trade de-energizes the system and regular lockout procedure is followed over the course of the shutdown.

4.4.4 HOUR BEFORE THE LAST TRADE IS COMPLETE:

The lead trade notifies BMS Operations Centre (7:30AM to 4:00PM) or the powerhouse (4:00PM to 7:30AM) that the work is nearly complete.

4.4.5 RE-ENERGIZING SYSTEM PRIOR TO PLANNED SHUTDOWN END TIME:

A risk assessment can be completed prior to the shutdown starting to determine the impact if the system is energized earlier than planned. The details of that assessment should be noted in the comments section of the electronic notice. If no assessment is completed and if the required work is completed prior to the planned shutdown end time, the Lead Trade will contact their M&P Manager and Facilities Manager to discuss the impact to the schedule and/or customers prior to re-energizing the system.

4.4.6 REMOVAL OF THE SHUTDOWN LOCKS:

Once system is ready to be energized and if locks were applied during the shutdown they are removed from the affected systems.

4.4.7 RE-ENERGIZE BUILDING SYSTEMS:

Building Systems are brought back 'on-line'. The Lead Trade notifies BMS that the building is up and running. The base building systems, along with any pre-determined systems identified through the planning process are verified as operational. The Lead Trade identifies any system failures and follow-up repairs required. The service centre is notified that the shutdown is complete. The service centre in turn notifies the Facilities Manager and any other parties requiring notification.

4.4.8 EXTENDING THE SERVICE SHUTDOWN PAST THE PLANNED SHUTDOWN END TIME:

If the shut down must be extended past the original completion time, the Lead Trade will notify any trades working on site and the Facilities Manager. The Facilities Manager will inform any impacted building users.

