Scheduled power outages allow for the advance rescheduling of research activities that cannot take place safely without power, unscheduled power outages require an immediate response to make research activities safe. This template allows Technical Facility’s, Schools, Research Units and Research Groups to outline how they plan on dealing with scheduled power outages. It should be used as a starting point and added to as necessary.

**Unscheduled Power Outages**

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| --- |
| Sudden or unscheduled power outages require an immediate response from researchers, both to ensure workplace safety and to protect sensitive or valuable equipment. Emergency lighting will remain on for at least 3hrs giving researchers time to make their area safe. Priority must be given to dealing with material or experiments that pose a risk in the absence of electrically powered equipment or safety systems. In the event that there is an unscheduled power outage then researchers must – 1. In so far as is possible bring experimental activities to a safe end
2. Ensure that chemical material stored in fume hoods and in ventilated storage cabinets is properly capped / sealed
3. Secure material stored in biosafety cabinets
4. Remove all radioisotopes and radioactive materials back to their safe storage area
5. Secure / contain cryogenic materials
6. Place equipment controls into the ‘off’ position as appropriate. Fridges and freezers should not be turned off and there may be other equipment such as incubators, thermocyclers, etc. that you may want to keep turned on during an outage so it will resume operation (or hold temp) when power returns. This should be assessed on a case by case basis.
7. Isolate from the power supply electrical equipment that cannot be turned off as appropriate and if it is safe to do so (See No. 6 above). Ideally high value or sensitive equipment should not be left powered during an outage if possible.
8. Ensure fridge and freezer doors are properly closed and are not opened during the outage and ideally for at least one hour after power has been restored.
9. If equipment has been fitted with any backup power supply ensure that these are functioning.
10. Turn off compressed gas supply at the cylinder manifold if possible unless the system is connected to power back up such as a generator and maintaining supply is critical.
11. Ensure gas taps / gas controls and vacuum taps / outlets are in the ‘off / closed’ position
12. Ensure that their bench space is left in a tidy state
13. Ensure that all passageways in their laboratories and workshops are clear and free from obstruction
14. If the power cut lasts longer than 2hrs leave the building if they have not already done so.

If you are offsite and become aware of a power cut in the university that has the potential to give rise to an unsafe environment contact a colleague onsite to take the necessary steps to make the area safe. Failing this you can contact the 24hr emergency line on 01 716 7999 with details of the potentially unsafe situation. Note that if telephones are not working you may need to attend the site in person to advise / help make the area safe.   |

**Scheduled Power Outages**

Once the times and dates of scheduled power outages are known Schools, Research Units and Research Groups should ensure that they take steps to ensure that no research activity that could be adversely affected by a power cut is taking place. Appendix 1 should be used as a guide to help with that planning.

**Appendix 1. Dealing With Scheduled Power Outage**

**Date of outage:**

**Time of outage:**

**Research Group / Lab:**

**Completed By:**

**Preplanning Checklist**

|  |  |
| --- | --- |
| **Task** | **Responsible Person** |
| Have all fridges and freezers been inspected or serviced recently?  |  |
| Confirm fridges / freezers are not over packed.  |  |
| Ensure high value frozen samples are stored in the correct cold storage with backup generator (if possible) |  |
| Are cryogenic storage vessels full of cryogen? |  |
| Have UPS’s been fitted to high value or sensitive equipment which cannot be powered down easily? |  |
| Are all plug tops labelled as to their function so as to allow rapid identification of what equipment can be turned off at the socket / unplugged if needed? |  |
| Are surge protectors fitted to key pieces of equipment? |  |
| Are all researchers aware of their responsibilities to refrain from laboratory / workshop during a power outage and to plan accordingly?  |  |

**Assigned Duties – It may be useful to assign the following key duties to named person(s). Researchers may add key duties to this list depending on their circumstances**

|  |  |
| --- | --- |
| **Task** | **Responsible Person** |
| To inform all researchers of the date and time of the power cut? |  |
| To ensure that high value equipment is powered down in advance of the power cut and where this is not feasible to check that alternate measures have been put in place to protect the equipment  |  |
| To make sure that all necessary equipment has been placed in the ‘off’ position unplugged in advance  |  |
| To check fridges and freezers are properly closed  |  |
| To check that chemical material stored in fume hoods and in ventilated storage cabinets is properly capped / sealed  |  |
| To ensure that material held in biosafety cabinets is secured. |  |
| To make sure that all radioactive materials have been returned to safe storage |  |
| To turn off compressed gas supply at the manifold and / or via flow control valves where appropriate  |  |
| To make sure that gas taps / vacuum outlets have been closed as appropriate  |  |
| To check that bench space has been left in a tidy state and that all passageways in their laboratories and workshops are clear and free from obstruction |  |

Your School / Research Unit / Research Group may have additional issues that require contingency planning e.g. -80oC freezers, incubators, growth chambers, etc. Please outline these issues and the steps you intend to take to address them:

|  |  |
| --- | --- |
| **Task** | **Responsible Person** |
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**Communications**

Managers of technical or complex facilities may wish to develop a list of key operational staff who can be contacted to enact any contingency plan.

**Forms should be completed and retained locally.**