General Research Laboratory and Geology Museum
HVAC Equipment Sequence of Operations

**Air Handling Unit No. 01 (1A & 1B):**

This duplex air-handling unit furnishes supply, exhaust, heating and cooling to all support offices and laboratories. Unless both units are off when performing PM, there would be some impact on the building ventilation, heating or cooling. The fume hoods shall not be used if the fume hood face velocity drops below minimum setting.

When one or both air handling unit sections are off, the fume hood operations are impaired, heating and cooling set points cannot be achieved and space temperature could change.

As these are duplex air handlers one unit will remain on during preventive maintenance, this will cause a reduction in fume hood exhaust, during this time the fume hoods should not be used.

**Air Handling Unit No. 02:**

AHU-2 furnishes ventilation air, cooling and heating to the Conference Center and Geology Museum. During PM the air handler will be shut off and space temperature could change.

**Absorption Chiller and Cooling Towers**

Absorption chiller and cooling towers provide chilled water to the air-handling units. During PM period, there would be no chilled water available to the air-handling units. As a result, space temperature could get warmer and uncomfortable. The chiller and cooling towers PM are usually done during the cold season.

**Laboratory Duplex Processed Chilled Water System and Roof Mounted Dry-Cooler**

Laboratory processed chiller is a duplex unit and it runs 24/7. During PM period as this is a Duplex system, one unit will always be on.

**Laboratory Duplex Air Compressor**

Laboratory compressor is a duplex unit and it runs 24/7, During PM as this is a duplex system one compressor will always be operating supplying air to the system, if both sections of the air compressor were to fail, there would be no compressed air available.
Phoenix Valve Duplex Air Compressor
This compressor supports the Phoenix valves exhaust system. This compressor is a duplex unit and it runs 24/7. As a duplex compressor one compressor will always be supplying air to the Phoenix valves, if both sections of the air compressor are down, the exhaust valves would fail in open positions providing maximum exhaust flow within the building.

Remaining Building Mechanical and Electrical Infrastructures
Performing PM on the remaining equipment has little impact on the space temperature, building ventilation and operation. The building occupants will be notified if performing PM on remaining building systems would impact their operation.