



<b>Document Number</b>	<b>Emergency Chilled Water Response SOP, D.6.01</b>
<b>Owner/Contact Information:</b>	D. Durham
<b>Effective Date:</b>	6/13/2014
<b>Last Revised/Reviewed:</b>	
<b>Related Policies and Procedures</b>	

## 1. Purpose/Introduction

To establish a protocol to re-establish adequate chilled water production to meet campus temperature and humidity control needs in the event of the loss of chilled water production capacity at the McIver Chiller Plant.

## 2. Definitions

Emergency chilled water response will be initiated when the following occurs:

- A) Loss of one or more of the large chillers (1875-ton or 1500-ton) in the McIver Chiller Plant that results in not being able to maintain the desired space temperatures and humidity control in campus buildings.
- B) Chiller repair time is estimated to be in excess of 48 hours.
- C) Campus impact without emergency response is deemed to be too detrimental to campus activities.

## 3. Procedural Steps

3.1 The following steps shall be taken in sequence as needed until space temperatures and humidity control are back in acceptable range:

- 3.1.1 Chiller repair shall be expedited as much as possible.
- 3.1.2 All pertinent Facilities Operations personnel, including the Director, shall be notified.
- 3.1.3 Emergency meeting will be held with Facilities Operations management and supervision to evaluate the situation and its anticipated impact. Decisions will be made regarding how to proceed at this meeting which may include all or some of the actions listed below.
- 3.1.4 Thermostat set points shall be changed to 78 degrees in all buildings except where lower temperatures are needed for special purposes.
- 3.1.5 Contact Registrar's Office to determine if classes and special events can be relocated to allow one or more buildings to be continuously set to the unoccupied mode.
- 3.1.6 Send emergency e-mail to Facilities Operations personnel and to campus building contacts describing situation and requesting that actions be taken to lower cooling load wherever possible. This includes shutting down unnecessary equipment, turning off lighting as much as possible, and keeping doors and windows closed.
- 3.1.7 If cooling load-shedding activities do not lower the cooling load adequately, the following steps shall be taken to provide the required level of cooling:
  - A) Contact the following rental chiller/emergency generator suppliers in the order listed until adequate equipment is located:
    - 1) First Contact: Drew Sheorn, Rental / Sales Specialist, Power Systems Division, 9000 Statesville Road, Charlotte, NC 28269 Cell: (704) 533-3395, Office: (704) 731-7371, Fax: (704) 597-7875, E-Mail: DSheorn@carolinacat.com

- 2) Second Contact: Phillip Wells, Brady Trane New Business Development, 1915 North Church Street, Greensboro, NC 27405 Telephone: (800) 849-1915, Fax: (336) 378-0677, E-Mail: Phillip.Wells@bradyservices.com
- 3) Third Contact: Scott Sirois, Technical Sales Representative, Carrier Rental Systems, 1237 Biscayne Drive, Concord, NC 28027 Telephone: (800) 586-8336, Fax: (704) 729-1333, Cell: (704) 691-8941
- B) Submit necessary purchase requisitions for rental chillers and generators in collaboration with Purchasing.
- C) Contact UNCG's diesel fuel supplier to give them adequate notice for required fuel deliveries. Current supplier is Berico Fuels, 2200 E. Bessemer Avenue, Greensboro NC Phone: (336) 273-8663
- D) Contact Parking Office to vacate adequate parking spaces that are needed for rental chillers, emergency generators, and associated water and electrical connections.
- E) Install chilled water headers on emergency chilled water supply and return system connection points located in parking lot median on south side of McNutt building. Chilled water headers and all associated parts needed for installation are located at 915 Northridge.
- F) Notify EH & S of the event and the anticipated diesel fuel storage and deliveries. Ensure compliance with Spill Prevention, Control, and Countermeasure (SPCC) Plan.
- G) Notify water treatment supplier of anticipated arrival of chillers.
- H) Once chillers are on-site, fill system with water from nearest potable water source. Flush as needed and have water treatment contractor test and treat water as needed to prevent contamination of the campus chilled water system.
- I) Once testing indicates adequate quality of water within rental chillers, the valves can be opened on the emergency connections to permit circulation of chilled water necessary to place the rental chillers in operation.
- J) Monitor chilled water system operation and building space temperatures to ensure that cooling needs are met.
- K) Evaluate relaxing of load-shedding measures previously taken based on available rental cooling capacity and impact on campus activities.

3.1.8 Once chiller is repaired and chilled water system returns to normal operation:

- A) Notify diesel fuel supplier when further diesel fuel deliveries are no longer needed.
- B) Notify rental equipment supplier that equipment is no longer needed.
- C) Send e-mail to Facilities Operations personnel, EH & S, and campus building contacts to notify them that chilled water system is back in normal operation.
- D) Shut down rental chillers and emergency generators.
- E) Reverse any cooling load shedding actions previously taken.
- F) Shut chilled water supply and return valves on the emergency chilled water system connections.
- G) Ensure that rental equipment is properly disconnected by supplier.
- H) Remove chilled water supply and return headers from emergency chilled water system connections and return headers and associated parts to 915 Northridge and secure.
- I) Notify Parking Office that parking spaces can be placed back into regular use.

**4. Revision Table**

Revision #	Section #	Summary of Changes	Approval Date