

# Managing Energy during Curtailments and Shutdown

Dale Cranford, PE, CEM
Energy Engineer
Piedmont Service Group
April 7, 2020





- Facility operating status in response to COVID-19
- HVAC/Building Automation System best practices
- Review of building analytics
- Maintenance and equipment replacements
- Energy audits

## Facility operating status in response to COVID-19



- Facility occupancies may differ from normal operation
- Example 1: Johnston Community College closed with limited on-campus activities
- Example 2: Town of Chapel Hill has 1 aquatic facility closed, but the other has increased operations to 24/7 to accommodate social distancing needs of police station



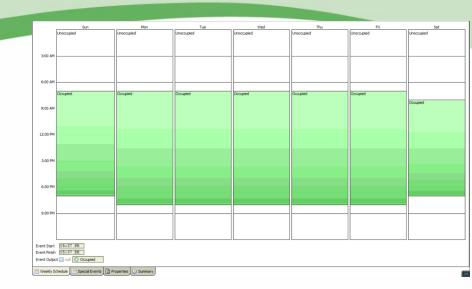


### HVAC/Building Automation System (BAS) best practices

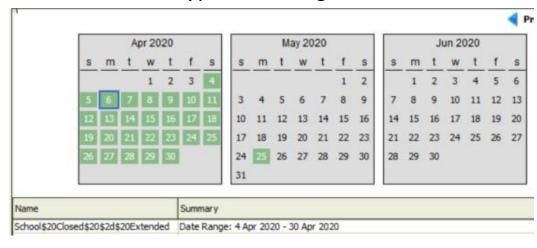


- Closed buildings/areas

   opportunity to set
   buildings to
   unoccupied schedules
   (ex: holiday/special events)
- Only leave HVAC equipment occupied that is essential to operation



Typical Building Schedule



Holiday Schedule for Building Closed



#### Review of building analytics

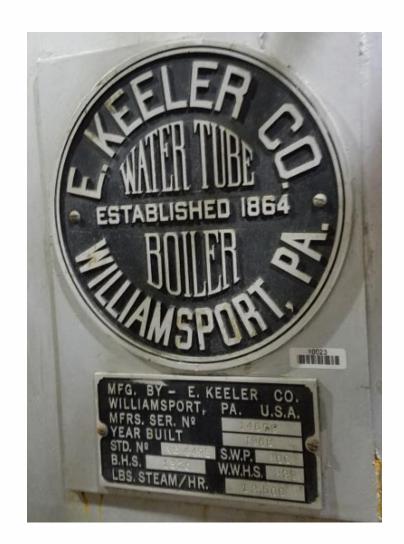
- During downtime, review available trend data to optimize energy consuming systems
- Use data review to direct maintenance activity and energy efficiency upgrades



## Maintenance and equipment replacements



- Curtailments and shutdowns provide opportunity to perform maintenance with less impact on facility operations
- Revisit capital plans for replacement of equipment nearing, at, or past end of life and replace with minimal impact



### Piedmont Service Group Building Efficiency and Sustainability A Service Logic Company

#### **Energy audits**

- Shutdowns also provide a great opportunity for facility surveys for energy efficiency upgrades
- Survey HVAC equipment and controls, lighting systems, water systems, etc.
- Investigate rebate programs for projects or opting out of rider

