

# ELECTRICAL LOAD REDUCTION PROCEDURES SUMMER 2016

**GENERAL:** Allegheny College is participating in two electrical load reduction programs during summer 2016; one program is mandatory, one program is voluntary. The mandatory program occurs when the PJM (Pennsylvania, New Jersey and Maryland) grid is stressed and everyone connected to the grid is tasked to reduce electrical consumption to avoid blackouts and brownouts within the grid area. **Whenever an event is called we will be turning off all non-critical systems throughout the Campus. In addition, we are requesting everyone to turn off computers, lights and any other non-essential equipment.** Warning for unscheduled events may occur the day before but **can be as short as 30 minutes.** The voluntary program is an economic program that will pay the College for energy that we do not use. The primary benefit is economic for the College. Our participation will 1) realize energy savings for the College and 2) earn the College money that will help offset our annual electrical costs. Opportunities to participate are announced one day in advance. Our decision to participate and the level of participation will depend on on-going Campus activities

**Mandatory Program (PJM grid call):** Our participation is required during periods when the PJM grid is over-taxed and blackouts/brownouts are likely. Maximum shutdown is essential to help the grid avoid emergency shutdowns. In such a situation we will shut down all equipment within our control except science department cold rooms, equipment supporting active experiments and dining service operational equipment in use. **Please be aware that, in the event of an emergency, PJM has the ability to shut down our electricity without notice. Everyone is encouraged to develop a back-up plan for that possibility.**

**Voluntary Program:** Our participation is voluntary and the economic benefit is based upon the present cost of electricity and our current baseline (established from the previous three days usage). The more equipment we can shut down, the more we can earn. Our evaluation of on-going Campus activities and weather conditions may make participation inappropriate for any specific event.

Through our Building Automation System (BAS) Physical Plant controls major HVAC systems Campus-wide such as chillers (building-wide air conditioning), air handlers and related component equipment. It is this equipment that we shut down. When possible we will over-cool before the event to minimize the impact from systems being turned off. We do not control fume hoods, building power or building lighting. Fume hoods are controlled locally; we request you to turn off any fume hood that is not required to support on-going research and also request you to consolidate work in fewer fume hoods if possible. In order to maximize the benefit from our participation, we request that you turn off computers, lights, individual air conditioners and fans and any other electrical equipment that is not mission essential (i.e. coffee pots, microwaves, etc.).

While we do want to maximize our participation in this program, we do not want to do it at the expense of either safety or program.

Participation by our entire community is crucial to the success of these programs! Last year we earned over \$46,000 through participation in these programs.

Please contact the Physical Plant Department (x5378) if you have any questions.