



M E M O

TO: Principal/Vice-Principal & Deans

FROM: Teri Shearer, Acting Provost and Vice-Principal (Academic)
Donna Janiec, Vice-Principal (Finance and Administration)

DATE: June 21, 2019

RE: Electricity Peak Demand Management Program

As part of its commitment to financial and environmental sustainability, Queen's is once again participating in an electricity peak demand management program this summer. As a part of this program, air conditioning systems on campus will be shut down on a number of afternoons between June and September. Demand management programs are common at large electricity users like Queen's, which has participated since 2012.

In the 2018-19 fiscal year, over 65 per cent of the university's nearly \$10 million electricity budget was dedicated to a charge called the "global adjustment" which is calculated based on Queen's share of the total provincial electricity demand during the five peak hours from the previous year. The global adjustment would cost the university millions of dollars more each year without demand management strategies. The university has avoided an estimated \$18.9 million dollars by participating in this program since 2012.

As the value and impact of Global Adjustment has increased, so has participation across the province. When the program began, there were about 200 accounts participating in Global Adjustment activities in Ontario and now there are over 1,100. This has put pressure on all participants to react more frequently and has made predicting the top five peaks more difficult.

In addition to external consultant services, Physical Plant Services, working with our Queen's engineering student interns, has developed an Ontario electricity grid model and applied advanced data analytics to develop a robust peak prediction program to help meet the top five peak hours.

As part of this program, the University will shut down air conditioning systems in a number of campus buildings on roughly 15 - 20 afternoons during June, July, August, and the first week of September. These shutdowns will be timed to coincide with the expected peaks in provincial electricity demand and, combined with the university's cogeneration activities, are expected to avoid over \$4.4 million on the university's electricity bill in fiscal year 2020-21.

PPS will issue weekly updates to provide advance notice of expected shutdowns. These will be posted on the [Gazette website](#) and circulated by email to building managers for distribution.

Please note that air conditioning systems will not be turned off in buildings when there are classes scheduled in those buildings, and PPS will coordinate with Event Services to minimize the impact on conferences that are being held on campus.

Our participation in this program also promotes a sustainable energy system in Ontario by reducing the need for the province to purchase additional power or build new generation facilities, which can have both financial and environmental costs.

While building occupants will notice temperature increases during the shutdown periods, where possible, PPS will attempt to mitigate this by cooling buildings prior to the shutdown. Health and safety is always a top priority and PPS will closely monitor building temperatures. Anyone with concerns may contact FIXIT at 613-533-7301 or [by email](#).

Further details about Queen's electricity peak demand management program, including the buildings affected and health and safety guidelines [may be found here](#).

We thank you sincerely for your participation and cooperation.

Sincerely,



Teri Shearer
Acting Provost and
Vice-Principal (Academic)



Donna Janiec
Vice-Principal
(Finance and Administration)