Xavier University Demand Response Program

PJM Demand Response Program

Demand Response Season: June 1 – September 30

What is Demand Response?

The Demand Response program is a way you can help the University save money during the hot summer months. PJM provides a reasonable financial incentive for Xavier University to participate in this program. Between June 1 and September 30, you may be asked to reduce your electrical usage during peak-demand times (2:00 PM – 8:00 PM). Demand Response strategies are designed to reduce this electrical usage in almost all buildings.

When does the Xavier University use Demand Response?

To accomplish our goal we will be asked to reduce the use of electricity for up to six hours at a time to help PJM manage the peak electrical load on very hot summer days. Generally, the conditions for demand response are extremely hot weather, usually 85° or higher and high humidity. The agreement allows that we may be called to curtail up to 10 times between June 1 and September 30. The university will experience at least one demand response event annually. Each year PJM conducts a one hour test to make sure all those that are signed up to participate can accomplish their goal of energy reduction. This one hour test may be the only participation required of the university by PJM, unless they need to reduce load on the electric grid during a peak demand period as described before.

How will I know if there is a curtailment?

When Xavier University is called upon by PJM to participate in a peak demand response event, PJM will notify the University as soon as possible, but this may be as little as two hours.. This notification process will also occur when the annual test will take place. In this case an advanced notice will go out a day or two before as well as a two hour notice.

Does my building participate in Demand Response?

A variety of curtailment methods have been identified in various buildings.

Frequently Asked Questions:

What is Demand Response?

Demand response is the reduction of the University's electrical consumption during requested peak usage periods during the summer. These periods usually occur during mid-afternoon and early evening. These periods will not last longer than 6 hours and historically have started between 1:00 p.m. and 2:00 p.m.

What is the Electrical Demand Response Program?

This contract includes active participation in PJM's electrical peak demand reduction program with the goal of controlling and reducing the use of electricity during peak summer usage periods. Participation in this program allows PJM to distribute its electrical load evenly to it consumers, forestalling critical shortages and avoiding high distribution charges from other vendors.

Who or What is PJM?

PJM Interconnection is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of 13 states including all of Ohio.

- Acting as a neutral, independent party, PJM operates a competitive wholesale electricity market and manages the high-voltage electricity grid to ensure reliability for more than 60 million people.
- PJM's long-term regional planning process provides a broad, interstate perspective that identifies the most effective and cost-efficient improvements to the grid to ensure reliability and economic benefits on a system wide basis.
- An independent Board oversees PJM's activities. Effective governance and a collaborative stakeholder process help PJM achieve its vision: "To be the electric industry leader – today and tomorrow – in reliable operations, efficient wholesale markets, and infrastructure development."
- All RTO's fall under the regulatory supervision of the Federal Energy Regulatory Commission (FERC)

Why do we participate in the Demand Response program?

The agreement provides a financial benefit to the university by being compensated for the reduction of a set amount of the universities electric load (kW), while PJM benefits by avoiding the purchase of expensive power from other suppliers, the suppliers save by not having to construct new power generation facilities (*the demand response program is a more cost effective solution for utilities to avoid building new generation plants*). Additionally, through good stewardship, we all benefit by lessening our environmental impact on the planet.

It is our intent to meet the goals of the contract while minimizing the impact to normal campus operations. There are incentives for participation in a demand response program which

particularly standout. First, conservation of energy will result in a reduction of our impact on the environment and add to the sustainability goals of the university. While this specific demand response program is part of a contract with an outside vendor, the university will benefit in cost savings if we all voluntarily reduce energy consumption on an ongoing basis. The slight discomfort we may experience during an event may prevent the electric grid or system from a total collapse resulting in a blackout. So the participation in demand response allows the university to be a good neighbor and contribute to greater cause for the community.

How long does the program last?

Our participation starts every June 1st and continues to September 30th. The university may be required to complete up to 10 Demand Response events during this period. Or we may not be called to participate in any events other than the one hour test requirement.

How and when will notifications be made?

Whenever possible, PJM will warn us of a potential event 12 hours, or more, in advance. PJM will send us a confirmation notice at least two hours prior to an event. At this point we will notify building coordinators and department heads by e-mail confirming that we have been notified to participate in a demand response reduction, and the estimated time frame of the event. Due to changing electrical demands PJM is not always able to give us a 12-hour warning. In this case we will receive at least two hour notice and will notify the campus by email at the earliest possible time.

What will be curtailed?

Typically, we target cooling related equipment (chillers, fans and pumps, air handlers) and lighting. Since curtailment will happen on a very hot day, the reduction in air conditioning may be the most noticeable.

How can I help to do my Part?

Every little bit helps when we all participate across the campus. If you are in an office, turn off your lights and use your task lighting if possible. If you know where the light switches are for the hall lights in your area, turn them off. Some lights will stay on (safety lights) so the hall should not go completely dark, utilize any natural light if possible by opening blinds or shades. Make sure conference rooms and storage area lights are off; turn off any non-essential items like coffee makers, microwaves, computers (not being used) printers, scanners, copiers, fans. Shut down any computers that are not being used, use the stairs if you are able instead of the elevators.