Customer Driven. Community Focused.
A City of Austin Service

Power Factor Adjustment

Effective Power Consumption Costs Less to Serve

What is Power Factor?

In the simplest of terms, power factor is a measure of how effectively electric power is consumed at larger commercial and industrial facilities. Greater amounts of power that are wasted result in a low power factor.

Customers who have a low power factor draw more electric current to accomplish the same work over an interval of time and have a higher cost to serve. A low power factor results in greater system losses and requires Austin Energy to install or purchase additional capacity.

Customers with a high power factor (over 90%) consume energy more effectively and, as a result, have a lower cost to serve.

Customers with a power factor less than 90% will see an adjustment to the kilowatt demand on which they are billed.

How the Power Factor Adjustment is Calculated

When the power factor is less than 90% during the interval of greatest monthly use, billed kilowatts will be determined by multiplying kilowatt demand during this interval by 90% and then dividing that total by the recorded power factor during this interval.

Power Factor Adjustment	
Example	
The kilowatt demand during the interval of greatest use	= 13.5 kW
The power factor during the interval of greatest monthly use	= 87 %
Calculation	
Billed kW = 13.5 kW x 0.90 power factor / 0.87 power factor	= 14.0 kW

The Power Factor Adjustment applies to:

- Electric Delivery Charge
- Demand Charge
- Regulatory Charge

What Causes Low Power Factor?

The main contributors to low power factor are motors that operate at less than full load.

This often occurs in facilities that have induction motors, compressors, conveyors, magnetic ballasted fluorescent lighting, and various types of manufacturing equipment. Step-down, step-up transformers can also cause a low power factor.

Increase Your Power Factor

- Resize electric motors — **Rebate available**
- Add variable frequency drives — **Rebate available**
- Install power factor correction capacitors — **Download vendor list (pdf)**
- Resize step-up, step-down transformers — **Rebate available**
- Replace older magnetic ballasts in lighting — **Rebate available**

Austin Energy Rebates and Incentives

Our rebate and incentive offerings are designed to help you implement energy efficiency measures to reduce your electric demand, and to help offset your initial investment.

We currently offer **lighting retrofit**, **motor**, and **variable frequency drive rebates** that increase energy efficiency and may help increase your power factor.
Learn more about the Austin Energy Rebates and Incentives

Learn More

- **Manage Your Commercial Energy Usage**