Understanding Your **New kVA Rate**

What's Changing?

Beginning in 2027, large business customers will transition from a kW-based delivery demand charge to a kVA-based delivery demand charge. This new rate redesign aligns delivery service charges more closely with the demands customers place on the electric system and provides opportunities to improve the utilization fo the grid and save.

Your facility may use the same amount of energy as before, but the new rate design looks more closely at the total apparent power (kVA) your equipment needs from the electric system. Understanding your power factor, which measures how efficiently your facility uses electricity, and how it affects your current billing demand can help you better understand your future delivery service costs and identify opportunities for improvement.

Under the new rate design, a customer with the lower power factor needs more total power from the grid to do the same amount of work and will have a higher delivery demand charge than a customer with the same kW and a higher power factor. Customers with a lower power factor that improve their power factor have an opportunity to reduce their demand charges and reduce their bill.

Example – Two Customers Each **Use 100 kW**



95% Power Factor | **105 kVA** Electric Required

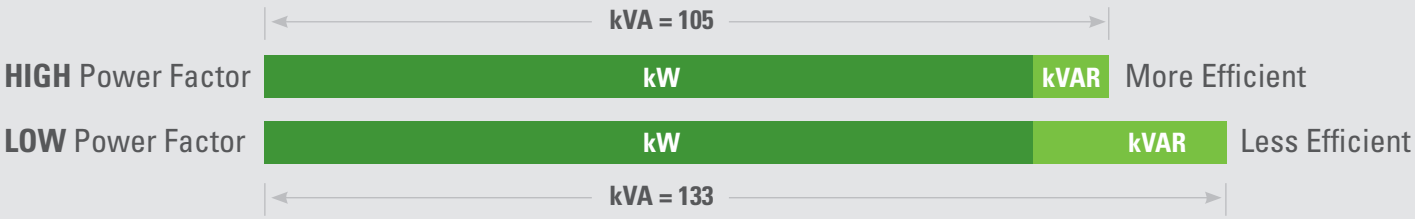
MORE Efficient Facility



75% Power Factor | **133 kVA** Electric Required

LESS Efficient Facility

Power Factor Efficiency



kW vs. kVA

Think of electricity like a glass of root beer:

- **kVA** = the whole glass (total power needed)
- **kW** = the beverage (useful power doing the work)
- **kVAR** = the foam (reactive power that takes up space on the system)

Utilities need enough equipment and system capacity to serve the whole glass – the total power demand, or kVA – not just the part doing useful work, or kW.

Power Factor Basics

Power factor measures how efficiently electricity is used.

Power Factor = kW ÷ kVA

- **Higher power factor** = electricity is being used more efficiently at your location
- **Lower power factor** = more total power is needed to do the same work
- **Higher efficiency generally means less total power is needed** to do the same work.

Think of power factor as fuel efficiency for your electrical equipment.



How Will This Affect My Bill?

It is important to understand that this change only affects the calculation of delivery demand charges. Bill impacts will depend on your power factor, demand patterns and energy use. Equipment-heavy customers may be impacted most. Facilities with low power factor, large motors, heavy equipment loads, older electrical equipment or limited power factor correction may see greater impacts because they require more total power from the electric system to do the same work.

To help with the transition, a rate limiter will be used to help reduce large bill changes when the new rate begins.

How Can I Improve Power Factor?

Improving power factor can reduce the kVA required to operate your facility and may help manage demand-related costs. Common approaches include:

- **Install Power Factor Correction Equipment**
  Capacitor banks and similar equipment can help reduce reactive power.
- **Upgrade Older Equipment**
  Newer motors, drives and electrical equipment often use electricity more efficiently.
- **Use Variable Frequency Drives**
  Variable frequency drives (VFDs) can improve motor efficiency and reduce unnecessary demand, lowering your facilities' power factor. Learn more about financial incentives for VFDs through the Ameren Illinois Energy Efficiency program.
- **Monitor Energy Use**
  Energy management systems and software can help identify equipment that may be lowering your power factor.

To learn more about the new delivery demand charge or your power factor, contact the **Business Call Center** at **1.800.232.2477**

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