

UNDERSTANDING THE IMPACT OF SIMULTANEOUS EV CHARGING ON COSTS

How multiple EV chargers affect your electric bill

Charging multiple electric vehicles (EVs) at the same time increases the total cost because it uses more kilowatts (kW). For example, at a site with four chargers, each capable of 200 kW, the billed demand for the month can range from less than 200 kW to 800 kW. This depends on factors like vehicle acceptance rate, charger output and simultaneous charging events. In early stages of EV adoption or in rural areas, having multiple vehicles charging simultaneously at peak capacity is limited. As EV adoption increases, the chance of simultaneous charging rises too.

200 kW



If only one vehicle charges and reaches peak charger capacity without any other simultaneous charging during the month, the demand charge could be approximately 200 kW.

400 kW



When two vehicles charge simultaneously and each reaches peak charger capacity at any point during the billing period, the demand charge for the month could be 400 kW.

600 kW



If three vehicles charge at the same time and all reach peak charger capacity at any given point in the billing period, the demand charge could be 600 kW.

800 kW



If four vehicles charge at the same time and all reach peak charger capacity at any given point in the billing period, the demand could be 800 kW, and so on.