

# Power Wheeling



*This is not the wheeling we are referring to...*

## What is "wheeling"?

In electric power transmission, wheeling is the transportation of electric power (megawatts or megavolt-amperes) over transmission lines.

Electric power networks are divided into transmission and distribution networks. Transmission lines move electric power between generating facilities and substations, usually in or near population centers. From substations, power is sent to users over a distribution network. A transmission line might move power a few miles or hundreds of miles.

An entity that generates power does not have to own power transmission lines: only a connection to the network or grid. The entity then pays the owner of the transmission line based on how much power is being moved and how congested the line is.

Some power generating entities join a group which has shared ownership of transmission lines. These groups may include investor-owned utilities, government agencies, or a combination of these.

Since prices to move power are based on congestion in transmission line networks, utilities try to charge customers more to use power during peak usage (demand) periods. This is accomplished by installing time-of-use meters to recover wheeling costs.

## What are the advantages of wheeling?

"Wheeling" allows utility areas with too much supply to transmit excess power to other utilities with too much demand. The ultimate goal is to move the least-cost power to where it is needed, maximizing efficiencies. If wheeling is an option, a utility can determine if it is cheaper to build a new electric generation facility or buy power from another service area. From the QF perspective, wheeling allows QFs to develop renewable, indigenous resources, such as wind or hydro, in remote areas that do not need the power, and send it to areas with higher demand.

**What are the disadvantages of wheeling?**

One problematic aspect of wheeling is determination of the value of transmitted power. In other words, how much should someone charge for allowing a electric generator to transmit power through its transmission lines? Private utilities also argue that access to too many parties will reduce the reliability of the system. However, utilities have been wheeling for years. The alleged problems with increased access to transmission are attempts by the investor-owned utilities to restrict their competition. Of course, increased access to transmission should be implemented carefully to protect the integrity of the system.

**Why is wheeling important to independent energy producers?**

Independent energy producers do not have the power of eminent domain and generally do not own transmission lines. Therefore they are dependent upon utilities to move their power to market. In a competitive marketplace, where independent energy producers are competing with utilities or their affiliates, access to transmission can be used to limit the participation of independent energy producers.