



# Customer-owned generation: Myths vs. facts

Prepared by Dawson Public Power District in cooperation with the Iowa Association of Electric Cooperatives.

If you're thinking about installing a customer-owned generation system, make sure you have all the facts first. Read through our list and see if you've heard any of these myths.

## **1. Myth: I don't need to contact Dawson PPD before I install a customer-owned generation system on my property.**

**FACT:** Nebraska law requires that owners of alternative energy production facilities (such as solar photovoltaic and wind turbines) notify their utility company, which includes Dawson PPD, of plans to construct, install and operate any system that will be connected to the utility's system. The Dawson PPD System includes electric transmission lines, distribution lines or attached equipment. The notification by the owner must be made in written form and received by Dawson PPD at least 60 days prior to the commencement of construction or installation.

## **2. Myth: Dawson PPD will help determine if owning a generation system is a good choice for me.**

**FACT:** It is solely the responsibility of the customer to determine if owning a generation system is a good investment. Dawson PPD does not provide financial assistance with the analysis. However, Dawson PPD has created information to help its customers understand the complexity of owning a generation system before a decision is made.

## **3. Myth: Because I already have a wind or solar generating facility on my property, I don't need to contact Dawson PPD if I plan to expand my system.**

**FACT:** Whenever a system expansion is planned, it's necessary to contact Dawson PPD to ensure all electrical needs can be adequately met and that system reliability and safety are not compromised. In some instances, line upgrades may be necessary to serve the expansion. The system expansion also will need to undergo the same inspection process that is required of a new generation system.

## **4. Myth: I will be using all of the energy output that I generate with my customer-owned system; therefore, I don't need to contact Dawson PPD.**

**FACT:** No matter what size of the system, the state of Nebraska requires that consumers notify their electric provider of plans to construct, install and operate any system that will be connected to the utility's systems (electric transmission lines, distribution lines or attached equipment). The notification must be made in written form and received by Dawson PPD at least 60 days prior to the commencement of construction or installation. An interconnection agreement is also required to be in place prior to operation of the system.

## **5. Myth: If I install a customer-owned generation system, I won't need the grid.**

**FACT:** In order to ensure reliable and uninterrupted power, individual renewable systems typically must be balanced with a continuous source of dependable power from central station generation. It's very rare for individuals who want continuous and reliable electricity to be completely off the grid. Backup generation in the form of a gas-powered generator, battery bank, or some other storage technology would be needed if the consumer was no longer on the grid and a continuous supply of power is desired. However, these backup systems can be more expensive and less reliable than the grid and may require regular maintenance by the customer to ensure reliability.



**6. Myth: The grid acts as a battery for my excess kilowatt-hours.**

FACT: Currently, the grid is not capable of storing electricity in a manner that is cost competitive with other technologies.

**7. Myth: My solar or wind generator can be my backup power source in case of a long-term power outage, like an ice storm.**

FACT: Talk with your contractor if you want your system to provide backup power during major power outages. A distributed generation system must be disconnected and isolated from the electrical grid when used as backup power. This is to ensure your safety and the safety of the linemen who may be working on the power line during an outage. Many distributed generation systems built to send excess power to the electrical grid use an inverter to detect line voltage. In the event of a power outage, the inverter will shut off the DG system's ability to generate power as a safety precaution.

**8. Myth: An interconnection agreement is not required between Dawson PPD and me.**

FACT: To ensure your own safety and that of your fellow consumers, you must notify Dawson PPD if you intend to install a customer-owned generation system. According to state statutes, the notification by the owner must be made in written form and received by the electric utility at least 60 days prior to the commencement of construction or installation. Under Nebraska law, an interconnection agreement must be in place.

Whenever a generating resource is connected and providing power, Dawson PPD must be aware that the system is in place so that our line personnel and other employees are not put in harm's way. There are a number of safety mechanisms that must be taken into account and put into place with customer-owned generating facilities.

**9. Myth: If I install a customer-owned generation system, and Dawson PPD requires an interconnection agreement, then Dawson PPD is responsible for the maintenance of my system.**

FACT: Dawson PPD does not have any responsibility for the maintenance of customer-owned generation systems. The customer who owns the generation resource is responsible for all necessary maintenance and repair investments and activities.

**10. Myth: Once my system is installed, it does not need to be inspected before it is interconnected.**

FACT: The state of Nebraska requires that an electrical inspection is completed to ensure the generation facility is safely interconnected to the grid. An Approval Notice is required to be provided to Dawson PPD. The interconnection of the customer-owner generation facility must comply with the National Electric Safety Code and the Institute of Electrical and Electronics Engineers Standard 1547.

**11. Myth: I am not responsible for fees associated with line upgrades that may be needed in order to provide power to my customer-owned generation resource.**

FACT: Dawson PPD reviews who benefits from the extensions or upgrades, and then the costs are generally assigned to those that benefit. Federal energy policy and Nebraska law assigned the responsibility of any interconnection costs, such as line upgrades and any other costs of interconnection, to the customer that is interconnecting to the grid.



**12. Myth: Owning and operating a DG system on my property does not present any additional safety issues for Dawson PPD.**

FACT: Each type of generating source often has specific requirements. For example, in the case of a rooftop solar system, the International Fire Code requires a construction permit, specific signage and markings, properly spaced access points, and smoke ventilation, just to name a few. All customer-owned generation systems within the state must have a safety inspection by the Nebraska State Electrical Division. Nebraska law further requires that consumers notify Dawson PPD before interconnecting their generation system and that an interconnection agreement is in place. These measures are to ensure the safe and reliable operation of the system and to protect the customers and employees who interact with the power grid. If Dawson PPD linemen are not aware of an interconnected system, they could be at risk of a serious injury while working on the distribution system. These requirements also support the safety of local emergency personnel, such as the fire department, by ensuring that there is appropriate system notification in the case of fire to prevent an injury from such a system.