

GENERAL
MANAGERERIC
HALFMANN

Coordinating Power Across the Grid

WHEN YOU FLIP a switch, electricity is there— instant, reliable and ready to power your day. But behind that simple act is a carefully coordinated system made up of many grid power players, all working together to keep the lights on.

At Karnes Electric Cooperative, we think it's important for our members to understand how this system works and who's involved in delivering the electricity you depend on every day.

It all starts with generation plants that actually produce electricity. Power plants convert energy from a variety of sources—such as natural gas, nuclear energy, wind and the sun—into electricity. A diverse mix of generation sources helps ensure reliability while also supporting affordability and sustainability goals.

Once electricity is generated, it has to be moved— often across long distances—to reach local communities. That's where transmission lines come in.



High-voltage transmission lines strung along massive towers move bulk electricity along highways or across open land. Because electricity can't easily be stored in large quantities, this system must constantly move power from where it's produced to where it's needed, all in real time.

Karnes EC is a member of South Texas Electric Cooperative, our local generation and transmission partner. South Texas EC is a private, not-for-profit wholesale power provider that generates and transmits electricity to Karnes EC and other electric cooperatives in our region.

Coordinating the flow of large amounts of power is a complex job, especially across multiple states or regions. Independent system operators, like the Electric Reliability Council of Texas, and regional transmission organizations, like the Southwest Power Pool, manage wholesale electricity markets.

These organizations don't own power plants or transmission lines. Instead, they act as a traffic controller for the grid—balancing supply and demand every second of the day and directing which power plants should generate electricity at any given moment.

Then there's the part of the grid most people are familiar with—your local electric utility. That's where Karnes EC comes in. We take electricity from the high-voltage transmission system and deliver it directly to your home, farm or business through lower-voltage distribution lines. We maintain utility poles, power lines, electric substations and other

essential equipment in our community to keep power flowing safely.

When storms roll through or outages occur, our crews are the ones working to restore power safely and as quickly as possible. We're proud to serve the members across our service area, and we're committed to providing reliable, affordable electricity you can count on.

Finally, there's you—the end user. Homes, businesses and industries all play a critical role in the grid. Your energy use directly influences how much electricity needs to be generated and delivered at any given time.

During periods of high demand— like hot summer afternoons or cold

winter mornings—the grid must work harder to meet increased usage. Simple steps, like adjusting your thermostat or running appliances during off-peak hours, can make a meaningful difference.

From generation to transmission to your local utility, it takes a coordinated effort to power everyday life. At Karnes EC, we're proud to be your trusted energy partner—and to play our part in keeping the grid strong for the communities we serve. ■