

## **Southwest Power Pool Membership Brings Big Benefits to Consumers**

East River Electric Power Cooperative, its power suppliers Basin Electric Power Cooperative and the Western Area Power Administration, along with other utility groups in our region joined the Southwest Power Pool (SPP) in 2015. Before joining SPP, Basin Electric, the Western Area Power Administration and Heartland Consumers Power District worked together to own and operate the bulk transmission grid. There were some benefits and downfalls to operating a standalone grid.

The decision to join the Southwest Power Pool was discussed and studied extensively by these utility groups for years before the systems decided to join SPP. In the end, they joined SPP because it allows these utilities to share generation and transmission resources with other utilities up and down the region in a more efficient manner and provide more reliable electricity to consumers. This decision has also brought financial benefits to consumers across the region.

Specifically for Basin Electric, the cooperative is able to sell generation into the market and East River Electric is able to see a return on transmission infrastructure. It's led to a multi-million-dollar annual benefit to consumers in the East River footprint alone, with added financial benefits to other member cooperatives in the Basin Electric family. It means ratepayers see the benefit in the form of affordable and stable rates. East River Electric's average wholesale rate has been stable for several years and has been reduced each of the past three years.

### **Details on the Southwest Power Pool**

The Southwest Power Pool is a Regional Transmission Organization that balances energy generation with energy usage across 14 states from the Canadian border south to Oklahoma, New Mexico and parts of Texas. On a typical day, generation and transmission assets are used in the most efficient way possible by balancing energy generation with energy needs, allowing generation units across the SPP footprint to run and keep the grid stable at the lowest possible cost.

### **Transmission operation**

In the Upper Midwest, the Western Area Power Administration (WAPA), the federal agency that markets power from the hydroelectric dams, is the Transmission Operator in the region. WAPA operates the bulk transmission infrastructure that delivers power from both WAPA and Basin Electric to East River Electric. East River Electric, which is a Transmission Owner in SPP, operates transmission and substation infrastructure that brings power to local member distribution systems who, in turn, deliver power to homes, farms and businesses.

### **Emergency situation**

Several days before we experienced an energy emergency on Feb. 16, the Southwest Power Pool began notifying utilities that forecasted cold weather in much of their service territory could lead to potential issues on the grid. SPP began asking local utilities to start asking their consumers to voluntarily conserve energy to help ease strain on the regional grid. However, because of continued cold weather from Canada to Texas, demand for electricity outpaced generation resources that were available. In an emergency situation, SPP gives WAPA notice that rolling outages are needed with little notice. Then WAPA is required to begin rolling outages which impacts the transmission and substations in East River Electric's system. When their substations are de-energized, consumers of local member distribution

systems experience a power outage. This is what happened in our region on Feb. 16. These short-term outages are needed to protect the rest of the grid from damage and potentially uncontrolled outages that take longer to repair.

### **Excess generation resources mandated by federal government**

Consumers may wonder how a utility group could come up short on the amount of generation needed to meet electric demand. The federal government requires regional transmission organizations to keep an excess of generation in their portfolios specifically for emergency situations. In the emergency that recently occurred, a combination of unfortunate circumstances led to rolling outages. A lack of normal wind energy capacity impacted the amount of generation available. Out of about 27,000 megawatts of wind energy in the SPP portfolio, there were times when the wind towers producing electricity amounted to only around 500 megawatts of the 27,000 megawatts typically available. Natural gas power plants also had issues staying online because of delivery issues, cold weather and a tight supply. Combine those two situations with record-breaking cold weather across the entire geographic region of SPP, electric demand outpaced the generation available.

### **Benefits for consumers continue**

Being a member of the Southwest Power Pool has created many benefits for utilities and their consumers in the region. In times of unplanned outages of generation units in any given area of SPP, they are able to access generation from another area to ensure consumers continue to have power. It has prevented outages in many instances. If a utility's generation units are unable to run on any given day, for whatever reason (technical malfunction, transmission issues, lack of fuel supply, etc.) they are able to access generation from the Southwest Power Pool to continue the flow of electricity to their consumers. If they were a standalone utility without a shared generation and transmission grid, their consumers would experience an outage until the problem at their generation units was resolved.

Overall, being part of a Regional Transmission Organization like the Southwest Power Pool helps to keep electricity more affordable and reliable for consumers across our region.