

Energy Affordability and Reliability: Frequently Asked Questions

Think locally

If you're asked: Nevada is getting hotter and hotter, and heat waves are challenging for the electric power system. How can we make sure that AC keeps working when the heat is on?

You can answer: Advanced energy technologies work together to tackle rising temperatures and risk to the grid. These energy storage, distributed energy, and microgrids. NV Energy already has more than 1,000 megawatts of energy storage in operation or under development, easily surpassing its 2030 goal. Bringing on even more will increase reliability and resiliency for Nevada's energy grid during periods of high customer demand.

At homes and businesses, resources like rooftop solar paired with small batteries, energy efficiency, and demand response can lower the amount of energy that Nevadans need to draw from the larger grid. And, if and when the grid goes down, a system with generation and storage that is set up to work apart from the larger grid during emergencies ("microgrid") can keep the power flowing.

Finally, energy efficiency and demand response programs ensure that less energy is used to accomplish the same tasks and help curb strain on the grid. Blackouts can also be avoided by expanding programs that offer incentives to customers to reduce energy consumption during high energy consumption periods, such as heat waves.

If you're asked: I'm all for renewable energy... but don't we need to focus on affordability and lowering electricity bills?

You can answer: Yes, we definitely need to focus on energy affordability. Renewable energy, combined with energy efficiency, can help reduce electricity costs and make bills more affordable. It now costs about the same to *build* large-scale solar and wind as to *operate* existing natural gas generation, even before the recent gas price spikes. And since solar and wind are home-grown technologies – rather than a global commodity subject to geopolitical turmoil – the cost keeps dropping rapidly, falling by 90% and 72% respectively over the past 12 years. Once built, solar and wind have nearly zero cost to operate, which lowers electricity prices for consumers.

Furthermore, the cheapest energy is the energy we don't use. The average cost per kilowatt-hour for utility-sponsored energy efficiency program savings is 3.1 cents per kilowatt-hour (kWh), about half of that of a natural gas combined cycle plant (6 cents per kWh).

If you're asked: What can we do to help folks struggling to pay their electric bills every month?

You can answer: Energy efficiency is key to assisting struggling households. Lower-income households in both rural and urban communities have twice the energy burden than average, measured as a percentage of household income spent on energy costs. But all Nevadans pay more

than most of our neighbors. In 2020, the average monthly electricity bill for a Nevadan household was \$110.36, above the average for the Mountain West (\$104.78).

Between 2012 and 2017, NV Energy achieved energy savings between 0.56 and 0.75 percent of total sales – savings that equate to more than 17,200 Nevada homes' annual energy consumption. Increasing the energy savings target would motivate the utility to expand and improve all efficiency programs and substantially boost customer financial savings.

Think regionally

If you're asked: How do we avoid the rolling blackouts we've seen in other states?

You can answer: In just the past year alone, millions of Americans have experienced unprecedented threats to electric reliability due to natural disasters such as wildfires, deep freezes, and extreme heat. In these moments of crisis, maintaining electricity is not just a luxury, it is an imperative. **A well-designed Regional Transmission Organization (RTO), strengthened by additional transmission capacity like NV Energy's GreenLink project, will improve resilience and help future-proof Nevada's electric power system** to withstand severe weather conditions, mitigate climate risks, and dynamically respond to grid disruptions. An RTO broadens the pool of energy resources available – Nevada can source additional electric capacity during times of high peak demand and export energy to help neighbors when their grids are strained – making it better equipped to prevent or mitigate prolonged outages.

If you're asked: What about when the sun isn't shining and wind isn't blowing...?

You can answer: Studies show that high amounts of renewable energy technology commercially available today – up to 80% of electricity generation – can meet demand without any reliability concerns. But we're still a long way away from that 80%. Today, wind and solar make up a third of the in-state generation that powers Nevada's electric grid. Still, connecting Nevada's electricity grid to the greater western region will assist in making sure that electricity suppliers can meet customer demands regardless of weather conditions, and at reasonable cost. A Regional Transmission Organization (RTO) is the best way to meet Nevada's 100% clean energy goals affordably and reliably, so the state should prioritize developing strong regional cooperation.

Additionally, joining an RTO will create in-state jobs building transmission and clean energy installations while lowering energy costs. Lower energy costs for Nevadans means more money to spend in the local economy. Building these new resources in Nevada, facilitated by an RTO, can also create supplemental revenue streams for communities and the state as a whole. Moreover, an expanded competitive energy market will attract new private investment capital to the state and new businesses that are working toward corporate sustainability goals.

