

## Resource Generation Plan FAQ

### What is Austin Energy's Resource, Generation and Climate Protection Plan to 2035?

- Austin Energy's Resource, Generation and Climate Protection Plan to 2035 is the community-guided roadmap that outlines how the utility will power Austin with energy that is:
  - » Reliable
  - » Affordable
  - » Environmentally sustainable
  - » Equitable

The plan responds to growing challenges — such as rapid population growth, climate change, extreme weather, rising market costs, and local transmission congestion — by laying out a strategy that prioritizes:

- » Energy efficiency
- » Demand response
- » Local solar
- » Battery storage
- » Innovative clean-energy programs
- » Transmission import capacity
- » Additional, more efficient local generation
- » A culture of innovation for emerging and evolving technologies

It reaffirms Austin Energy's commitment to providing 100% carbon-free energy as a percent of customer load by 2035, exiting coal as soon as feasible, reducing emissions through new guardrails, and expanding equitable access to clean energy.

The result is a balanced strategy designed to deliver reliable, affordable and environmentally sustainable energy while ensuring benefits and burdens are shared fairly across all Austin communities.

You can find more details about the 2035 Plan [here](#).

### How is Austin Energy working toward its carbon-free goal?

- Austin Energy is working to meet the goal by continuing to invest in affordable carbon-free projects both locally and across Texas. We want to have enough carbon-free energy generated to cover all of our customer load in 2035 and beyond. If barriers stand in our way, we will take the approach of “do your best and clean up the rest,” mitigating or offsetting any remaining carbon emissions starting in 2035.

Despite rising challenges, Austin Energy is hard at work advancing its clean energy goals:

- » Investing in affordable wind and solar projects across Texas
- » Significantly increasing local solar to 405 MW by 2035
- » Expanding battery storage, with at least 125 MW planned by 2027
- » Pursuing beneficial electrification — the transition toward electric powered technologies that also reduce overall emissions
- » Shifting energy-efficiency programs to focus on greenhouse gas avoidance
- » Exploring emerging carbon-free technologies, like long-duration storage, geothermal and advanced nuclear

The utility will also phase out its reliance on coal by exiting its share of the Fayette Power Project as soon as feasible and will continue to reduce emissions from coal during the transition by reducing generation output during low-demand periods.

This balanced and flexible strategy ensures Austin Energy can achieve its carbon-free goals while maintaining reliability, affordability, and equity for the Austin community.

## What does it mean to incorporate equity into planning our energy future?

- Incorporating equity into Austin Energy’s planning means making sure that the benefits and impacts of our energy system are shared fairly across all communities — especially those that have historically faced higher energy burdens or greater environmental and reliability impacts. Austin Energy uses a formal energy equity framework made up of three parts:
  - » **Procedural Equity:** ensuring that diverse voices have a meaningful role in decision-making
  - » **Recognition Equity:** acknowledging and addressing past and present inequities, such as higher energy burdens among low-income residents
  - » **Distributional Equity:** ensuring that programs and investments like solar incentives, weatherization, battery installations and reliability improvements reach the customers and neighborhoods that need them most

Equity impacts residents in different ways, which is why Austin Energy considers the impacts of reliability, affordability and environmental sustainability equally.

## New Investments in Local Solutions

### Why do we need local solutions?

- As the area and its energy needs continue to grow, Austin Energy must provide the power our community requires. Local solutions are a key tool in meeting these needs. Local transmission upgrades allow us to bring in more power from outside the Austin Energy service area while generation within the Austin Energy service area directly reduces costly transmission congestion, improves reliability and provides voltage support. Think of voltage as the “pressure” that pushes electricity through the system. It must remain stable for the grid to work properly.

Because of the time to complete both types of projects and the very dynamic nature of the larger electric grid, Austin Energy must take action on all types of local solutions, both transmission and generation. This is in addition to the work we do to reduce customer energy needs through energy efficiency and demand response measures — customer-side local solutions.

### What types of local energy resources are Austin Energy pursuing and what are their characteristics?

- In addition to customer-side local solutions and local transmission upgrades, Austin Energy is pursuing several types of local utility-scale resources, including:
  - » Local utility-scale batteries — Provide short-duration two- to four-hour dispatchable energy, support solar ramp-down, provide ancillary services and improve reliability
  - » Local utility-scale solar — Clean energy sited within the Austin Energy service area to reduce congestion, lower local prices and support reliability. Austin Energy plans to reach 405 MW of local solar by 2035
  - » More efficient natural gas peaker units — Small, modular, fast-responding generators used only during peak or emergency conditions. New units are roughly twice as efficient as Austin Energy’s 1970s-era current peakers

### How often does Austin Energy expect each resource type to run?

- Natural gas peaker units typically run only when needed during peak or emergency periods. Austin Energy commits to running the most efficient (least emitting) units first and staying within emissions guardrails.

Utility-scale batteries run frequently but in short bursts. They are designed for two- to four-hour events, not longer-duration needs like during extreme weather.

Local solar generates whenever sunlight is available, offsetting the need for fossil-fired generation and reducing congestion.

## How are new energy investments funded?

- Austin Energy aims to keep bill impacts limited and predictable, with special focus on reducing the electricity burden on vulnerable customers. The data shows that doing nothing is the most expensive option, because congestion costs, market exposure and outage risks increase. New investments are funded through Austin Energy's existing financial mechanisms:
  - » Capital improvement plans
  - » Rate revenues
  - » Grant opportunities

Austin Energy must maintain financial stability to avoid financial risks like those seen during long-duration outages such as the 2021 Winter Storm Uri.

## How do local resources protect us from something like Winter Storm Uri?

- Winter Storm Uri in 2021 was a statewide event, where the Electric Reliability Council of Texas (ERCOT) directed outages across Texas to prevent a statewide blackout because of too little generation. This situation also caused ERCOT market power prices and natural gas prices to skyrocket, creating a huge financial risk.

Having local generation resources available during high-demand periods like Winter Storm Uri allows Austin Energy to support grid stability and protect affordability for our customers. For example, during the 2021 winter storm, Austin Energy's local generation resources — fueled by natural gas — produced enough power to offset power and gas costs and give money back to our customers. Meanwhile, other utilities faced bankruptcy because they didn't have the same kind of protections from high wholesale power prices. Without local resources, Winter Storm Uri would have been not only a long-duration outage event but also a major financial impact for Austin.

# New, High-Efficiency Natural Gas Peaker Units

## Why is Austin Energy considering new natural gas peaker units?

- Austin Energy is actively pursuing a diverse mix of energy options, including:
  - » Maximizing demand-side management — energy efficiency, demand response, customer-sited batteries
  - » Local solar, battery storage, wind and newer technologies like geothermal
  - » Transmission upgrades to increase import capacity
  - » All-resource Request For Proposals (RFP), which require Austin Energy to test whether carbon- or emissions-free options can meet the same reliability needs before pursuing peakers

However, real-world experience and modeling show that batteries, demand-side management and local solar combined cannot solve long-duration reliability risks, especially as load grows. Some dispatchable local generation remains necessary.

## If Austin Energy is going carbon-free, why would we invest in new natural gas peaker units?

- Peakers act as an “insurance policy” for extreme weather and long-duration events that batteries and other resources can't cover. The 2035 Plan's carbon-free goal is carbon-free energy as a percentage of annual load goal. It does not eliminate every individual fossil resource immediately. In addition:
  - » Newer peakers are much more efficient and have far less emissions than existing peakers
  - » Peakers will only run when needed and will follow emissions guardrails
  - » Peakers move us closer to retiring coal resources and eventually transition away from older gas units

## Are newer peakers cleaner than Austin Energy's existing peakers?

- Yes. New natural gas peakers are about twice as efficient as Austin Energy's existing 1970s-era units, meaning they use roughly half the fuel and emit about half the emissions per MWh. All new peakers will also include Selective Catalytic Reduction (SCR) to reduce nitrogen oxide (NOx) emissions by 80–95%.

## How will Austin Energy reduce the environmental impact of gas peaker units?

- By combining peakers with energy efficiency, batteries and local solar, we will produce as few emissions as possible while still ensuring we can reliably and affordably serve all customers. Though peakers still emit NOx and carbon dioxide (CO<sub>2</sub>), they run only when needed during times of highest demand and in emergency situations. In the 2035 Plan, Austin Energy commits to:
  - » Running the least-emitting units first
  - » Setting emissions guardrails limiting run time and emissions
  - » Using pollution controls like SCR
  - » Replacing older units with cleaner technology as it becomes available

## What does Black Start mean?

- Black Start refers to a generator's ability to start up without any external power source and help restart the entire statewide grid after a blackout. Austin Energy is committed to maintaining black start capabilities in its generation portfolio to be part of the solution in a statewide grid blackout emergency.

Only certain types of generation — like peaker units — meet ERCOT's strict black-start requirements. Austin Energy will monitor developments at ERCOT. If those requirements change such that batteries could provide black start capability, Austin Energy will consider implementing batteries for that purpose, if economically feasible.

## Are you looking to add local generation because of data centers?

- No, this is not about data centers. The Austin area has been growing for years with new residents, new business, new healthcare, new manufacturing and many electric vehicles calling Central Texas home. That brings more demand for electricity. Over the last ten years, Austin Energy has hit five new peak records, each higher than the last. Over that time, system peak increased by nearly 14%. Austin Energy is looking at solutions and resources to power everyone in our community.

# Battery Storage

## What kind of battery storage is Austin Energy considering?

- The 2035 plan outlines a goal of 125 MW of new local battery storage by 2027, if economically feasible. Most utility-scale batteries available today are able to run two to four hours per discharge.

## How long does it take to recharge a battery?

- It takes the same amount of time to recharge a battery as it does to discharge it, but recharging also depends on grid conditions. For example, a two-hour duration battery would take two hours to recharge, but if energy isn't immediately available on the grid or if prices are too high, Austin Energy would wait for conditions to improve before recharging it.

## What is Austin Energy doing to ensure fire safety around batteries?

- All new installations go through permitting, safety and compliance processes involving fellow City departments, including Austin Fire Department or the respective Fire Department having jurisdiction. Additionally, newer battery technology chemistries, like lithium-iron-phosphate, significantly increase fire safety conditions.

## Why aren't batteries considered carbon-free?

- Batteries only store energy. They charge from the grid, and if the power mix during that time period includes fossil generation, the battery is charged from that source. Batteries are, however, emissions-free at the point of use and support integration of renewables.

# Renewables — Wind and Solar

## What types of solar facilities exist now, and what else is Austin Energy considering?

- Current and planned solar resources include:
  - » Local solar (rooftop, commercial and utility-scale within the load zone)
  - » Remote utility-scale solar through power purchase agreements
  - » Community solar and solar leasing programs
  - » Standard Solar Offer, which enables commercial rooftop hosting for customers

## Is Austin Energy investing in more wind power?

- Yes. Austin Energy plans to continue using remote wind facilities as a significant part of our energy portfolio and will pursue additional renewable Power Purchase Agreements (PPA), when affordable, through our annual RFP process.

## Why can't we focus more on renewable sources?

- Austin Energy is constantly focused on expanding our renewable portfolio, but we must also account for their limitations, such as intermittent productivity and susceptibility to transmission congestion constraints. Other considerations include:
  - » Short-notice dispatchability
  - » Voltage support
  - » Long-duration reliability
  - » Black start requirements
  - » We cannot rely on renewables alone to meet certain needs of our customers

# Transmission

## Can Austin Energy build more transmission lines to solve local power challenges?

- Transmission is part of the solution, and Austin Energy is consistently building and upgrading lines and substations. However:
  - » Transmission projects require ERCOT and Public Utility Commission review and approval
  - » Some projects take years due to permitting and supply chain constraints
  - » No single transmission solution fully solves reliability and voltage issues in Austin Energy's transmission studies
  - » Transmission alone cannot solve local reliability risks. Local generation is also required

# Energy Efficiency and Demand Response

## Are energy efficiency and demand response programs part of the solution?

- Absolutely. Modeling shows energy efficiency and demand response programs are essential. Demand-side management is the first priority in the 2035 Plan and helps reduce the need for new generation and transmission. Customer-sited batteries, managed EV charging, and load shifting also reduce peak load and congestion. The utility plans for 975 MW of energy efficiency savings by 2027 and 270 MW of demand response by 2035.

# Siting

## Where will these facilities be located?

- Austin Energy will locate new local energy facilities — such as utility-scale batteries, utility-scale solar installations or more efficient peaker units — within the Austin Energy service area so they can directly improve local reliability, provide voltage support and reduce costly transmission congestion.

Sites must be near existing transmission lines, substations, or other supporting infrastructure. This allows resources to connect reliably and cost-effectively to the grid and ensures they can address local constraints that risk outages and high local energy prices.

## Why can't these facilities be placed outside of Austin?

- Facilities outside the Austin Energy service area cannot resolve Austin-specific challenges. Only local resources can:
  - » Relieve transmission congestion
  - » Reduce load-zone price spikes
  - » Provide necessary voltage support
  - » Prevent local outages

## What criteria is Austin Energy using to evaluate the sites?

- Austin Energy evaluates potential sites using multiple factors, including:
  - » Energy equity, with a commitment to incorporate community input and neighborhood-level mitigation investments
  - » Proximity to required infrastructure, such as transmission, water, and fuel
  - » Permitting and land-use constraints
  - » Environmental impacts, including emissions considerations
  - » Ability to provide voltage support and improve local reliability

## Would all sites host all technologies?

- No. Not every site is suitable for every resource. Site needs vary based on resource type. Austin Energy will match technologies to locations based on feasibility, community feedback, environmental impact and the equity framework used in developing the 2035 Plan.

## What are the impacts and benefits to local communities chosen to host a facility?

- While some facilities may create localized impacts — such as noise or emissions depending on the technology — the 2035 Plan looks to reduce their effects with modern pollution controls, strict emissions guardrails, noise reduction options and use of the cleanest units first.

In addition, Austin Energy will work with local communities to gather their specific priorities. For example, customer programs — including energy efficiency, weatherization and clean-energy investments — could bring direct benefits, reduce energy burden and improve neighborhood resilience. These communities also benefit from stronger local reliability, which helps reduce outages and costs.

## How much water will be used at these facilities and how much land is needed for each type?

- It depends on the technology. All resources being considered are low water use technologies. Solar requires more space while batteries and peakers require less for the same amount of energy output. Access to necessary infrastructure, including water, is part of the site feasibility review.

## Is there value in having facilities in different locations?

- Yes. Placing facilities at diverse locations across the service area:
  - » Improves systemwide reliability and voltage support
  - » Reduces congestion risks
  - » Enhances resilience to extreme weather or equipment outages
  - » Allows Austin Energy to balance environmental and equity considerations more effectively