

Alliant Energy in Iowa

We proudly serve **500,000 electric** and **225,000 natural gas** customers across Iowa

Balanced Strategy

Our energy strategy balances traditional and renewable resources, as well as battery storage, to keep service reliable and costs stable



Community Investment

We invest in infrastructure and energy capacity that strengthens Iowa communities today and fuels growth for decades to come

Alliant Energy in Eastern Iowa

Linn County is our largest load center in Iowa, with a strong presence in Cedar Rapids.

Community Commitment

With 600+ employees in Linn County, we are deeply rooted in the Cedar Rapids community and committed to powering its continued growth.

Balanced Investments

We invest in a diverse mix of generation, including natural gas, solar, and battery storage, to maximize reliability and affordability.

Economic Growth

As our largest load center, Linn County's energy capacity attracts new investment, creating new jobs, increased tax revenue, and long-term opportunities.

OUR CEDAR RAPIDS REGION FOOTPRINT

- Prairie Creek Generating Station
- Cedar River Generating Station
- Pleasant Creek Solar
- Deer Run Battery Storage
- Cedar Rapids Community Solar Project
- **PROPOSED: Morgan Valley Energy Center**



Growing Linn County

Morgan Valley Energy Center is critical to provide reliable, secure energy to our customers and meet increased load obligations.

Morgan Valley Energy Center (NEW)

Technology: Combustion turbine facility

Capacity: 720 MW

Purpose: Necessary to meet energy load obligations

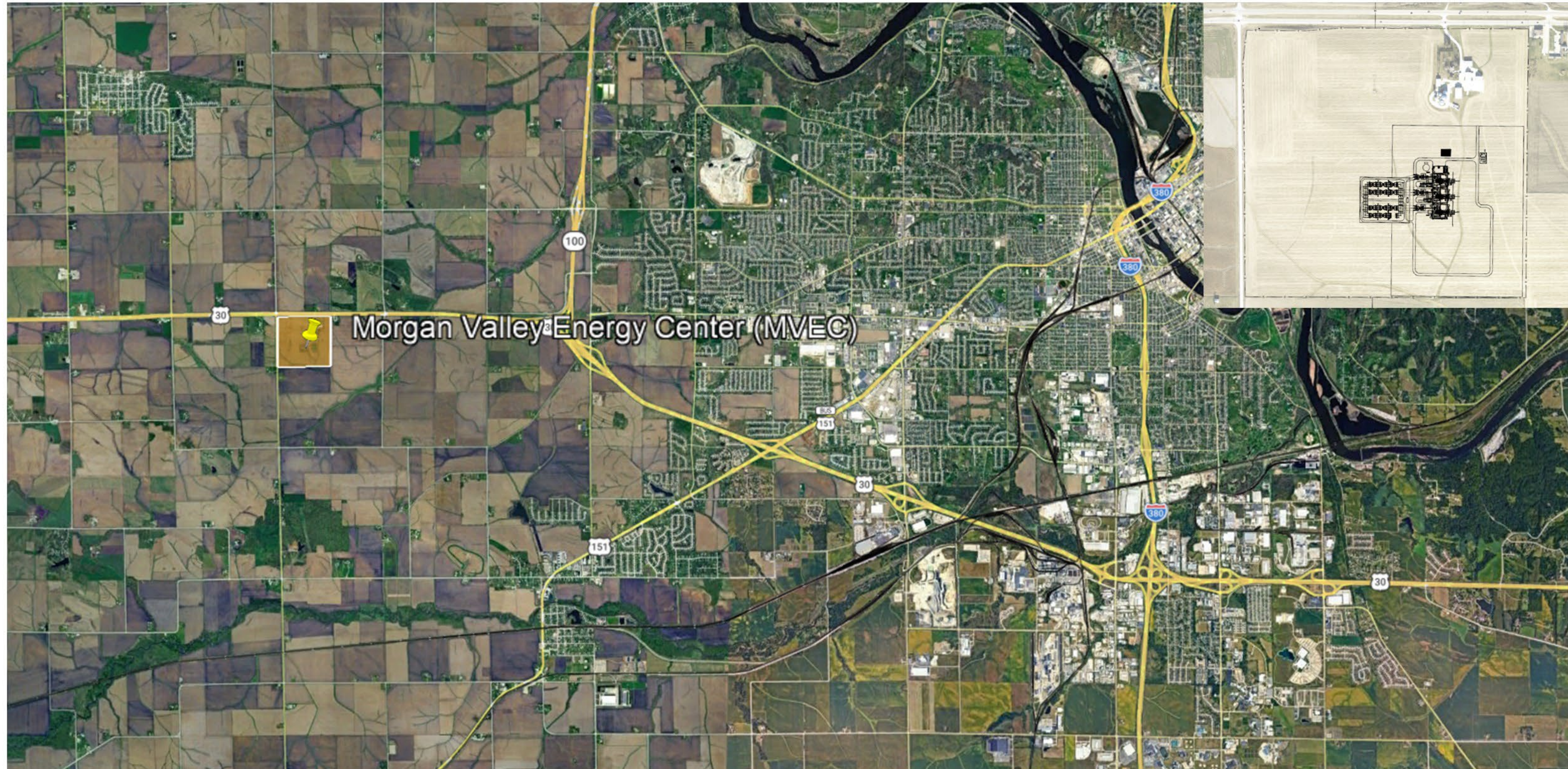
Footprint: Meets the siting requirements of Linn County and the preferences of Eastern Iowa Airport.

WHY BUILD IN LINN COUNTY?

Siting Morgan Valley Energy Center in Linn County, our largest load center, is a cost-effective decision for our customers. The site chosen has access to the necessary infrastructure needed to operate the facility, while also complying with the preferences of Eastern Iowa Airport and Linn County's EU-2 zoning ordinance setback at 2.25 miles.



Morgan Valley Energy Center



Our Balanced Energy Portfolio

We invest in natural gas generation alongside renewables to keep energy reliable and affordable.

WIND

Top-5 regulated wind owner nationwide with approval for ~1,000 MW more in Iowa

SOLAR & BATTERY STORAGE

Continued expansion of solar and battery storage across the service territory

NATURAL GAS

We are investing in natural gas across Iowa with the Bobcat, Burlington, Cedar River, Morgan Valley, and Riverhawk Energy Centers

Together, these resources reinforce a reliable, cost-effective energy system that supports customers and communities through peak demand and severe weather.

How We Evaluate the Need for New Resources

Before proposing any project, we ask three fundamental questions to make sure it is the right thing to do for our customers and communities.

“Is the energy supply reliable?”

Reliability

We forecast how much energy our customers will need in the years ahead. If demand is growing faster than our current supply can handle, we need to plan now so the lights stay on tomorrow.

“Does this provide value for our customers?”

Affordability

We compare different ways to meet that need — renewables, natural gas, energy storage, and more — and choose the options that keep costs reasonable for customers over the long term.

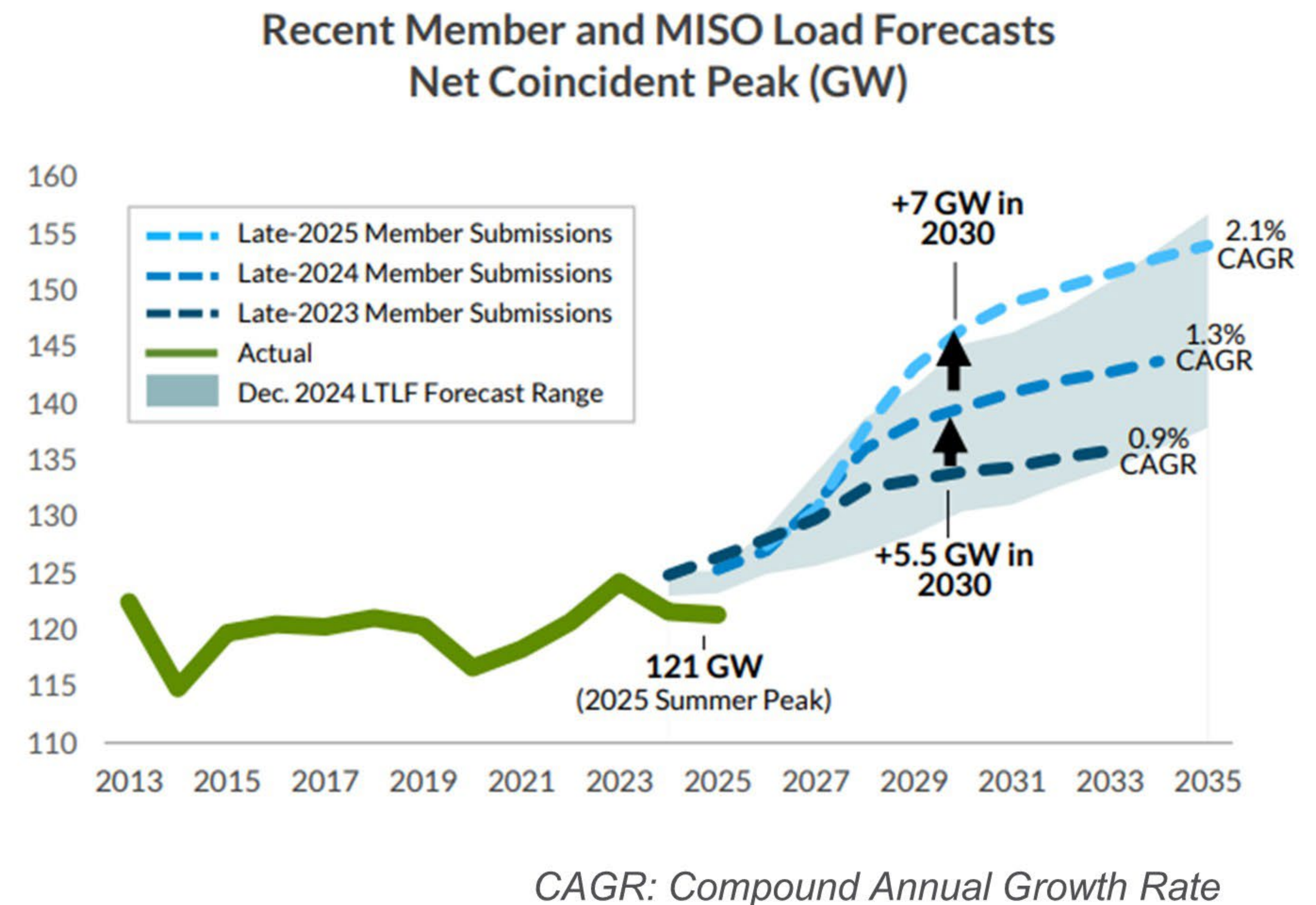
“Will it benefit communities we serve?”

Community Benefit

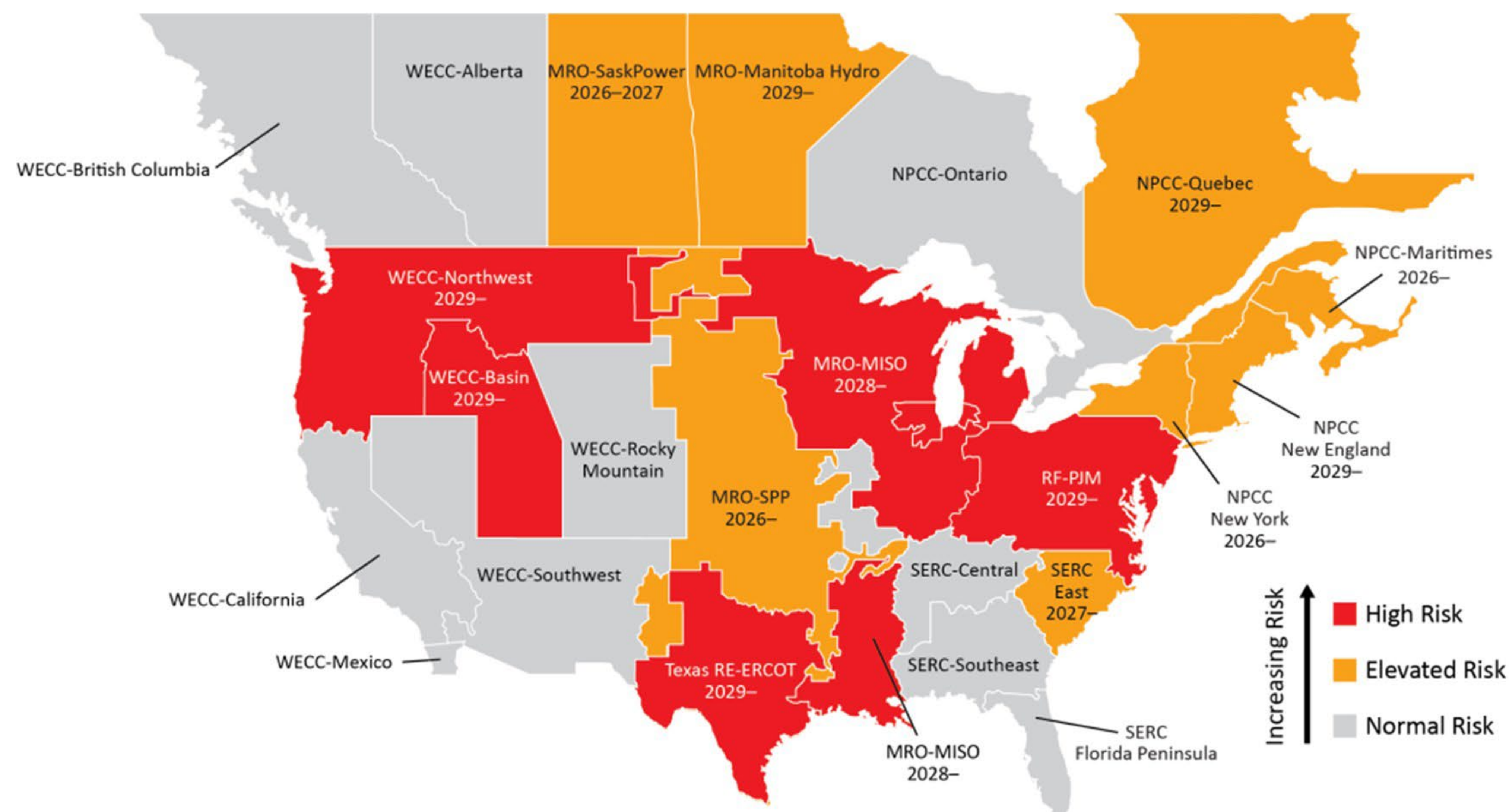
We consider how a project affects the people and places around it — jobs, tax revenue, environmental impact, and quality of life. A project must be in the public interest to move forward.

Energy Demand is Increasing

- Electric utilities within the Midcontinent Independent System Operator (MISO) footprint must secure capacity resources sufficient to meet their forecasted seasonal load with reserve margin to support reliability.
- Load is growing in Alliant Energy's service territory and across MISO. Reliability obligations are evolving.
- In a future regulatory proceeding, the Iowa Utilities Commission will determine the prudence of investments made on behalf of customers.



Resource Adequacy in the Midwest and US



Alliant Energy is in the Midwest Reliability Organization (MRO) and the resources are dispatched by the Midcontinent Independent System Operator (MISO)

Meeting reliability needs relies on implementation of 50 GW of expedited resource additions

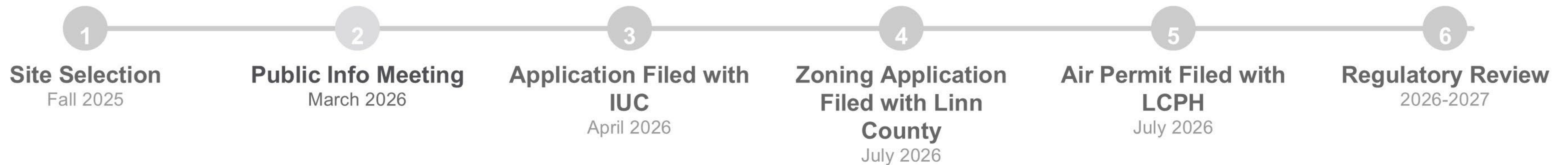
2025 LTRA						2025 LTRA with MISO ERAS Additions					
Risk Level (High, Elevated, or Normal)						Risk Level (High, Elevated, or Normal)					
2026	2027	2028	2029	2030		2026	2027	2028	2029	2030	

Source: NERC 2025 Long-Term Reliability Assessment



Regulatory Process Overview

Morgan Valley Energy Center is subject to extensive, independent regulatory review.



- ✓ Morgan Valley Energy Center is subject to a multi-layer, independent regulatory review from the Iowa Utilities Commission (IUC) and Linn County Public Health (LCPH). Additionally, the project will be designed to meet Linn County EU-2 zoning requirements.
- ✓ Alliant Energy must prove this project is in the public interest and meet stringent requirements regarding emissions and public health. A multi-month regulatory approval process will occur between 2026 and 2027.
- ✓ Construction cannot begin until Alliant Energy meets all regulatory requirements from LCPH and the IUC approves the application.

The Role of Morgan Valley Energy Center

Morgan Valley is needed to support load obligations and deliver reliable energy to customers.



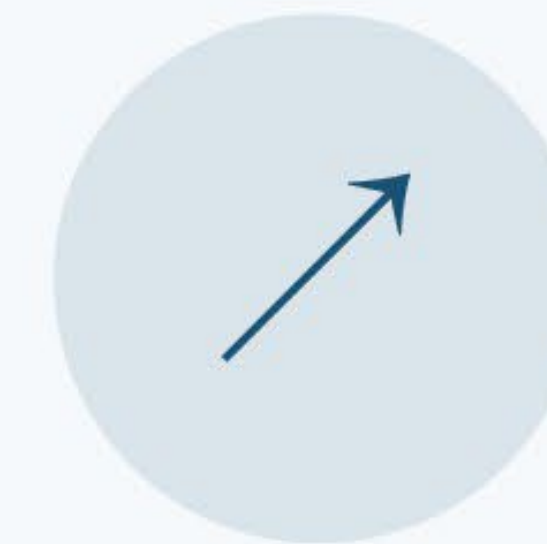
Balanced Resources

Complements our renewable portfolio with reliable, dispatchable generation that keeps the grid stable when wind and solar are unavailable or when demand is high.



Energy Security

Provides 720 MW of on-demand capacity that strengthens grid resilience and ensures dependable power delivery to homes and businesses across the region.



Growth Capacity

Creates available energy capacity that attracts new employers, supports existing business expansion, and generates long-term economic opportunity for the Cedar Rapids region.

Project Overview

CAPACITY

720 MW

Natural gas-fired generation

ELECTRIC INTERCONNECTION

Morgan Valley Substation

The Facility will interconnect to two ITC transmission lines via an on-site substation.

TRANSMISSION OWNER

ITC Midwest

Electric transmission

NATURAL GAS PIPELINE

The Facility will be provided natural gas via a pipeline built, owned, and operated by an interstate natural gas pipeline supplier.

WATER

Alliant Energy is required to meet the requirements set by the DNR. The facility uses a closed-loop system, minimizing water use.

LAND USE

55 Acres for Facility

160 Acres Total

Purchase agreements secured

Site Selection Considerations

Proposed Morgan Valley Energy Center Site: south of HWY 30, east of Linn Benton Road

Interconnection

- Access to adequate fuel supply and electrical outlet (pipeline expansion required)
- Minimize interconnection facilities
- Minimize regional transmission system upgrades

Land Suitability

- Proximity to dwellings
- Appropriate drainage and terrain
- Floodplain and transportation access

Environmental & Cultural

- Existing local air quality
- Endangered species
- Wetland habitat
- Historical and cultural resources

Meets Local Siting Expectations

- Current site was chosen based on the 2.25-mile setback put in place by Linn County and the feedback received from Eastern Iowa Airport
- Many sites were considered, including within the Big Cedar Industrial Center

Site Selection Timeline

How Alliant Energy arrived at the current Morgan Valley Energy Center site

Early 2025



Project proposed for Big Cedar Industrial Center near Fairfax. The site is owned by Alliant Energy and is in an industrial area.

Summer 2025



Feedback from Eastern Iowa Airport raises concerns about site viability. Key stakeholders urge Alliant Energy to consider additional sites.

Fall 2025



Alliant Energy deprioritizes the Big Cedar site and begins new round of site selection, both within Cedar Rapids and unincorporated Linn County.

Early 2026



Site viability within Cedar Rapids is limited. At the same time, Linn County passed a new ordinance that introduced new setback requirements. The Morgan Valley property meets the new setback requirements.

Early 2026



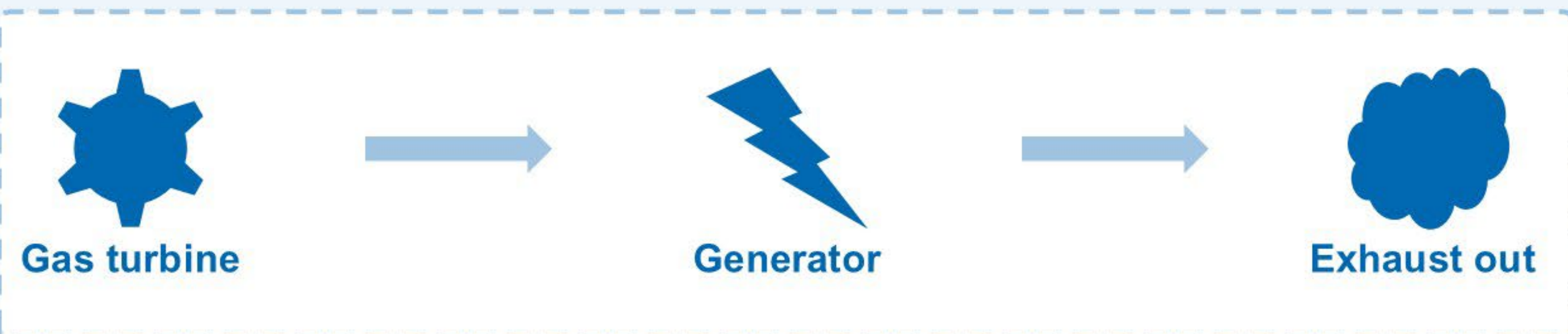
Alliant Energy enters into purchase agreements with willing landowners and announces current Morgan Valley site.



Simple Cycle vs. Combined Cycle

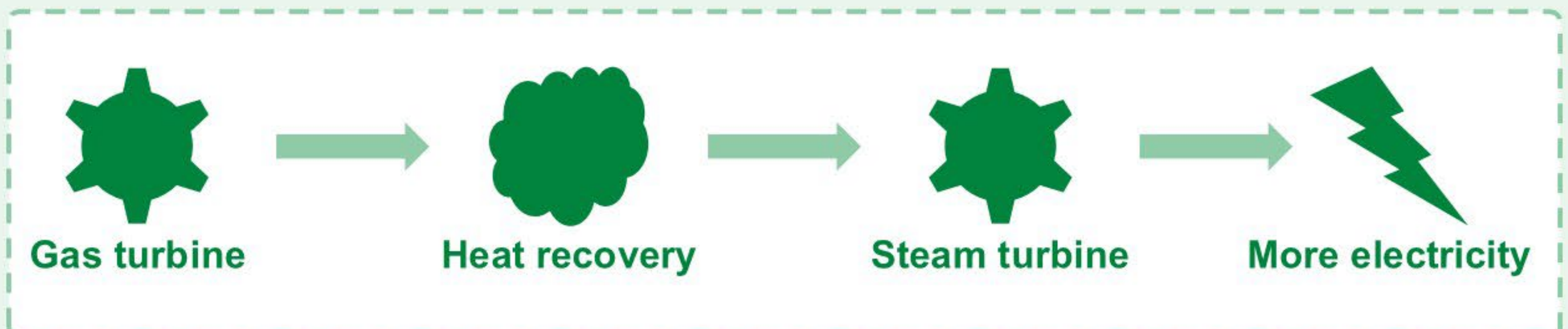
Alliant Energy is proposing to build a simple-cycle generation facility with the flexibility to convert to a combined-cycle facility in the future, based on customer demand and energy needs.

Simple Cycle



- **How it works:** Compressed air and natural gas combust; the hot, expanding gas spins one gas turbine that drives a generator, then leaves as exhaust.
- **Efficiency:** ~33–40%, generating power from a single gas-turbine cycle (Brayton Cycle).
- **Best for:** Peaking and backup power — lower upfront cost, shorter construction timeframe, fast 10–30 minute starts, lower water consumption
- **Operating profile:** Compact and flexible, designed to ramp up and down quickly to follow changing demand. Facility will run less than 40% of the time.

Combined Cycle



- **How it works:** Adds a heat-recovery steam generator and steam turbine that reuse the gas turbine's hot exhaust to produce additional electricity.
- **Efficiency:** ~45–53%, generating power from gas-turbine cycle combined with a steam turbine cycle (Rankine Cycle)
- **Best for:** Baseload and intermediate generation, producing more electricity from the same amount of fuel.
- **Operating profile:** Larger plant (~3x the plan area of a simple cycle facility) that runs most efficiently during steady, continuous operation, unlike simple cycle.

Project Schedule



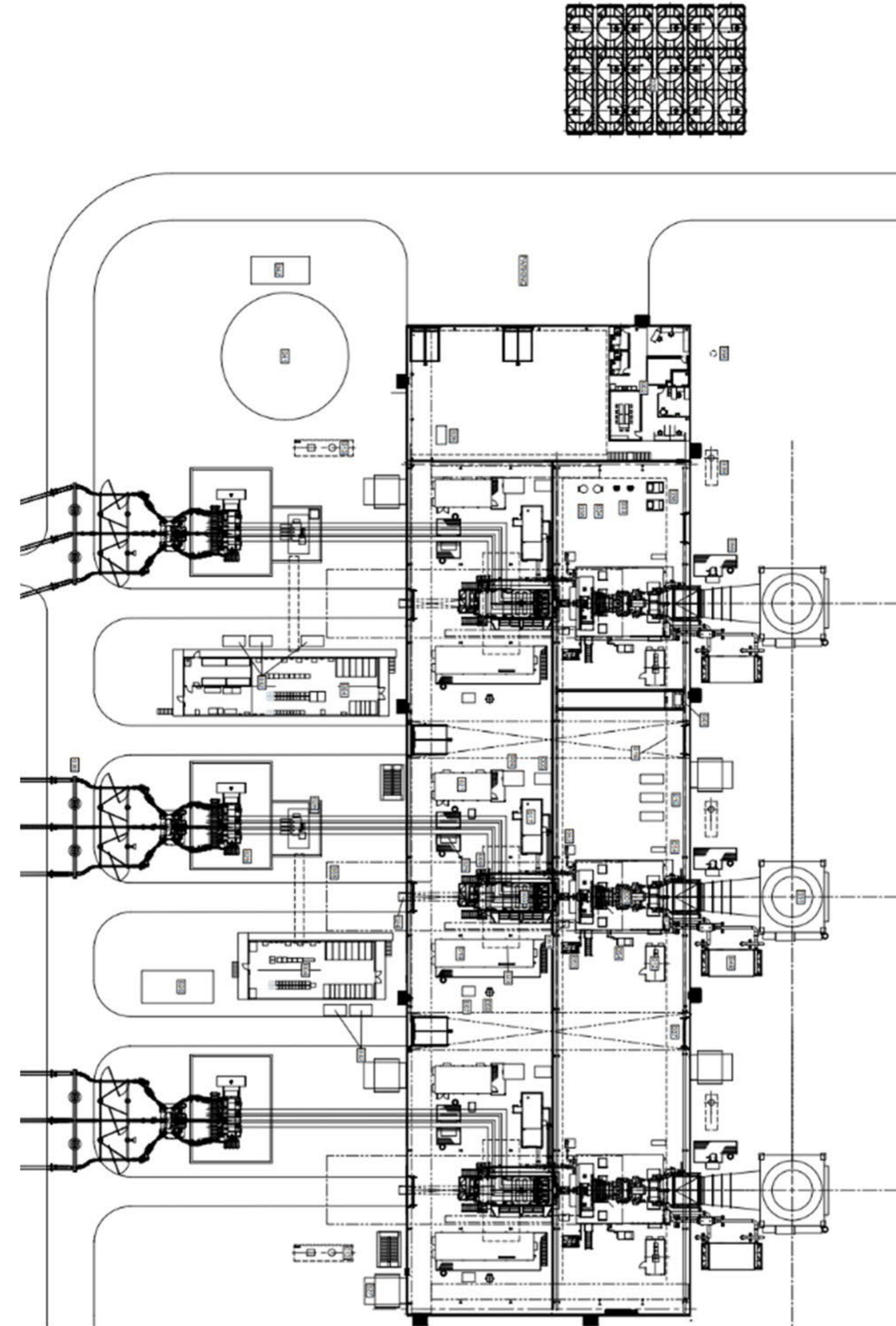
Key Milestones

File with IUC → Environmental review → Permit approvals → Site preparation → Facility construction → Commissioning → Commercial operation

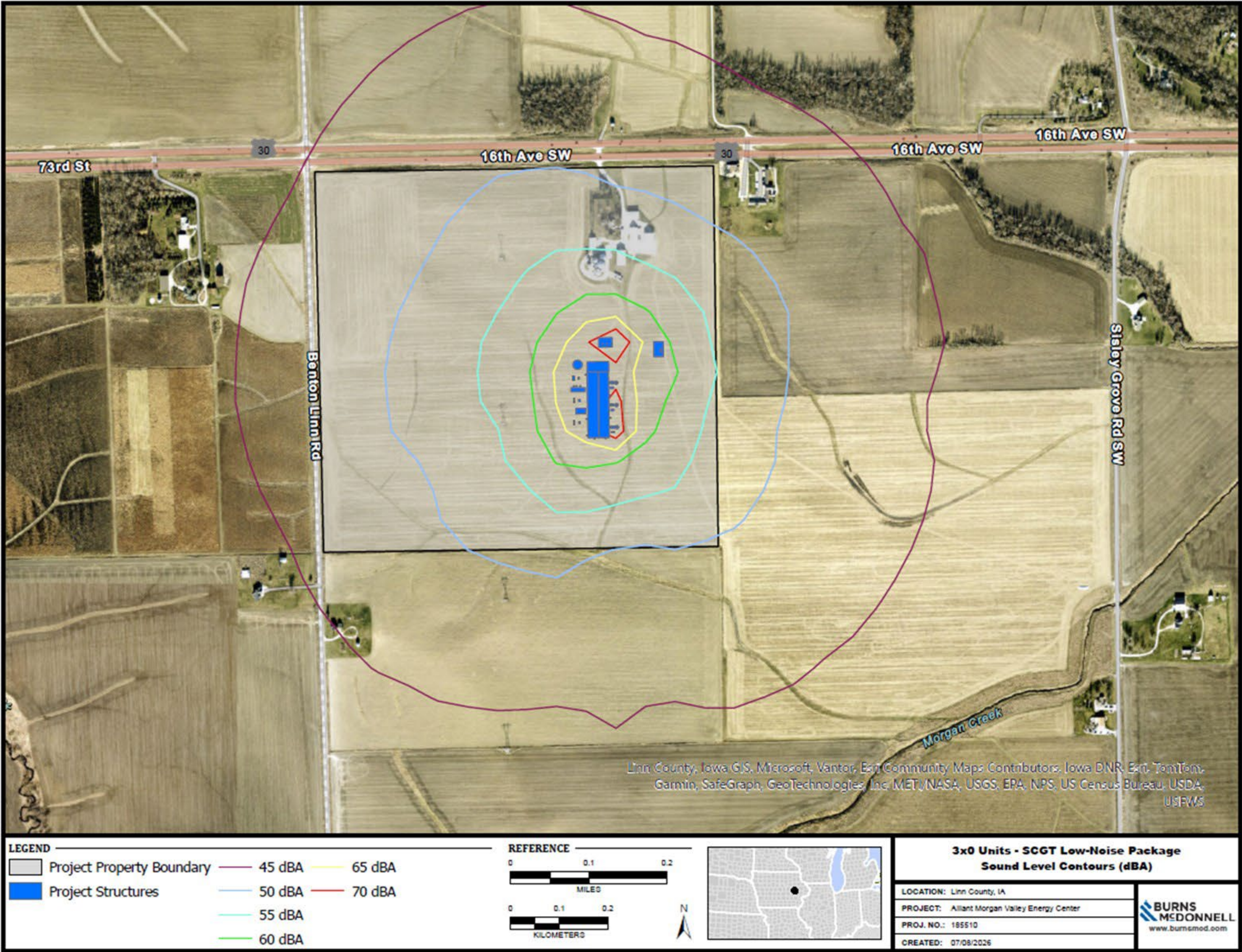
**Subject to change*

Project Components

- Fin fan coolers/radiators
- Maintenance/warehouse building
- Admin/control building
- Exhaust stacks
- Auxiliary/electrical building
- Generation interconnection
- Gas yard



Preliminary Sound Levels



Sound Pressure Level (dBA)	Environment
100	Motorcycle at 25 feet
90	Small propeller aircraft flyover
80	Heavy truck passing at 50 feet
70	Inside a commercial aircraft cabin (smallest circles)
65	Washing machine running
60	Normal Conversation at 3-5 feet
55	Light Rainfall or quiet office
50	Private office
45	Public library (largest circle)
40	Quite rural area with light breeze
30	Quiet Bedroom at night

Morgan Valley Energy Center



Morgan Valley Energy Center



Morgan Valley Energy Center



Air Permit Application

The Morgan Valley Energy Center is designed to meet all applicable public health and environmental requirements established by law — **and our air permit application proves it.**

- ✓ Submitted to Linn County Public Health (LCPH) and the Iowa Department of Natural Resources (IDNR) on July 21, 2026
- ✓ Reviewed by LCPH and IDNR for up to one year, public comment period anticipated in 2027, final permit will be issued by IDNR
- ✓ Evaluated under the same permitting process and federal criteria used to approve dozens of facilities nationwide
- ✓ A proven track record of meeting or exceeding requirements

The air permit application is publicly viewable on the IDNR Easy AIR system



Air Quality Standards

Cleaner air and more renewables – while the local economy keeps growing.

Air quality

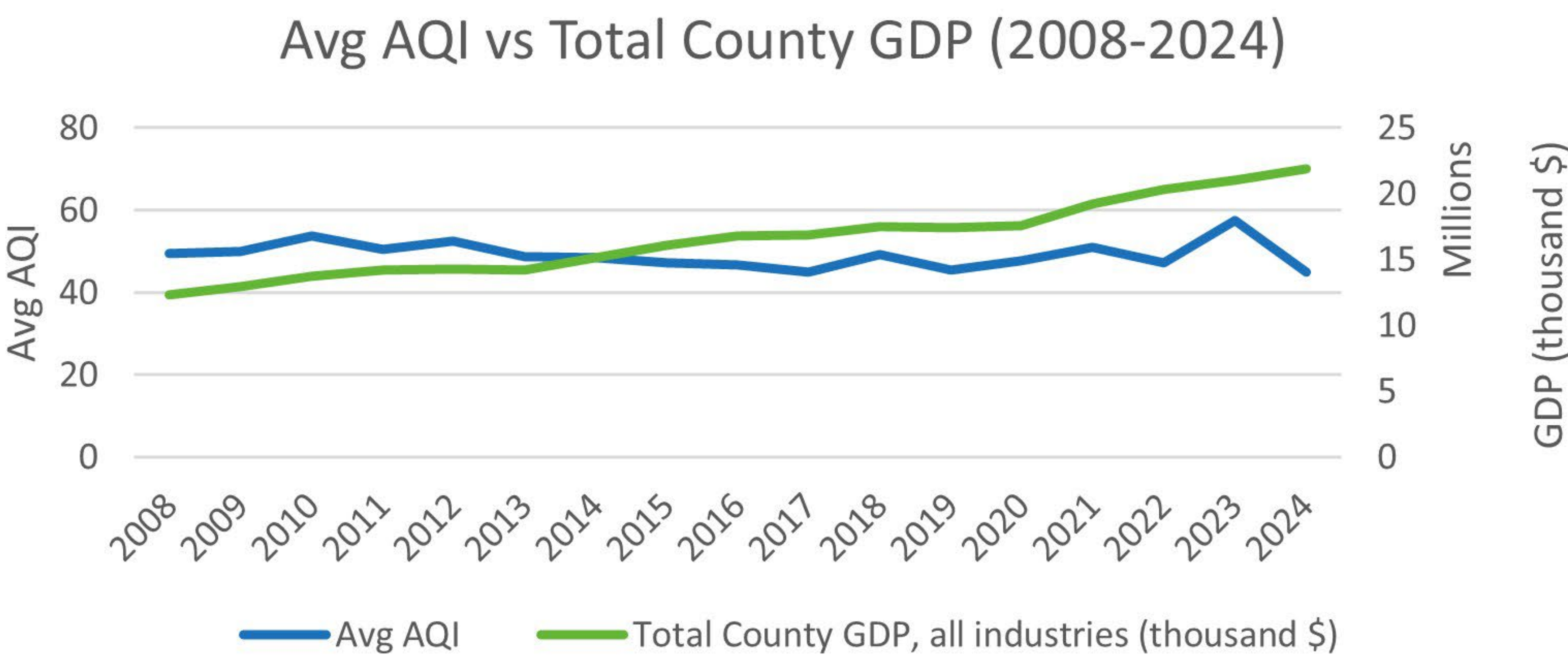
Since 2005, Alliant Energy emissions are down **93%** for SO₂, **84%** for NO_x and **96%** for Hg.

Renewables

Top-five U.S. operator of regulated wind—nearly **1,800 MW** in operation today, with approval to add up to **1,000 MW** in Iowa. Added about **1,500 MW** of solar since 2022.

GHG emissions

Down **35%** from 2005 levels in 2025 (CO₂e, metric tons).



Sources: U.S. Environmental Protection Agency, U.S. Bureau of Economic Analysis

Total GDP has increased 77.3% in Linn County between 2008 and 2024 (\$9.55 billion over 16 years). During that same period, the average AQI has decreased slightly.

The only days between 2008 and 2024 with AQI over 150 (Unhealthy) are attributable to wildfire smoke in 2023.

Best Available Control Technology

What is BACT?

Best Available Control Technology is the emissions-limit standard required for new or modified major facilities, such as power plants. BACT is set case-by-case by the permitting authority. Morgan Valley's BACT analyses follow a standard process and are part of the air permit application.

Step 1 – Identify all available control technologies



Step 2 – Eliminate technically infeasible options



Step 3 – Rank remaining control technologies by effectiveness



Step 4 – Evaluate most effective controls and document results



Step 5 – Select BACT

What about SCR technology?

Selective Catalytic Reduction (SCR) was one of nine NOx-reduction strategies studied for the project.

Why we are not using it: For Morgan Valley, SCR was evaluated and found infeasible on technical, energy, environmental and economic grounds. The BACT analysis showed that:

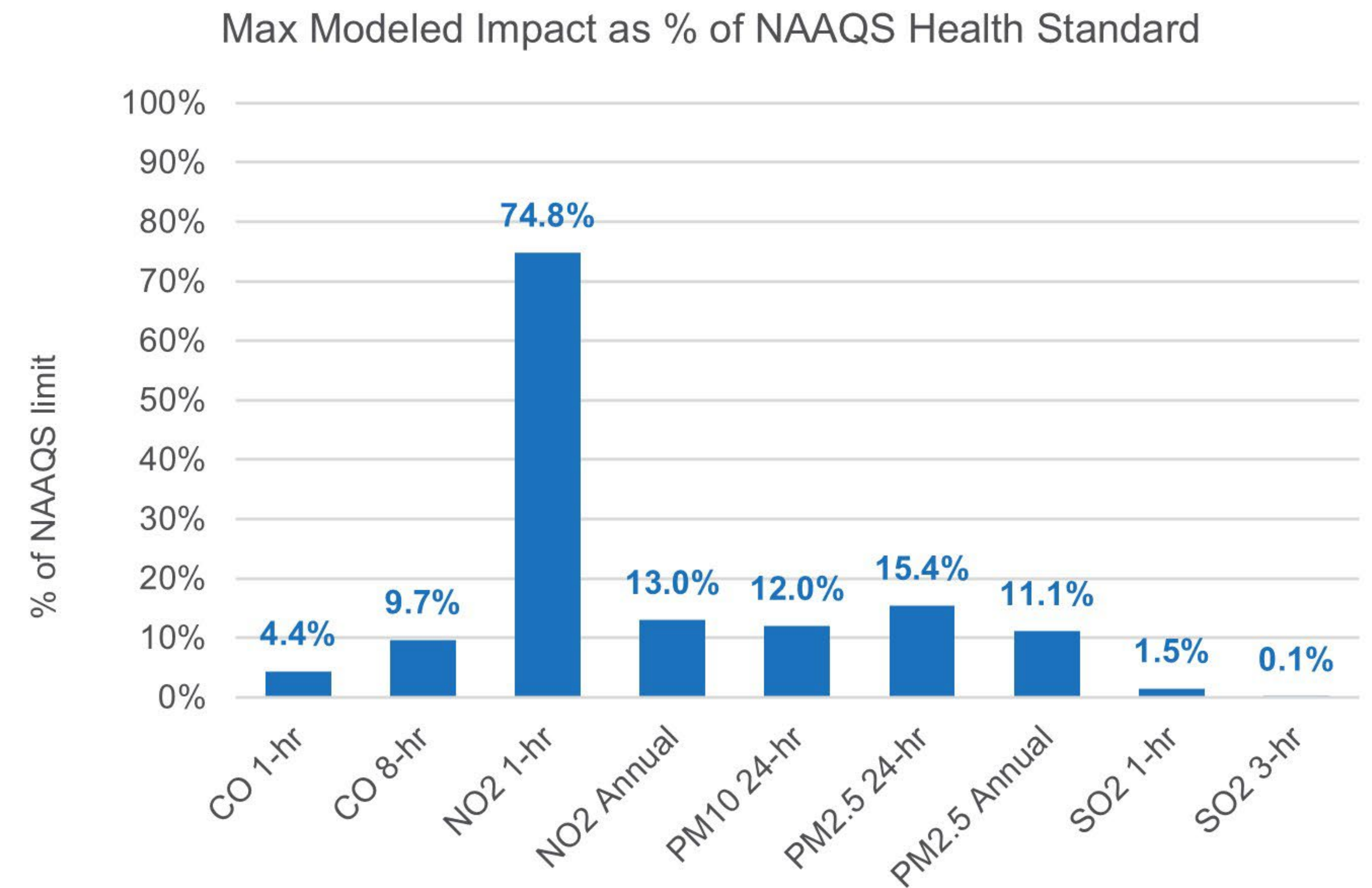
- Low NOx Burners can achieve a 5 ppm NOx emission rate without SCR. This is 45% lower than the EPA standard for CTs.
- SCR would increase PM and ammonia emissions, reduce total energy output, require ammonia storage, and increase noise from the dilution fans needed to reduce exhaust temperature.

Modeling Impact vs. NAAQS Standards

Maximum modeled impacts are compared to EPA health standards (NAAQS).

Maximum modeled impact vs. National Ambient Air Quality Standards (NAAQS)

Pollutant	Averaging Period	Maximum Impact as a Percent of the NAAQS
CO	1 hour	4.4%
	8 hours	9.7%
NO ₂	1 hour	74.8%
	Annual	13.0%
PM ₁₀	24 hours	12.0%
PM _{2.5}	24 hours	15.4%
	Annual	11.1%
SO ₂	1 hour	1.5%
	3 hours	0.10%



Air modeling factors

The modeling analyses consider a variety of factors.

 **Terrain elevations.** Actual terrain elevations as well as flat terrain were modeled.

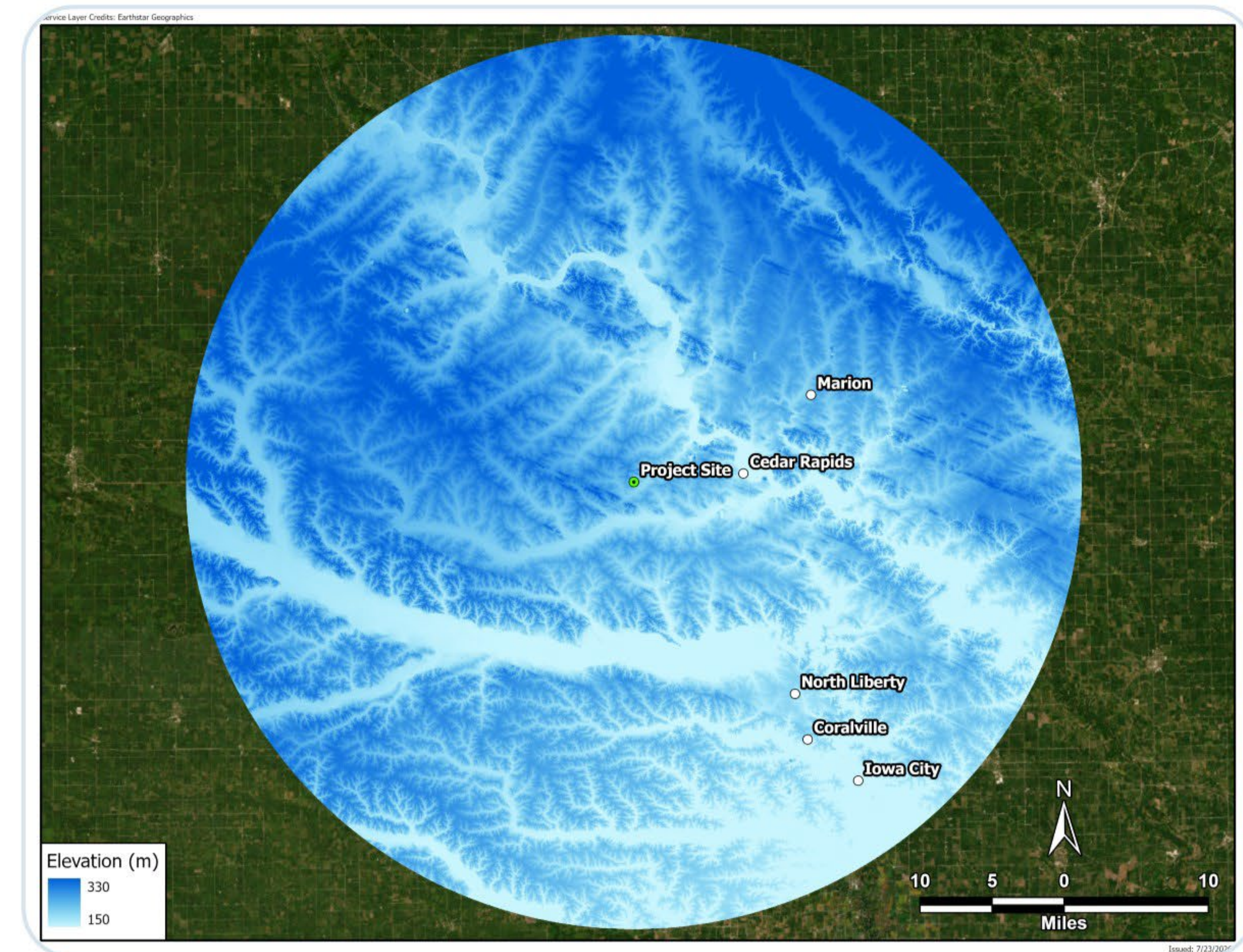
 **Meteorological conditions.** Hourly data from 2020 through 2024.

 **Operating conditions.** The full range of operating conditions was modeled.

 **Nearby and background sources.** Results incorporate nearby sources and a background value that includes mobile sources and other sources not specifically modeled.

 **EPA health standards.** Results are compared to the health standards set by EPA.

Terrain in the model



Our Commitment: Growth

When growth is structured correctly, it can help keep rates stable for everyone.

You will not pay for large-load user growth. Large-energy users pay for the grid investments needed to serve them, not existing customers.

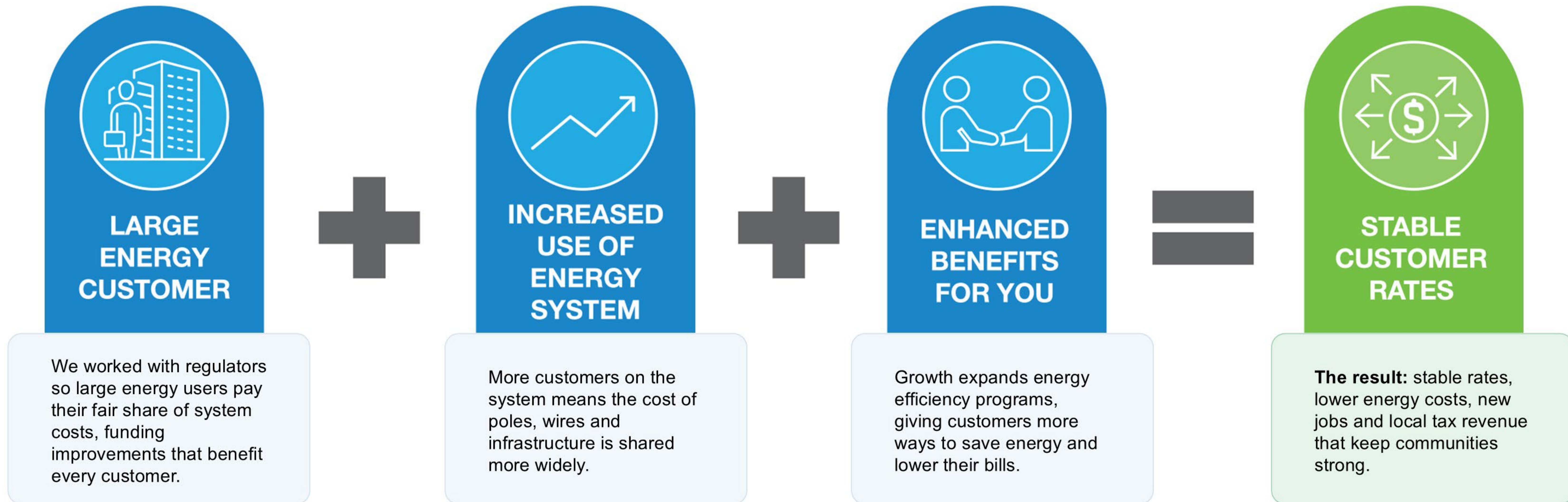
Your reliability comes first. We complete necessary upgrades before adding new energy loads, so your service stays dependable.

Independent oversight protects you. Regulators review and approve all investments and rates, with ongoing reporting to ensure accountability.

Growth without burden. New growth adds jobs and strengthens the tax base while we maintain cost-effective, reliable service for all.

Our Commitment: Fairness

Protecting your rates while powering progress



Our Commitment to You

Alliant Energy has committed to keeping electric base rates stable through the end of the decade.

When growth is structured correctly, it can keep costs stable for everyone.

PHONE
1-800-ALLIANT

WEBSITE
alliantenergy.com/morganvalley

IUC DOCKET
GCU-2026-0002

