

2024
Integrated Resource Plan



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1 Executive summary

1.1 Overview

Our Integrated Resource Plan (“Plan”) is the blueprint for how Spire Missouri Inc.’s (“Spire”) energy will support our customers and communities in Missouri over the next 20 years. We’re focused on serving our customers and communities, and safely delivering reliable and affordable energy. Through careful analysis, we’ve focused on a plan that gets the job done for our customers today and tomorrow. Our Plan delivers on our commitment and the expectations of our customers and communities.

1.2 Meeting our customers’ needs

The primary goal of the Plan is to ensure that our customers’ energy needs are met. At Spire, we’ve developed a forecast of customer demand over the next 20 years. This forecast, coupled with our peak-hour and peak day planning regression, will reduce the risk of shortages and enable us to provide a stable and reliable supply of natural gas to our customers, in the most cost-effective way.

Beyond customer demand, we also recognize that customers want more control and choice within their energy decisions and are working to enhance our energy efficiency programs and our services to customers. Some of these services may link to the introduction of Advanced Metering Infrastructure (AMI) technology in our service regions. Once the AMI network has been fully implemented and tested, this technology will support new web-enabled capabilities, giving customers more detail about their energy usage and service options. While this technology is still being deployed, at Spire we’re striving to enable customers to have a larger role in their energy decisions and help them increase their efficiency and conservation.

This investment in AMI will lead to several benefits such as:

- Offering a more personalized experience to our residential and commercial customers.
- Decrease or eliminate the amount of gas lost from theft and unaccounted for loss.
- Enhanced safety through remote leak detection and meter shut-off.
- Reduced bill estimation by close to 90% from more accurate and timely meter readings.
- Reduced truck rolls and investigations due to on demand reads, improved data insights, and fewer usage issues.

Additionally, we have a very robust pipeline infrastructure upgrade program which allows us to upgrade our aging infrastructure in order to safely and reliably deliver service to our customers.

1.3 Environmental commitment

In 2020, Spire committed to be carbon neutral by midcentury subject to certain assumptions. To achieve this, Spire aims to reduce scope 1 and scope 2 emissions from its operations through system upgrades, fleet and facilities improvements, as well as additional

emissions strategies. In 2021, Spire appointed a Head of Environmental Commitment to examine our sources of emissions and to develop a proposal for reducing them. After establishing a baseline of emissions for Spire, in 2022 Spire also undertook an examination of the inclusion of renewable natural gas in its supply mix. In 2023, Spire named a Vice President of Sustainability to establish plans for emissions reductions and renewables access for consideration by its various businesses.

A copy of our detailed and most recent sustainability report can be found on our website at www.spireenergy.com/sustainability.

1.4 A strategy for the future

Throughout this Plan, we provide a view of the future that will enable us to make informed decisions. We've evaluated a range of options and believe that this strategy puts Spire in the best position to succeed in safely providing service for our customers that is affordable and reliable, while achieving environmental performance standards that exceed the objectives of the states and communities we serve.

2 Background and perspective

2.1 Missouri overview

The 2024 Missouri Economic and Workforce Report¹, prepared by the Missouri Department of Higher Education and Workforce Development, provides a broad overview of Missouri's economy, tracking a selection of meaningful indicators intended to provide a snapshot of the state's current economic climate. The key facts from the report are outlined here. Overall, the state is in a good spot from an economic perspective and positioned well for economic growth in the future.

- Missouri's GDP totaled \$344.12 billion in 2023 in 2017 inflation-adjusted dollars, a 2.2 percent increase from 2022 to 2023.
- Per capita income in Missouri was \$61,302 in 2023, a 6.0 percent increase from 2022. In 2023, Missouri's total personal income was \$379.84 billion, a 6.3 percent increase over 2022.
- Missouri grew at an annualized rate of 1.3 percent to equal \$42.09 billion in growth over the past 10 years, or a 13.9 percent GDP increase overall.
- In 2023, Service-providing industries contributed 73 percent, Goods-Producing industries contributed 17 percent, and the Government sector contributed 10 percent to the Missouri GDP.
- In the past year, most industry sectors experienced a positive growth except Agriculture, forestry, fishing and hunting and Wholesale trade.
- The Mining, quarrying, and oil and gas extraction industry had the largest yearly growth at 18.1 percent. The largest negative yearly growth was in Agriculture, forestry, fishing and hunting at -5.8 percent.
- Information at 10.1 percent; Retail trade at 9.8 percent; Utilities at 7.2 percent; and Arts, entertainment, recreation, accommodation, and food services at 6.6 percent had the largest positive growth in the past year.
- Missouri's seasonally adjusted unemployment rate in May 2024 was 3.5 percent, an increase from May 2023 (2.9%).
- The annual average not seasonally adjusted unemployment rate for both the nation and Missouri has been declining since 2013, increasing significantly in 2020, and continuing the downwards trend since then, indicating recovery from the pandemic and ongoing economic strength.
- In May 2024, 61.2 percent or 3,011,658 of Missouri's civilian non-institutionalized population, were employed and only 3.5 percent of labor force, or 109,380, were unemployed.

¹ A copy of the full report can be found on the Missouri Economic and Information Center website at <https://meric.mo.gov/economic-research/mo-regional-economic-reports>

- Missouri’s nonfarm seasonally adjusted payroll employment topped just over three million in May 2024, representing an increase of 2.8 percent, or 82,000 jobs, compared to May 2023.
- From 2022 to 2023, all regions grew in employment with the Ozark Region leading at 2.1 percent growth and the Southeast Region experiencing the lowest growth rate at 1.0 percent. Statewide, the employment growth was 2.2 percent from 2019 to 2023 and 1.9 percent from 2022 to 2023.
- The statewide average wage in 2023 was \$61,117. The St. Louis and Kansas City regions had wages higher than the state average, at \$70,041 and \$65,462, respectively.
- The St. Louis Region is the largest, in terms of employment, with over one million employees in 2023. The Kansas City and Central regions had the next highest employment with over 558,500 and over 289,500 employees, respectively.

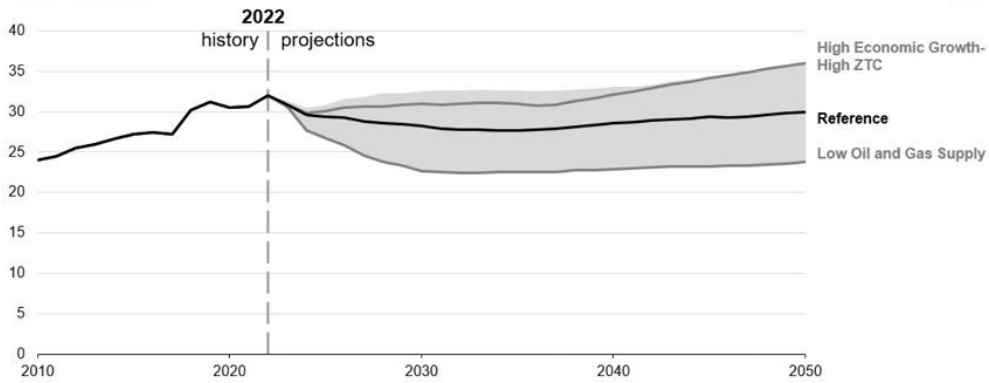
2.2 Natural gas markets

With its central location, Missouri can access several interstate natural gas pipelines. Historically, this connectivity has allowed Spire to access the Midcontinent and Gulf supply basins for the Missouri East market, and the Rockies and Midcontinent basins for the Missouri West market. With the addition of the Spire STL Pipeline, Missouri East now has greater access to the Rockies basins and the prolific Marcellus and Utica basins in Appalachia. Given the diversity of supply, we expect both favorable pricing and a higher degree of resiliency, relative to other regions in the continental U.S for many years to come.

On a more national scale, in the U.S. Energy Information Administration’s (EIA) 2023 Annual Energy Outlook Reference Case, natural gas consumption (first chart below) is expected to dip slightly in the near-term, but then trend slightly up, and is mostly flat over the forecast period. This is coupled with increasing production (second chart below) over the forecast period, which is largely driven by LNG exports, as shown in the third chart below. This forecast from the EIA reflects an uptick in price (third chart below) in the near-term, followed by a recovery.

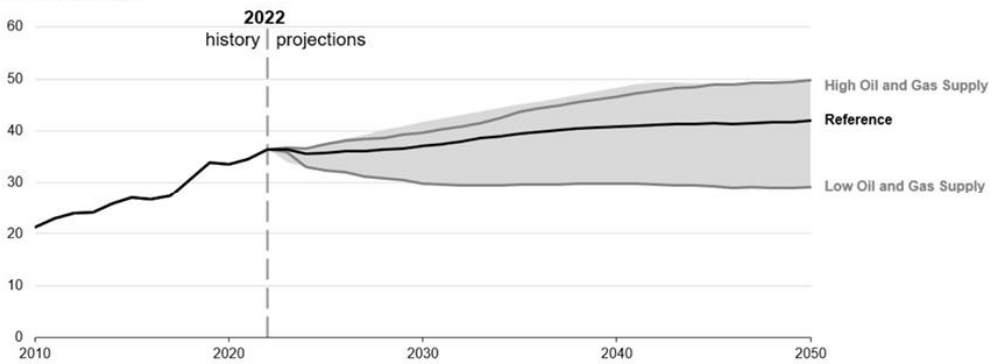
Ultimately, these are simply forecasts and are based on the most recent data available from the EIA at the time of publishing this Plan. There are many variables that can impact all of these forecasts, and we continuously monitor these variables to ensure we’re able to reliably and affordably serve our customers.

Natural gas consumption
trillion cubic feet



Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2023* (AEO2023)
Note: Shaded regions represent maximum and minimum values for each projection year across the AEO2023 Reference case and side cases. ZTC=Zero-Carbon Technology Cost.

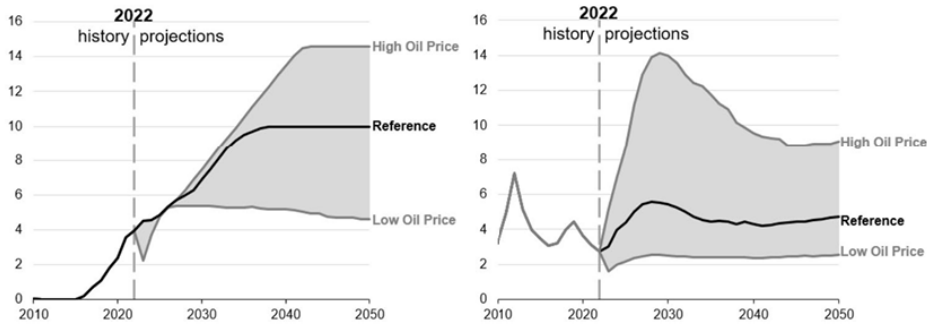
Dry natural gas production
trillion cubic feet



Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2023* (AEO2023)
Note: Shaded regions represent maximum and minimum values for each projection year across the AEO2023 Reference case and side cases.

Liquefied natural gas exports
trillion cubic feet

Ratio of Brent crude oil price to natural gas price at Henry Hub
Brent price/Henry Hub price (energy-equivalent terms)



Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2023* (AEO2023)
Note: Shaded regions represent maximum and minimum values for each projection year across the AEO2023 Reference case and side cases.

2.3 Benefits of natural gas

Spire has been safely delivering natural gas to Missouri customers for more than 160 years, and we continue to add to our more than 1 million customers who are seeking the affordability and reliability that natural gas has to offer.

Natural gas use is more affordable than comparable electric usage for comparable residential activities.² Households that use natural gas for heating, cooking, and clothes drying can save more than \$1,100 per year compared to homes using electricity for those same applications.³ Some of these savings are attributable to the fact that natural gas delivery systems are significantly more efficient for the direct use of natural gas versus having to convert natural gas to electricity for usage; the natural gas delivery system is 92% efficient from production to end use compared to 38% efficiency due to converting the energy source into electricity.⁴ The United States has been the leading producer of natural gas for well over the past decade and produced nearly a quarter of the world's natural gas in 2022.⁵ Natural gas commodity prices have remained relatively low over this timeframe because of the abundance of supply available within our country which has benefited natural gas customers. Natural gas prices are projected to be 30-50% less than the price of other fuels for the same amount of energy delivered through 2050 and is expected to be 3.3 times more affordable than electricity during that same timeframe.⁶ Electrification and decarbonization efforts around the country are applying pressure to increase electric energy costs. This has not gone unnoticed by customers and there has begun to be pushback and reliability concerns surrounding some of these initiatives.

Customers value natural gas because it is an extremely reliable energy source that comes through when it is needed most. Only 1 in 650 customers are expected to experience a planned or unplanned outage in any given year in contrast to electric distribution systems which have an average of one outage per year per customer.⁷ There are also increasing pressures on electric grid reliability. Many states and utilities are retiring conventional power plants and replacing them with renewable generation sources such as solar and wind. While these sources are moving to decarbonize the electric generation, it is also replacing dispatchable resources with weather dependent resources. Midcontinent Independent System Operator (MISO) states that the transition “underway to get to a decarbonized end state is posing material, adverse challenges to electric reliability.”⁸ There are technologies in the works that could potentially mitigate those challenges, but they are not yet viable at grid scale. The challenge associated with developing technologies and the timing of those technologies is coming into play while there's expected to be load additions and incremental load growth in many regions.⁹ Much of this load growth is anticipated to come from power generation, LNG and data centers. The Electric Power Research Institute (EPRI) estimates that data centers could grow to consume up to 9% of U.S. electricity

² The US Department of Energy representative average unit costs of residential energy sources for 2023 shows natural gas being over three times cheaper than electricity on a common per unit basis. Natural gas = \$13.97 per MMBtu and Electricity = \$46.19 per MMBtu.

[Federal Register :: Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy](#)

³ 2024 AGA Playbook

⁴ 2024 AGA Playbook

⁵ [U.S. Natural Gas Production Sets New Record High \(forbes.com\)](#)

⁶ 2024 AGA Playbook

⁷ 2024 AGA Playbook

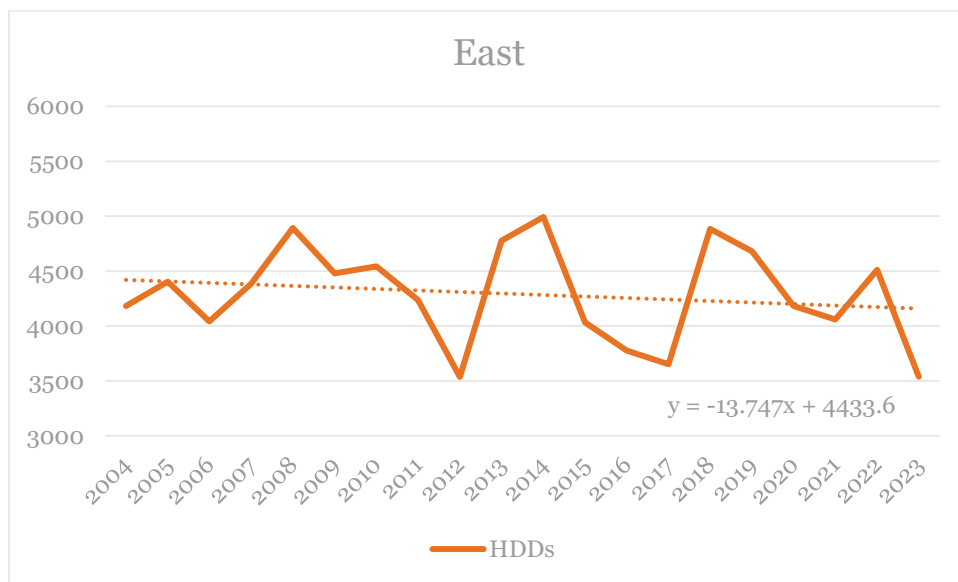
⁸ MISO's Response to the Reliability Imperative. February 2024. [Reliability Imperative \(misoenergy.org\)](#)

⁹ MISO's Response to the Reliability Imperative. February 2024. [Reliability Imperative \(misoenergy.org\)](#)

generation annually by 2030, up from 4% of total load in 2023.¹⁰ This is significant growth that is difficult to meet given the lead time associated with bringing on new generation resources. Natural gas plays an important role in maintaining the reliability of the grid. Given the effort to decarbonize electricity production, energy experts note it’s likely that it will make “gas more important, not less, especially when demand spikes and conditions worsen for the availability of weather-dependent wind and solar.”¹¹

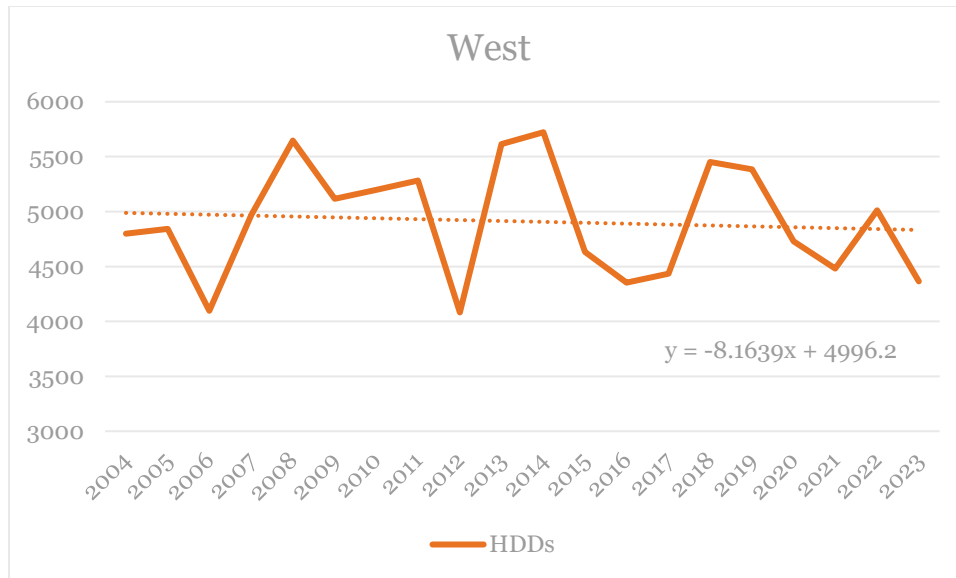
2.4 Changing weather

Just like the rest of the world, Spire is seeing the effects of a warming climate. This trend can be shown by simply plotting the annual Heating Degree Days (HDDs) over the last 20 years, ending in calendar 2023, with a trendline. As shown in the charts below, the slope of the trendline is negative in both regions (East and West). While this warming trend is important to note, ultimately as a natural gas utility provider, we must be prepared to meet peak hourly demand, and temperature extremes and winter storms are still prevalent and occurring.



¹⁰ EPRI, Powering Intelligence: Analyzing Artificial Intelligence and Data Center Energy Consumption, 2024.

¹¹ Why U.S. Electricity Is Becoming Even More Natural Gas Dominant (forbes.com)



2.5 Federal, state and local policy

2.5.1 Federal policy

The Federal Energy Regulatory Commission (FERC) regulates, among other things, the interstate natural gas pipeline system used to deliver natural gas to local distribution companies in the U.S., including those upstream pipelines that deliver supplies to the Company. FERC consists of five members appointed by the President of the United States and confirmed by the Senate. By statute, not more than three members of FERC may come from the same political party. All have an equal vote, and the President selects the Chairman. FERC requires at least three members to operate as a quorum. Commissioners serve five-year terms.

2.5.2 State and local policy

Missouri policy continues to focus on safe, affordable, reliable and sustainable natural gas service to its communities. Missouri values individual choice in energy selection, and the state enacted legislation that preserves the individual’s ability to choose natural gas as an energy source. Spire continues to stay engaged with the Missouri Division of Energy which encourages Missourians to advance the efficient use of diverse energy resources to drive economic growth, provide for a healthier environment and achieve greater energy security for future generations.

Like Spire, both St. Louis and Kansas City have issued or are pursuing bold carbon neutrality objectives. As part of its climate action plan, St. Louis has already pledged to reduce greenhouse gas (GHG) emissions 80% by 2050. The St. Louis plan also includes advancing renewable energy, energy efficiency, and emerging technologies like combined heat and power. Kansas City has developed a Climate Action & Resiliency Plan with a goal of being carbon neutral by 2040. Spire is working with Kansas City to develop a Renewable Natural Gas facility at the Blue River Wastewater treatment plant which is scheduled to be completed in 2026. We expect other municipalities to pursue local climate policies over the near and mid-term.

2.6 Serving our customers

At Spire, we continue to invest in technology to improve customer service and provide the ability for customers to manage their energy use more proactively. We're currently deploying AMI, which will provide improvements to our ability to serve customers as described previously.

New consumer technologies and applications for natural gas continue to advance. Gas fired heat pumps show promise, both as standalone water heating applications or combination systems that provide both space heating and hot water. This technology and how Spire is intending to promote it is discussed further in this Plan. There are also ongoing investigations into hybrid gas/electric space conditioning which would combine gas furnaces with electric heat pumps.¹² Finally, consumers continue to adopt high efficiency natural gas furnaces.

In January 2020, we conducted a study with residential natural gas customers across Missouri. Results show that more than a third of customers have high interest in renewable natural gas and other carbon neutral programs. In addition, over half are willing to pay more on their monthly natural gas bill to support renewable natural gas and carbon neutral programs.

Spire listened to its customers and in response has been advancing renewable natural gas and other carbon neutral initiatives to meet our customers' expectations. In November of 2023, Spire filed the Carbon Offset Initiative with the Missouri Public Service Commission. This program seeks to provide Spire's natural gas customers an affordable, flexible way to offset the emissions of their natural gas usage through the use of renewable thermal certificates and verified carbon offsets retired on participating customers' behalf. The Carbon Offset Initiative was approved by the Commission in July 2024 and is expected to be open to customer participation in early 2025.

¹² Source: Gas Technology Institute

3 Energy efficiency and conservation

3.1 Overview

This section addresses Spire’s portfolio of energy efficiency programs and demand side resources available to help customers conserve energy. Customer demand reductions may come from independent actions, as customers weatherize and insulate their homes or otherwise reduce their energy consumption. Reduced customer demand may also be influenced by demand side mechanisms like our current energy efficiency programs. This section will introduce all the initiatives offered throughout different service territories of Spire. Our energy efficiency programs are measured utilizing the Total Resource Cost (TRC) test. The TRC test evaluates the benefits of cost avoidance. These avoided costs encompass expenses related to the gas procurement, the distribution system, and the reduced need for available supply capacity, including reduced peak day demand.

Spire consists of two main service areas: Missouri East, which encompasses St. Louis and the surrounding area, and Missouri West, which covers Kansas City and the surrounding area. The combined statewide residential programs for space heating and water heating have achieved an estimated natural gas savings of 535,538 MCF for program years 2021, 2022, 2023, and 2024. Over the same program years statewide incentives programs for commercial and industrial users have collectively achieved an estimated natural gas savings of 463,537 MCF. Using the EPA Calculator, Spire’s statewide efforts have offset 55,000 Metric Tons of Carbon Dioxide (CO₂) which is roughly equivalent to over 60,500,000 pounds of coal.

3.2 Current energy efficiency programs

We offer Missouri customers several programs to maximize energy efficiency. Residential, commercial and industrial (C&I) customers can take advantage of programs tailored to fit their needs. Spire invests between \$10 and \$13 million each year as agreed to in the most recent rate case to help customers improve their energy efficiency. This does not include additional funding amounts for the Weatherization and PAYS programs which combined could double the above annual amounts.

Several of our energy efficiency initiatives are co-delivered with other utilities, including Ameren, Evergy, and Independence Power & Light. We work with EarthWays Center to do a virtual workshop which introduces educators to the benefits and basics of energy efficiency and sources of energy. These co-delivered projects demonstrate our commitment to increasing energy efficiency and ensuring that programs reach as many customers as possible.

Our energy efficiency programs also support community investment and economic development. Our team routinely engages in conversations with local municipalities, developers, and state agencies on projects.

3.2.1 Standard residential rebate program

The Company’s residential high efficiency rebate program provides rebates to residential owners and customers for the installation of high efficiency heating systems, water heating

systems, and thermostats. Owners of, or customers living in, an individually metered dwelling unit, are eligible to participate in this program. They can apply for rebates through the Company or through participating heating, ventilating and air conditioning (HVAC) and plumbing contractors. Owners of multiple individually metered dwelling units are allowed to receive rebates for all qualifying natural gas energy efficient equipment without limitation, subject to program funding availability.

The Company performs outreach and marketing work in-house with a team of energy efficiency staff working throughout the Spire footprint. Applied Energy Group (AEG) provides technical assistance along with program modeling. The rebate processing work is handled by Uplight through subcontractor Blackhawk Network.

3.2.2 Commercial and industrial program

3.2.2.1 Standard rebates

The C&I Rebate program was created to offer C&I customers incentives through prescriptive (standard) rebates, as set forth below, and custom rebates. These incentives support the implementation of natural gas energy efficiency measures, including part or all of the cost of an energy audit that identifies a measure eligible for a rebate under this program.

Customers implementing certain measures as described below will receive prescriptive rebates. All other rebates under this program will receive financial incentives which are customized or individually determined using the TRC test latest edition of the California Standard Practice Manual for Economic Analysis of Demand-Side Programs and Projects.

Non-Profit Customers, defined as a government agency, public school district, or a customer that demonstrates that it qualifies as a 501(c)(3) charity or as a benevolent corporation as defined by RSMo 352.010, may qualify for specific rebates in the program.

3.2.2.2 Custom rebates

The C&I Rebate program will provide custom rebates to C&I customers for the installation of any natural gas related energy efficiency improvement that does not qualify for a prescriptive rebate. All custom rebates will be individually determined and analyzed to ensure that they pass the TRC test. Any measure that is pre-qualified (evaluated prior to being installed), must produce a TRC test result of 1.0 or higher.

C&I rebates are calculated as the lesser of the following:

- No rebate for measures with less than a two-year payback
- A buy-down to a two-year payback
- \$6.63 per MCF saved during the first year

3.2.2.3 C&I audit

The energy audit rebate will only be provided to a customer that qualifies for a prescriptive and/or custom rebate under this program. The audit rebate offer will be structured as follows:

- Non-profit customers will be eligible for a rebate of 75% of the audit cost, \$600 per building under 25,000 sq. ft., or \$750 for buildings 25,000 sq. ft. and over, whichever is lower.
- All other C&I customers will be eligible for a rebate of 50% of the audit cost, \$375 per building under 25,000 sq. ft., or \$500 for buildings 25,000 sq. ft. and over, whichever is lower.
- For customers with more than one building per account, there is a limit of three audit rebates per customer per program year. Energy for each audited building must be estimated based on total utility metered use, if sub-metered data is not available.
- No customer building shall qualify for a second audit rebate under this program.
- Audits must be performed by qualified professionals (Registered Professional Engineer, Registered Architect, Certified Energy Manager, or equivalent training, experience, and continuing education). Audit procedures and reports must reach the level of effort of a Level I - Walk-Through Analysis as described in the most recent edition of Procedures for Commercial Building Energy Audits published by the American Society of Heating, Refrigerating, and Air Conditioning Engineers.
- To be eligible for a rebate, the audit report must identify at least one energy efficiency measure which qualifies for a rebate under this program, the energy efficiency measure must be implemented, and the application for the audit rebate must be included with the application for the qualifying energy efficiency measure.

3.2.2.4 C&I rebate limit

During a program year, a C&I customer's total rebate is limited to \$100,000 or the remaining uncommitted budget for the current program year, whichever is lower. Remaining uncommitted program budgets may be reallocated to other programs if not part of unexpired rebate pre-approvals committed for proposed customer projects. All measures that receive pre-approval must be implemented/installed within six (6) months of the date of pre-approval, and all invoice(s), and other required project documentation must be submitted within eight (8) months of the date of preapproval.

3.2.3 Income-eligible residential programs

3.2.3.1 Weatherization program

The weatherization program is designed to provide energy education and weatherization assistance to limited-income residential customers. The program assists customers in reducing their energy consumption and thus reducing their natural gas utility bill. The Company provides \$950,000 annually in assistance for the benefit of eligible low-income customers who use natural gas for space heating in the Company's east service territory and \$750,000 annually in assistance for the benefit of eligible low-income customers who use natural gas for space heating in the Company's west service territory.

Each year the Company shall make the appropriate funds available to either the state agency responsible for distributing low-income weatherization funds for redistribution to local community agencies that perform such work in the Company's service territory or to such local

community agencies directly. Such agencies shall in turn provide the funds to weatherize the homes of eligible low-income customers of the Company who use natural gas for space heating.

Company funds provided to community action agencies under this program are not subject to the weatherization guidelines of the United States Department of Energy and may be utilized by agencies towards the weatherization of properties that present hazardous or health concerns and regardless of the date last weatherized if they satisfy Company-established guidelines.

3.2.3.2 Independence Power & Light (IPL) weatherization program

The IPL Pilot weatherization program is an experimental co-delivery program between IPL and Spire Missouri West administered by Truman Heritage Habitat for Humanity that is designed to provide weatherization improvement measures to create long-term (natural gas) bill reduction savings to low-income single family Spire West natural gas customers within the Independence, Missouri service territory.

3.2.3.3 Income eligible multi-family program (co-delivered with Ameren Missouri)

The purpose of the Program is to deliver long-term natural gas savings and bill reductions to low-income customers who occupy multi-family dwelling units within the Spire Missouri East service territory. Results are achieved through direct-install water consumption reduction and heat retention measures at no cost to participating customers. The program also provides residents of the dwelling units with education on the use of the natural gas conservation measures.

This program is available to income qualified multi-family properties that contain natural gas space-heating and/or water-heating equipment and receive gas service from Spire Missouri East and electric service from Ameren Missouri. Multi-family dwelling units are defined as structures of three (3) or more attached unit complexes. For the purposes of this program the term income-qualified refers to:

- Participation in federal, state, or local subsidized housing program.
- Proof of resident income levels at or below 80% of the area median income or 200% of federal poverty level.
- Fall within a census tract included on Ameren Missouri's list of eligible low-income census tracts.

3.2.3.4 Income eligible multi-family program (co-delivered with Evergy)

The purpose of the income eligible multi-family direct install program is to deliver long-term energy savings and bill reductions to income-eligible customers in multi-family dwelling units and shared common areas within the Spire Missouri West service area. Multi-family dwelling units are defined as structures of three (3) or more attached unit complexes.

This program is available to income-qualified multi-family properties that contain natural gas space-heating and/or water-heating equipment and receive gas service from Spire Missouri West, meeting one of the following building eligibility requirements:

- Participation in an affordable housing program: documented participation in a federal, state or local affordable housing program, including LIHTC, HUD, USDA, State HFA and local tax abatement for low-income properties.
- Located in a low-income census tract: location in a census tract identified as low-income, using HUDs annually published Qualified Census Tracts as a starting point.
- Rent roll documentation: where at least 50% of the units have rents affordable to households at or below 80% of the area median income, as published annually by HUD.
- Tenant income information: documented tenant income information demonstrating at least 50% of units are rented to households meeting one of these criteria: at or below 200% of the federal poverty level or at or below 80% of the area median income.
- Participation in the weatherization assistance program: documented information demonstrating the property is on the waiting list for, currently participating in, or has in the last 5 years participated in the weatherization assistance program.

3.2.3.5 Non-co-delivery income eligible multi-family program

The purpose of this program is to deliver long-term natural gas savings and bill reductions to low-income customers who occupy multi-family dwelling units within the Spire Missouri East or Spire Missouri West service territories where current co-delivery programs with Ameren Missouri, or Everygy are not available. This is achieved through direct-install water consumption reduction and heat retention measures at no cost to participating customers. Additional in-unit or common area measures may also be applied individually or in combination and may be eligible for incentives. This program also provides residents of the dwelling units with education on the use of the natural gas conservation measures.

This program is available to income-qualified multi-family properties that contain natural gas space-heating and/or water-heating equipment and receive gas service from Spire Missouri East or Spire Missouri West. Multi-family dwelling units are defined as structures of three (3) or more attached unit complexes. For the purposes of this program the term “income qualified” refers to:

- Participation in federal, state, or local subsidized housing program
- Proof of resident income levels at or below 80% of the area median income or 200% of federal poverty level
- Fall within a census tract included on Company’s list of eligible low-income census tracts. Where a multi-family property does not meet one of the eligibility criteria listed above and has a combination of qualifying tenants and non-qualifying tenants, at least 50% of the tenants must be eligible for the entire property to qualify.

3.2.3.6 Income eligible residential single-family program (co-delivered with Ameren Missouri)

The purpose of this program is to deliver long-term natural gas savings and bill reductions to low-income customers who occupy single-family dwelling units within the Spire Missouri East service territory. This is achieved through a variety of channels to educate

customers about energy use in their homes and offer information, products, and services to residential customers to conserve energy.

This program is available to income-qualifying single-family low-income customers receiving service under Spire's residential rate schedule residing in single-family detached housing, duplexes, and mobile homes. Customers must have service with Spire Missouri East and Ameren Missouri to participate. To qualify for participation, low-income participants must meet one of the following income-eligibility requirements below:

- Participation in federal, state, or local subsidized housing program.
- Proof of resident income levels at or below 80% of area median income or 200% of federal poverty level.
- Fall within a census tract included on Ameren Missouri's list of eligible low-income census tracts.

The direct-install measures for individual dwelling units will include programmable thermostats, learning thermostats, low-flow faucet aerators, low-flow showerheads, insulating water-heater pipe wrap, shower start, air sealing, ceiling insulation, furnace clean & checks. This program also provides incentives to property owners for other eligible natural gas measures such as furnace or boiler upgrades and/or water-heating equipment upgrades for the property. These upgrades could be as high as 100% of the installed cost of the measure.

3.2.4 On-bill finance program offerings

3.2.4.1 EnergyWise dealer program

The EnergyWise dealer program is a program by which the Company will make financing available to credit-qualified, current and future, residential and commercial customers who own a structure to which natural gas is provided by the Company in the customer's name, for the purchase and installation of certain energy efficiency and conservation improvements, including high efficiency natural gas heating equipment and, if desired by the customer, a high efficiency air conditioner or certain other energy-efficient appliances, related equipment and an energy audit. The purpose of the program is to encourage the use of such energy efficient or environmentally friendly appliances or conservation measures. Purchases can be made from, and installation can be performed by any Company-authorized heating and cooling contractor doing business in the Company's service area and participating in the program.

Financing, at terms and interest rates not exceeding interest rates allowed by Missouri law, nor less than interest rates generally prevailing in the applicable retail markets for such equipment and services, is available for the purchase and installation of the following equipment:

- A high efficiency natural gas heating system with an Annual Fuel Utilization Efficiency ("AFUE") of 92% or greater,
- A high efficiency natural gas space heating boiler with an AFUE of 90% or greater.
- An appliance that meets the requirements of (a) or (b) coupled with (i) a gas air conditioner; (ii) a high efficiency electric air conditioner with a Seasonal Energy Efficiency Ratio ("SEER") of 14 or more or (iii) an additional energy efficient natural gas

appliance. If the required SEER level is increased for the Company's service area, then the SEER requirement in this subsection shall be increased 1 point above the new level.

- A high efficiency natural gas water heater with an Energy Factor (EF) of .67 or greater or have a Uniform Energy Factor (UEF) of .64 or greater; or a Thermal Efficiency (TE) of .90 or greater, provided that the EF shall be at least .82 or greater or have a UEF of at least .80 or greater for tankless water heaters
- Natural gas integrated space and water heating tank system with an AFUE of 90% or greater; or an integrated space and water heating tankless system with an EF of .82 or greater or have a UEF of .80 or greater
- An energy audit performed by a certified energy auditor provided if any of (a) – (e) above are purchased and installed.

3.2.4.2 Insulation financing program

The insulation financing program is a program whereby Spire, subject to certain restrictions, will grant loans to eligible residential customers for the purpose of making certain home energy conservation improvements, some of which must entail, where feasible, a specified increase in the customer's ceiling insulation.

The maximum loan per dwelling unit is \$5,000. A customer can obtain a loan for energy conservation improvements, some of which must include attic, floor, wall and duct insulation; duct sealing, attic ventilation; caulking and weather-stripping; storm doors or storm windows and which may include an energy audit performed by a certified energy auditor. Except for the energy audit, when the customer applies for a loan, it shall be conditioned upon the insulation in the attic/ceiling being less than R-38 and part of the loan funds being used to increase the insulation level to at least an R-38 level. A minimum of R-38 ceiling insulation shall be required before other measures will be financed unless it is demonstrated that such R-38 level is not feasible.

In all cases where the total amount of the contract including the financing cost is \$1000 or more, a Uniform Commercial Code Financing Statement (UCC-1) must be prepared and submitted with the appropriate sales contract. The UCC-1 will be filed for a lien on the property until the loan is repaid in full.

3.2.4.3 Spire Pay As You Save PAYS®

The objective of the Spire PAYS® on-bill financing program is to expand opportunities for customer adoption of cost-effective energy efficiency measures through on-bill financing. PAYS® is a way for customers to make much-needed energy-efficiency upgrades to their home with on-bill financing without a credit check. Unlike traditional equipment financing, PAYS® allows a customer to pay for their upgrades as they save energy. That means Spire will make some or all of the initial investment in qualified upgrades and, over time, the customer will repay Spire for the costs of the upgrades through a fixed monthly PAYS® charge added to their Spire bill. Since the new energy-efficient upgrades save the customer money by using less energy, their annual bill should be lower than before. And there's no loan, no credit checks, no debt and no property lien.

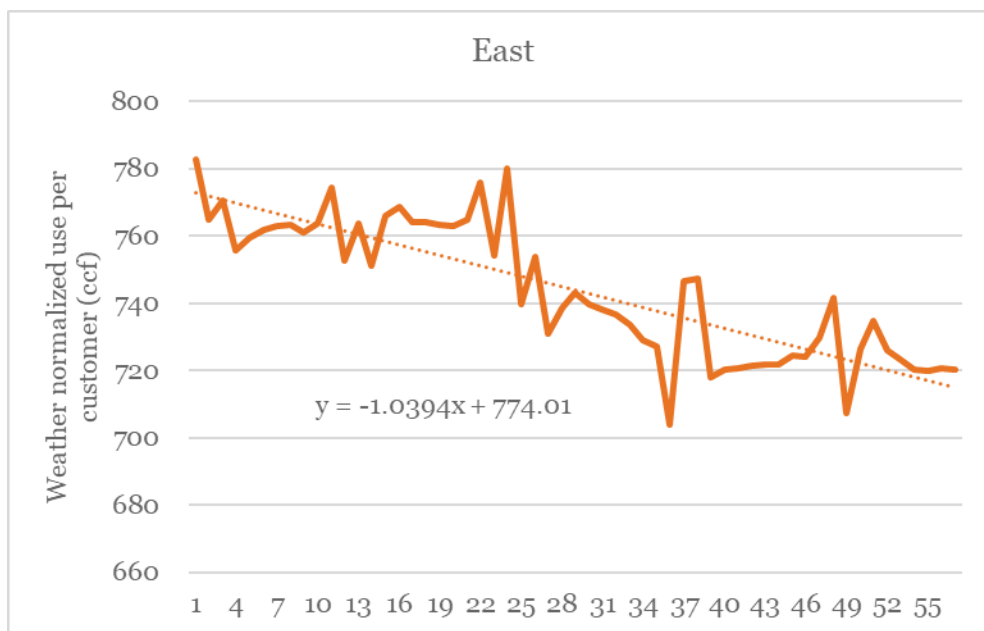
3.2.5 Energy audit tool offering

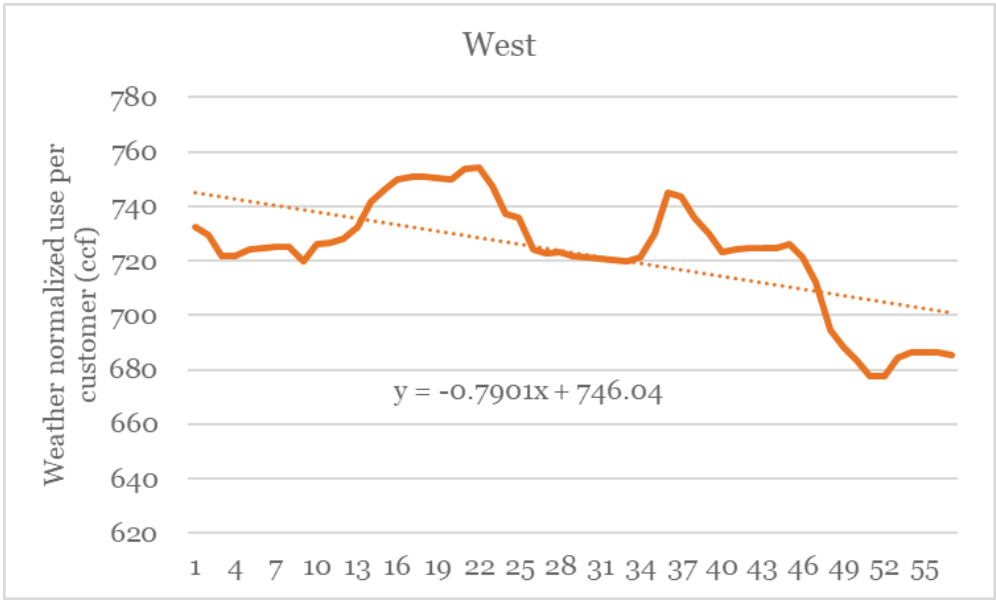
The energy assessment tool is currently available to Spire residential customers. Once customers establish an account online, the energy assessment, takes less than 10 minutes. Upon completion, customers receive an assessment report and rebate recommendations. Customers can evaluate multiple properties within one account. Available at spireenergy.com/assessments, the new tool provides:

- Professional-level insights for homes across Spire’s service territory in Missouri.
- Interactive home energy reports to show potential money and carbon savings.
- Recommendations that allow customers to see results immediately and act on recommendations.

3.3 Energy savings projections

We project that our energy efficiency programs lead to energy savings of around 1% of demand each year. As shown below, the impact of energy efficiency and conservation on Spire’s use per customer can best be shown by plotting the weather normalized rolling 12-month residential use per customer over the last 60 months. It’s very clearly trending downward. This energy savings is ultimately factored into the customer demand forecast described later in this Plan.





4 System overview

4.1 Overview

We currently serve approximately 1.2 million customers in Missouri and have approximately 32,000 miles of pipeline in our service territory. Our distribution system consists of main and related service lines, odorization and regulation facilities, and customer meters and is split between two service territories: Missouri East and Missouri West.

We're focused on ensuring our distribution and transmission systems are safe and reliable and deliver energy to our customers efficiently. We're working on modernizing our system through continued infrastructure upgrades, new technology and continued leak detection. Together, these initiatives will help us reduce methane emissions and ensure our customer's needs are met.

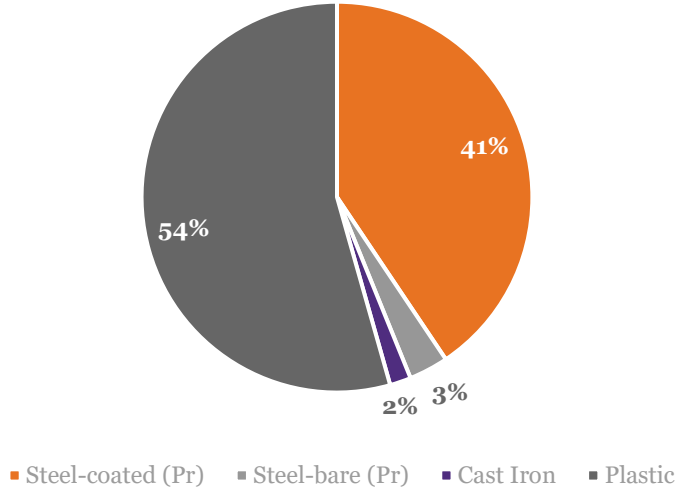
4.2 Existing distribution system

Our pipeline distribution system can be broken out into material and vintage based on what is reported to the Pipeline and Hazardous Materials Safety Administration (PHMSA). This is shown in the table and charts below.

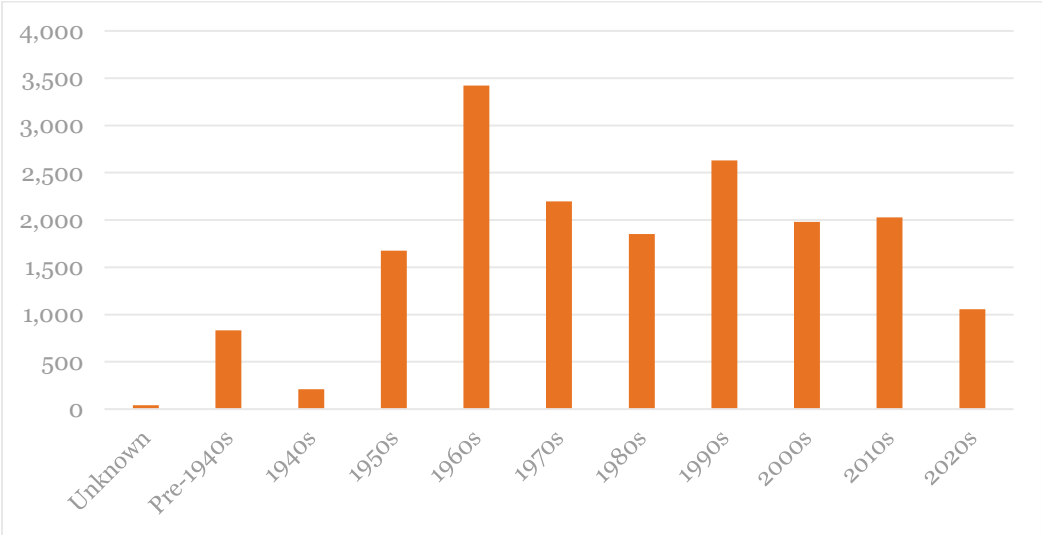
Spire Distribution Pipeline Material Breakdown (miles)

	Missouri East	Missouri West	Total
Steel-coated (Un)	0	0	0
Steel-coated (Pr)	3,944.16	3,335.49	7,279.65
Steel-bare (Un)	0	0	0
Steel-bare (Pr)	25.63	559.44	585.07
Cast Iron	207.03	107.06	314.09
Copper	0.04	0	0.04
Plastic PVC	0	0	0
Plastic PE	4,658.42	5,095.47	9,753.89
Plastic ABS	0	0	0
Plastic Other	0	0	0
Other	0	0	0
Total	8,835.28	9,097.46	17,932.74

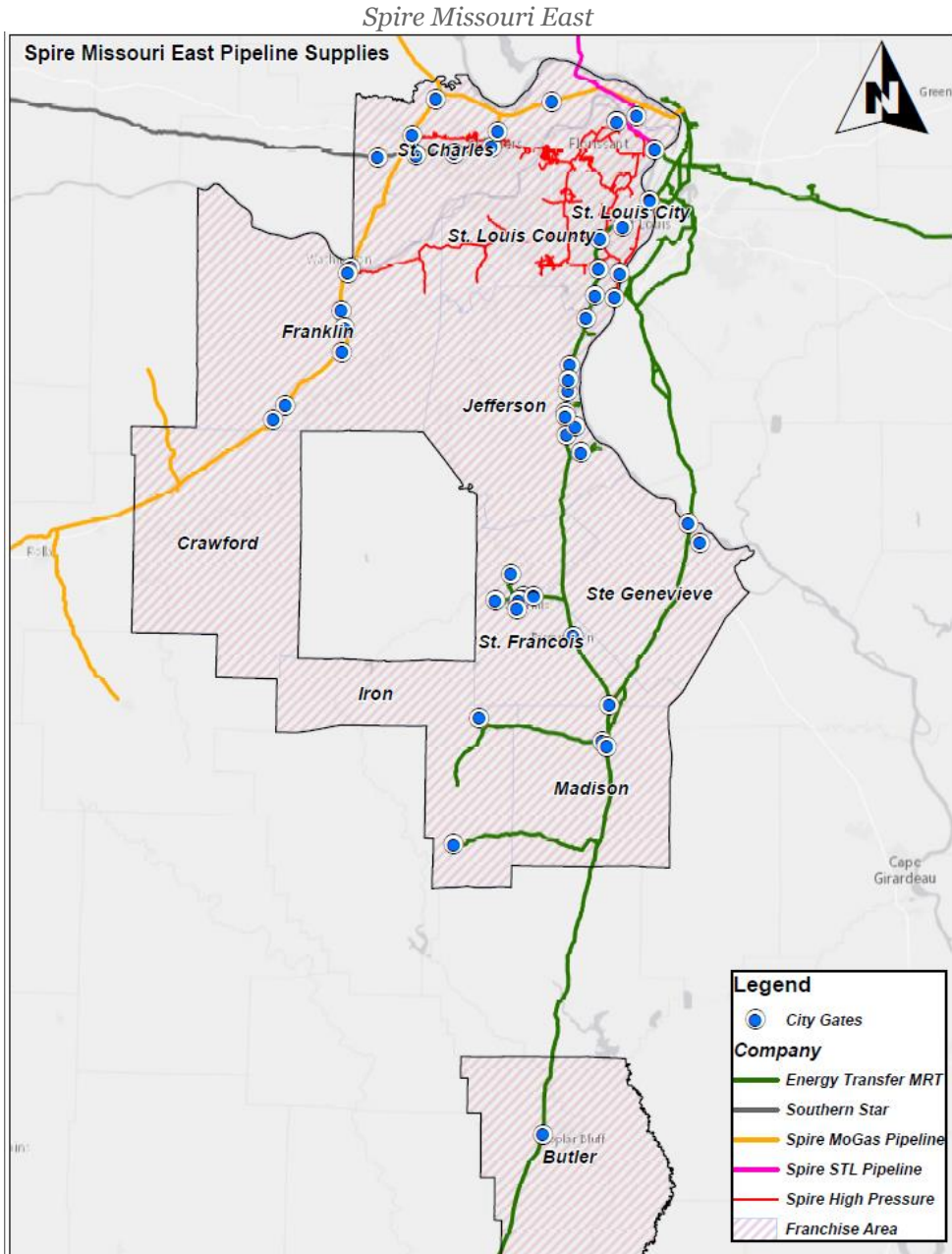
Spire Distribution Pipeline Material Breakdown (miles)



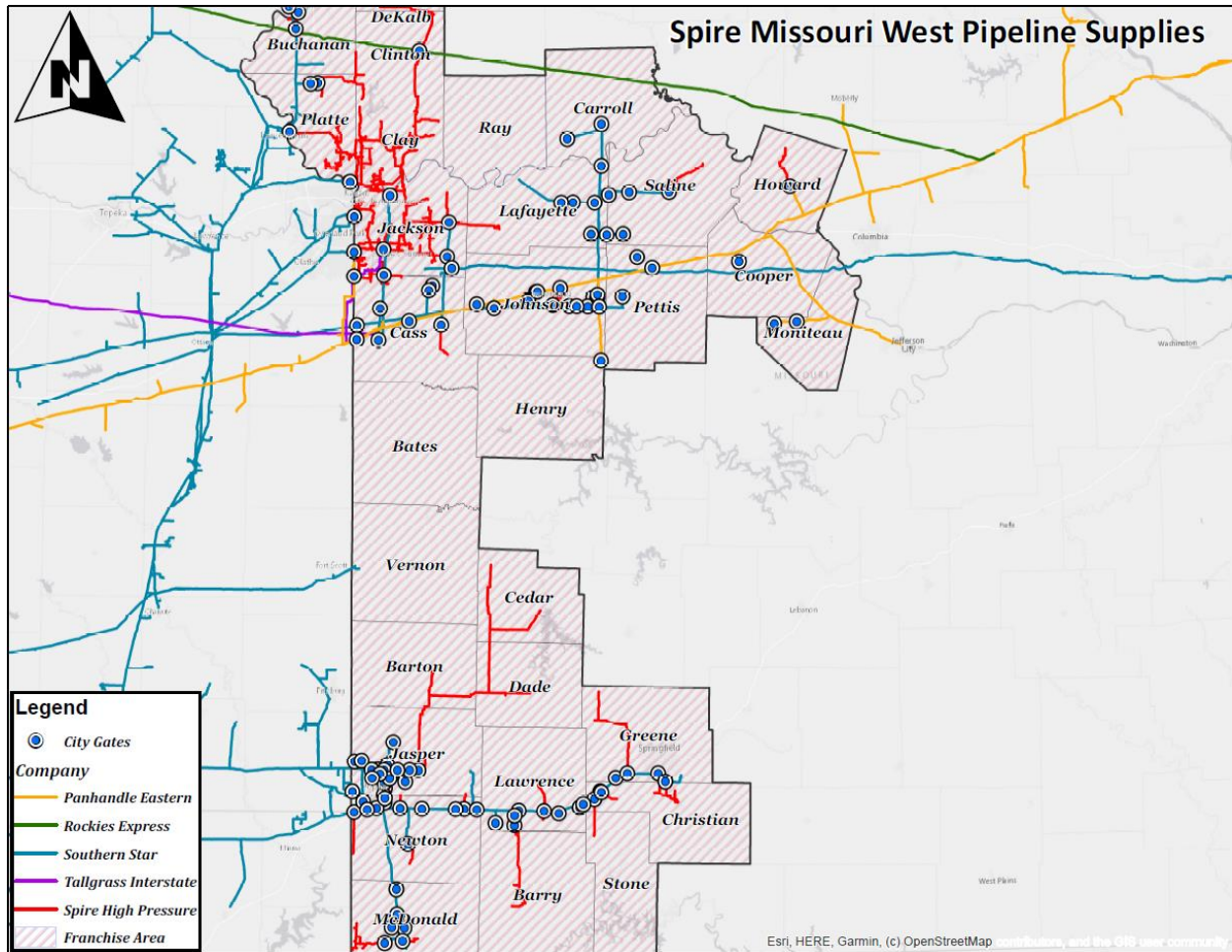
Spire Distribution Pipeline Vintage Breakdown (miles)



The two maps below depict Spire's Missouri East and Missouri West territory.



Spire Missouri West



Our system is resilient and robust. During the more recent winter storms (Uri, Elliott, Gerri, and Heather), we were able to meet our customers' demand across our service territories. Part of this success was due to the Spire STL pipeline which was placed into service in November 2019. This new pipeline to the St. Louis area has a capacity of 400 MMcf per day of which 350 MMcf are for Spire. The pipeline has been a crucial addition to our system reliability and resiliency.

4.3 System capabilities and constraints

Spire's system planning team utilizes Synergi Gas, a steady state hydraulic modeling software to determine the required system improvements needed to deliver safe and reliable service. These models are used in the sizing of new facilities and estimated required flow from the regulator stations compared to the existing equipment capacity. These models are also used to design for customer growth and overall system demand. The model is verified using recorded field pressure data, as well as actual usage. The system planning team built a correlated model reflective of Winter Storm Elliott, using actual data from the December 23, 2022 storm. Model data was compared to field data for this verification day.

Using this modeling software, Spire has generated master plans for several areas within Missouri. These models are used for design recommendations and replacements for obsolete facilities. These models are continually evaluated and updated so they can be used to identify key projects that may contribute to the long-term hydraulic health of our distribution systems.

The system planning team coordinates with the gas control and gas supply team to discuss contract capacities and physical constraints for each gate station flow. It's a collaborative effort any time additional capacity is looked at or considered because these decisions always anchor back to the modeling results. The hydraulic models are ultimately used to identify any shortfalls or system constraints. The system planning team is currently building a new capacity review process for the various regions & respective suppliers.

As a result of this continual coordination, this model was recently updated to better align with the peak day planning values that the gas supply team calculates as described in Section 5.4 below. This recent update better aligned our peak day planning regression to our downstream demand within our Synergi Gas model. With the Synergi Gas model demand update, we identified areas of concern in our models on the eastern side of Kansas City and western side of St. Louis that would require distribution system improvements and/or supply portfolio changes in the future.

To ensure system reliability into the future; the system planning team developed a 20-year plan for the greater St. Louis area and has kicked off a similar exercise for the Kansas City metro area recently. As a result of these efforts, the team has identified several projects within the 20-year plans that may contribute to a long-term solution that incorporates anticipated growth projections.

4.4 Distribution system initiatives – Missouri East

In 2023, Spire conducted a 20-year long-range plan for the distribution system in the greater St. Louis area. This study worked to identify current and future reliable service risks associated with customer growth, particularly in the St. Charles County area, southern St. Louis, & northern Jefferson County.

The first major priority of the long-range plan was a new ~5-mile feeder reinforcement extending into southwestern St. Charles County. As of October 2024, the feeder extension is under construction. Furthermore, the engineering team also designed several smaller reinforcements throughout St. Louis & Jefferson Counties. As of October 2024, a handful of these have been completed and placed in-service and the remainder are in some stage of the design process.

4.5 Distribution system initiatives – Missouri West

In 2017 and 2018, we conducted a distribution system master planning process for our Missouri West system, which identified limitations for our distribution system in the Kansas City metropolitan area. Our Kansas City system at that time had isolated take points from its key interstate gas suppliers, leaving the system without the flexibility to flow gas from different suppliers in the event of an unanticipated reduction from a supplier and without the ability to

leverage different supplier sources to provide the most cost-effective gas supply portfolio for our customers. In addition, the existing high-pressure lines included a significant amount of bare steel that needed to be replaced.

As part of the master planning process, our engineering team designed a new feeder system, with two new legs, a western leg and an eastern leg. In May 2019, we began construction of the western leg of the 20-inch feeder system to integrate our distribution system in the Kansas City area, while also replacing the existing aging infrastructure. This western leg of the feeder system was a multi-year plan, consisting of 11 phases. As of September 2024, all 11 phases of the west leg are complete, in addition to 4 new regulator stations. The east leg is also a multi-year plan that consists of 9 phases, including 7 new regulator stations. As of October 2024, the design and construction for the first phase of the east leg is complete. The construction of the second phase is in progress, with the third ready for construction. The remainder of phases are in various stages of design. The regulator stations associated with these phases are also in various stages of design and easement acquisition.

4.6 Upgrading our infrastructure and preventing leaks

We've been significantly upgrading our infrastructure in recent years focused on modernizing our system and reducing leaks. These upgrades reduce public safety threats, improve the overall functioning of the system, and reduce operating costs from having to respond to and fix leaks. From 2005 to 2023, we reduced methane emissions from our gas utilities (mains and services) by more than 51% due to infrastructure upgrades and leak detection and repair programs that replace higher emitting materials — putting us on target to reduce emissions by 73% by 2035.

In Missouri specifically, we've replaced 1,615 miles of mains since FY 2016. There is 899 miles of legacy main replacement remaining (585 are bare steel and 314 are cast iron). Additionally, service line upgrades were completed along with these main replacements. This is part of Spire's ISRS (Infrastructure System Replacement Surcharge) which provides for recovery on infrastructure investments without regulatory lag. The selection criteria for pipeline replacement is based on a mandated program and strategic replacements. These strategic replacements are driven by Distribution Integrity Management Plan (DIMP) risk scores for an area. The risk scores are a basis of leak history, material type and other risk factors. This program has led to a significant decrease in leaks across Spire's service territory. Based on the annual PHMSA Department of Transportation report information, the number of leaks repaired and scheduled for repair has decreased by 44.4% since 2016.

Additionally, in response to the PHMSA Notice of Proposed Rulemaking on Leak Detection and Repair (LDAR), we are in the process of planning for Advanced Leak Detection deployment. The LDAR final rule is expected to be published by PHMSA early in 2025, and the effective date of the rule is currently six months from the final rule publication. However, many in the industry have stated concerns about the timing of the effective date and have requested PHMSA to consider a longer period of time between the publication date and the effective date. We are currently preparing for a three-year phased roll out pending the PHMSA final ruling.

Spire intends to continue investing in its infrastructure and has planned capital investment in the coming years to replace and upgrade pipeline infrastructure, invest in new

business, metering equipment, etc. Spire is planning to invest over \$5.5B from 2025 to 2034 in Missouri as shown below. Much of this capital investment will be for pipeline replacement of aging infrastructure.

Spire Missouri Expected Capital Expenditures*
(Millions)

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Infrastructure Replacement	\$ 336.4	\$ 337.4	\$ 349.3	\$ 366.1	\$ 380.6	\$ 390.0	\$ 401.2	\$ 412.0	\$ 421.8	\$ 432.6
New Business/RNG	80.0	69.5	68.2	69.8	72.6	74.4	76.5	78.5	80.4	82.5
Meters	121.5	47.8	46.4	39.2	33.6	34.4	35.4	36.4	37.3	38.2
Vehicles & Equipment	22.0	22.5	22.7	23.5	24.7	25.3	26.1	26.8	27.4	28.1
Maintenance Capital	32.7	16.1	17.3	19.1	19.3	19.8	20.3	20.9	21.4	21.9
Total	\$ 592.6	\$ 493.3	\$ 503.8	\$ 517.7	\$ 530.8	\$ 543.9	\$ 559.5	\$ 574.6	\$ 588.2	\$ 603.3

* as of November 2024 on an accrued basis

4.7 Maintaining modern facilities

4.7.1 Distribution integrity management (DIM)

We actively manage the integrity of our natural gas distribution system in accordance with requirements issued by PHMSA. We maintain a written Distribution Integrity Management Plan (DIMP) that includes a risk weighted score for each identified threat to the distribution system and details measures that we will implement to mitigate those threats. We have an established set of processes to review and update the DIMP annually, and as required, to reflect changes and improvements that have occurred in the process.

4.7.1.1 DIMP risk assessment process

Spire currently assesses risk in the system using both a Subject Matter Resource (SMR)-centric risk model and a data-centric risk model. Results from both models are evaluated to identify high risk threats to the system.

The data-centric risk model utilizes available operational and historical data. This approach leverages available leak repair history that we collect to estimate the likelihood of failure. Leak severity, geographical and system data are also used in the evaluation of the consequence component of risk. Total risk scores are based off of a combination of the failure and consequence components.

The SMR-centric risk model utilizes the experience and judgment of key personnel to evaluate and rank gas distribution pipeline risks. As part of the SMR-centric process, the SMRs are given access to relevant reports and data to ensure they have the best possible information available.

4.7.1.2 DIMP accelerated action identification and performance tracking

Selection of threats requiring action plans are made after the relative risk for each threat has been calculated, results are reviewed by Company SMRs, and adjustments are made to risk scores as necessary. Sub-threats with risk scores above established thresholds qualify for action plans. Currently the company has identified accelerated actions for prioritizing replacement of legacy pipe materials (i.e.: cast iron, bare steel, copper), improving fittings, improving damage prevention, and monitoring of farm taps.

Performance measures have been established to monitor accelerated action performance and assist in the ongoing evaluation of threats. Established baselines with these measures are used to evaluate the ongoing effectiveness of the integrity management program.

4.7.2 Transmission integrity management (TIM)

We actively manage the integrity of our natural gas transmission system in accordance with requirements issued by PHMSA. We maintain a written Transmission Integrity Management Plan (“TIMP”) that includes a weighted risk score for each identified threat to the pipelines in those transmission systems and detailed measures that we will implement to mitigate those threats. We have an established set of processes to review and update the TIMP. It is reviewed annually and updated as required to reflect changes and improvements that have occurred in the process, procedures and analysis for each element of the program.

4.7.2.1 TIMP Risk Assessment Process

Spire currently assesses risk to the pipeline using the Geonamic risk model. Results from the risk model are evaluated to identify high risk threats to the system.

The risk model utilizes available operational and historical data to calculate the relative risk for all pipelines in the system. This approach leverages all available operational and maintenance history that we collect on the pipeline to estimate the likelihood of failure. Failure severity, geographical and system data are also used in the evaluation of the consequence component of risk. Total risk scores are based off a combination of the failure and consequence components. The Geonamic risk model utilizes the experience and judgment of key personnel to evaluate and rank gas transmission pipeline risks.

4.7.2.2 High consequence area (HCA) external corrosion direct assessment (ECDA) process

HCAs are assessed using the ECDA process. The ECDA process is a 4-step process. Step one entails reviewing and analyzing all the historical pipeline data for the HCA to determine the active threats to the pipeline to select the appropriate indirect inspection tools that will assess for those given threats. Step two is the indirect inspections phase where two or more complimentary inspection tools are used to inspect the pipeline in the HCA. The return inspection data is then analyzed to determine the locations of indications where possible defects may be. Step three is the direct examination phase where selected indications are excavated, and the pipeline is directly examined to assess the nature and severity of the defect. Step four is the post assessment phase of the process where the results of the assessment are reviewed to determine whether ECDA is a valid assessment method to assess for the determined threats. Approximately 14% of the HCAs are assessed annually.

4.7.2.3 TIMP accelerated action identification and performance tracking

Selection of threats requiring preventative and mitigative (P&M) action plans are made after the relative risk for each threat has been calculated, results are reviewed by Company SMEs and adjustments are made to risk scores as necessary. Currently the company has an accelerated action plan for prioritizing testing and replacement of the oldest and highest risk transmission segments in the system.

Performance measures have been established to monitor P&M actions performance and assist in the ongoing evaluation of threats. Established baselines with these measures are used to evaluate the ongoing effectiveness of the integrity management program.

4.7.3 Storage integrity management (SIM)

At Spire's on-system underground storage facility, we have a Storage Integrity Management Plan ("SIMP") designed to ensure the integrity of the wellhead and field. This plan identifies high consequence and risk areas and assigns a risk score. The plan then includes preventative and mitigative measures where required and where they are necessary to improve safety.

4.7.4 Safety management system (SMS)

SMS outlines the framework required to support a holistic approach to safety across Spire. This includes employee safety, pipeline safety, pipeline integrity, damage prevention, environmental safety and right of way safety. The goal of SMS is to create processes and procedures that support an environment where zero incidences occur. To achieve these goals, the American Petroleum Institute Recommended Practice 1173 (API 1173) and the Plan-Do-Check-Act (PDCA) cycle are utilized. The API 1173 framework outlines ten elements providing guidance on how to operate a safe environment for not only our employees but also the communities we serve.

By utilizing the PDCA cycle, we are able to set goals, establish metrics, and create methods for data collecting. The plans outlined to reduce risks and threats of the system are implemented to improve the Company's operation controls. If incidents occur, investigations, lessons learned, and other means of communication are generated to reduce the likelihood of the event reoccurring. Any gaps that are identified are acted on to improve the safety of the system. By utilizing the tools provided by our SMS framework, we are able to affirm to all internal and external stakeholders that safety is a value.

5 Demand forecast

5.1 Overview

Spire retained ScottMadden to develop a robust weather normalized 20-year demand forecast for each of its Missouri operating units. The results are summarized in the tables below and the full detailed report is attached as Appendix 1. Overall, the base forecasts for Missouri East and Missouri West are relatively flat. The effects of electrification and energy efficiency and conservation may have a profound effect on overall demand and Spire will continue to monitor and track those impacts accordingly. While the effects of electrification are largely unknown at this time, Spire does anticipate that energy efficiency and conservation will continue to erode natural gas load in its service territories as can be shown in the high energy efficiency case.

The scenarios ScottMadden reviewed are summarized below, but for the purposes of this Plan and the supply planning in Section 6, the Base scenario was used.

5.1.1 High economic growth

The High Economic Growth scenario assumes that the rate of electrification is similar to the historical data period and the Base case, with additional growth over the Forecast Period associated with higher economic growth, driving higher demand. To develop this scenario, it was assumed that in each year of the Forecast Period growth was 0.5% higher than the year over year growth rate of the Base case. That is, if the Base case assumed 0% growth in a given year, the High Economic Growth scenario would reflect 0.5% growth.

5.1.2 High energy efficiency

Although the historical dataset on which the econometric models were developed reflects a trend in energy efficiency savings, the potential for additional energy efficiency and conservation savings associated with new factors (e.g., changes in federal standards, emerging technologies, changes in local building codes, etc.) remains a possibility. Between late 2023 and early 2024 the Department of Energy finalized several efficiency standards which go into effect in 2028 and 2029 for natural gas furnaces and boilers, water heaters, washers and dryers, and stoves. For example, starting in 2028, newly installed natural gas furnaces and boilers must have an efficiency rating of at least 95 AFUE, which is an increase from the current standard of 80 AFUE. These impacts are all assumed to be reflected in the High Energy Efficiency scenario.

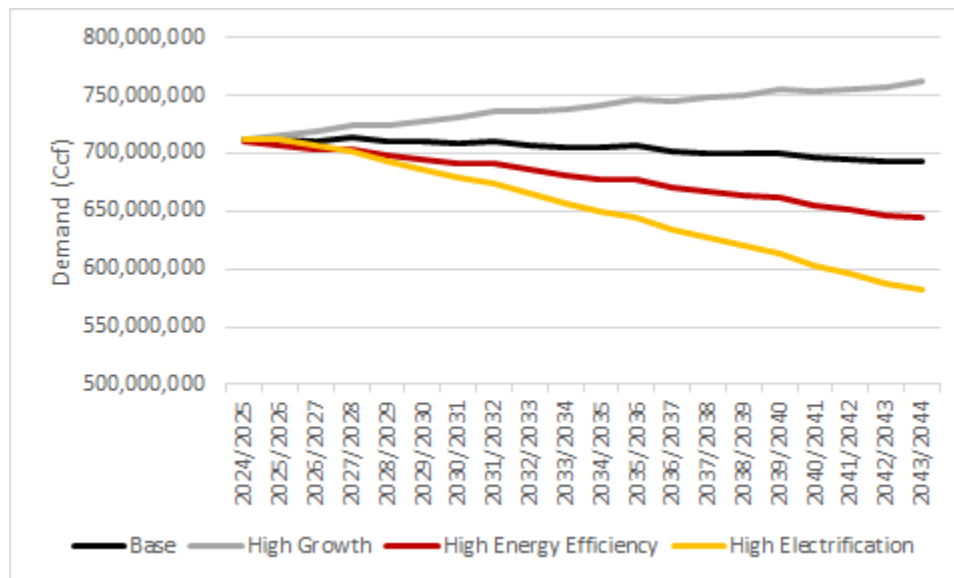
5.1.3 High electrification

The High Electrification scenario assumes a higher level of electrification than is present in the historical dataset. Electrification includes new potential customers or existing customers installing electric heat pumps, water heaters, stoves, or other electric technologies instead of the natural gas equivalents. Industry research was reviewed to help develop the assumptions that serve as the basis for the High Electrification scenario. In addition, because Ameren Missouri's electric service territory significantly overlaps with Spire's, Ameren Missouri's most recent electric Integrated Resource Plan ("IRP") was reviewed to understand the underlying forecasts related to electrification.

5.2 Missouri East annual demand forecast

East (Ccf)

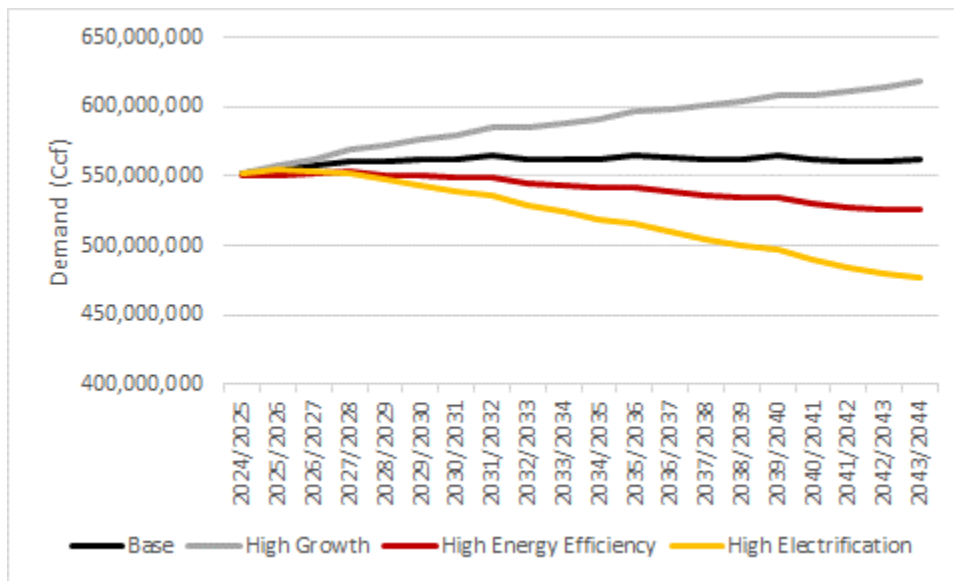
Split-Year	Base	High Economic Growth	High Energy Efficiency	High Electrification
2024/2025	712,251,065	712,251,065	710,171,913	712,251,065
2025/2026	711,237,670	714,798,925	706,722,596	711,237,670
2026/2027	710,964,516	718,098,398	704,006,488	706,455,209
2027/2028	713,077,984	723,823,565	703,638,469	702,241,296
2028/2029	710,076,907	724,396,382	698,220,643	692,992,104
2029/2030	709,517,582	727,447,759	695,209,528	686,131,937
2030/2031	708,803,247	730,352,611	692,043,509	679,113,363
2031/2032	710,419,621	735,669,890	691,139,607	674,287,738
2032/2033	706,825,311	735,626,177	685,169,961	664,535,042
2033/2034	705,775,325	738,211,539	681,676,869	657,191,682
2034/2035	704,695,111	740,772,738	678,157,931	649,825,598
2035/2036	705,981,515	745,828,864	676,908,521	644,612,839
2036/2037	702,174,389	745,535,999	670,784,271	634,781,764
2037/2038	700,690,997	747,688,682	666,891,949	627,073,367
2038/2039	699,234,676	749,873,125	663,030,332	619,400,711
2039/2040	700,086,885	754,536,416	661,356,464	613,757,033
2040/2041	695,896,483	753,792,786	654,935,256	603,741,515
2041/2042	694,154,698	755,675,054	650,828,503	595,869,174
2042/2043	692,401,111	757,544,428	646,718,561	588,004,541
2043/2044	693,104,550	762,101,771	644,899,214	582,205,937
CAGR (2024/25- 2043/44)	-0.1%	0.4%	-0.5%	-1.1%



5.3 Missouri West annual demand forecast

West (Ccf)

Split-Year	Base	High Economic Growth	High Energy Efficiency	High Electrification
2024/2025	551,725,749	551,725,749	550,073,770	551,725,749
2025/2026	554,543,754	557,302,382	550,931,890	554,543,754
2026/2027	557,349,230	562,908,327	551,769,997	553,752,886
2027/2028	561,393,818	569,807,798	553,820,621	552,714,480
2028/2029	560,803,471	572,057,642	551,303,219	547,121,717
2029/2030	561,837,260	575,972,465	550,389,449	543,124,142
2030/2031	562,398,581	579,427,770	549,017,044	538,677,812
2031/2032	564,832,680	584,832,711	549,467,821	536,005,066
2032/2033	562,825,558	585,678,684	545,618,443	529,171,809
2033/2034	562,819,891	588,601,180	543,729,821	524,256,217
2034/2035	562,830,626	591,555,413	541,872,528	519,385,405
2035/2036	565,220,816	597,025,366	542,300,742	516,685,423
2036/2037	563,243,854	597,922,289	538,566,745	510,062,743
2037/2038	562,823,820	600,466,005	536,335,828	504,878,419
2038/2039	562,797,469	603,440,222	534,494,830	500,069,266
2039/2040	564,459,822	608,239,824	534,260,186	496,755,247
2040/2041	561,764,619	608,376,778	529,938,875	489,704,001
2041/2042	561,244,382	610,855,258	527,682,943	484,568,086
2042/2043	560,904,928	613,540,075	525,616,325	479,620,616
2043/2044	562,705,073	618,576,845	525,555,940	476,487,232
CAGR (2024/25-2043/44)	0.1%	0.6%	-0.2%	-0.8%



5.4 Peak day forecast approach

While a weather normalized demand forecast, such as the one prepared for Spire by ScottMadden is a necessary first step, from a gas supply planning perspective, the second step must be translating the demand to reflect peak day weather conditions because Spire has an obligation to serve during all weather scenarios. Spire currently uses a nonlinear multivariate autoregressive regression based on heating-degree days, the previous day's heating-degree days, and day of the week current to predict a peak day. Over time, we have incorporated new variables to improve the accuracy and robustness to get the model to where it is today. We have one forecast for Missouri West and one for Missouri East. These forecasts are fairly effective at predicting demand in the short term with an R² value around 0.98 according to the Missouri East and West reliability reports.

Using this statistical approach as a baseline, Spire took the demand forecast prepared by ScottMadden and adjusted it to reflect the peak day requirements to be used for future portfolio planning. These peak day forecasts are not perfect and will certainly change over time. Given the demand forecasts prepared by ScottMadden, our peak day forecast is projected to decline slightly in Missouri East and increase slightly in Missouri West. There are many factors and variables used that influence peak day demand planning and those will continue to be monitored and updated. This peak day forecast is simply a linear projection of what our peak day forecast will look like using ScottMadden's Base case demand forecast with all else staying constant.

5.5 Missouri East peak day forecast

East (Dth/d)

Split-Year	Peak Day
2024/2025	1,225,982
2025/2026	1,224,238
2026/2027	1,223,767
2027/2028	1,227,405
2028/2029	1,222,240
2029/2030	1,221,277
2030/2031	1,220,047
2031/2032	1,222,830
2032/2033	1,216,643
2033/2034	1,214,835
2034/2035	1,212,976
2035/2036	1,215,190
2036/2037	1,208,637
2037/2038	1,206,084
2038/2039	1,203,577
2039/2040	1,205,044
2040/2041	1,197,831
2041/2042	1,194,833
2042/2043	1,191,815
2043/2044	1,193,026

5.6 Missouri West peak day forecast

West (Dth/d)

Split-Year	Peak Day
2024/2025	997,147
2025/2026	1,002,240
2026/2027	1,007,310
2027/2028	1,014,620
2028/2029	1,013,553
2029/2030	1,015,422
2030/2031	1,016,436
2031/2032	1,020,835
2032/2033	1,017,208
2033/2034	1,017,198
2034/2035	1,017,217
2035/2036	1,021,537
2036/2037	1,017,964
2037/2038	1,017,205
2038/2039	1,017,157
2039/2040	1,020,162
2040/2041	1,015,290
2041/2042	1,014,350
2042/2043	1,013,737
2043/2044	1,016,990

6 Supply planning

6.1 Overview

As described previously, the system planning, gas control, and gas supply teams coordinate future supply planning. This collaborative approach ensures reliable and affordable supply to Spire customers under all demand conditions. At its core, the team evaluates combinations of various supply basins, upstream transportation and storage paths, and on-system storage to assure reliable delivery of natural gas to Spire's city gates at the best possible delivered cost given daily, weekly and seasonal constraints and variability, and long-term industry developments.

6.2 Existing portfolio

We maintain a diversified portfolio of natural gas supply resources that include contracts to purchase natural gas from several different supply basins with various terms, as well as multiple contracts for pipeline transportation and storage services. We continuously evaluate potential supply, incremental pipeline transportation, storage capacity and distribution capacity enhancements as part of our portfolio management process.

Our objective is to tailor a diversified supply, firm transportation and storage services portfolio with contracts of varying terms and conditions to provide flexibility and resiliency to meet the changing load demands of our customers in a cost-effective manner. We ensure our contracted quantities are equal to or greater than the forecasted firm peak demand volumes, so that customers always have gas when they need it most.

In order to assure reliable and affordable natural gas service to its customers, Spire has developed a number of supply resiliency initiatives. These initiatives, generally upstream of the distribution system delivery points, are designed to protect our customers from unforeseen upstream service disruptions and price volatility. They involve securing natural gas supply or transportation for the benefit of Spire customers. For Missouri West we have added the Rockies Express/Southern Star Buchanan interconnect, Panhandle/Southern Star Princeton Interconnect, and the Southern Star Cedar Vale Expansion; all of which addressed much needed supply diversity and growth. Additionally, for Missouri East we contracted with Spire STL Pipeline. Spire STL Pipeline allows Spire to access new affordable supplies from the nearby Appalachian basin and provides much needed supply diversity. The benefits of these initiatives have proven to provide reliability and affordable supply during the extreme weather events that have affected the region over the last several winters.

6.2.1 City gate pipeline transport capacity

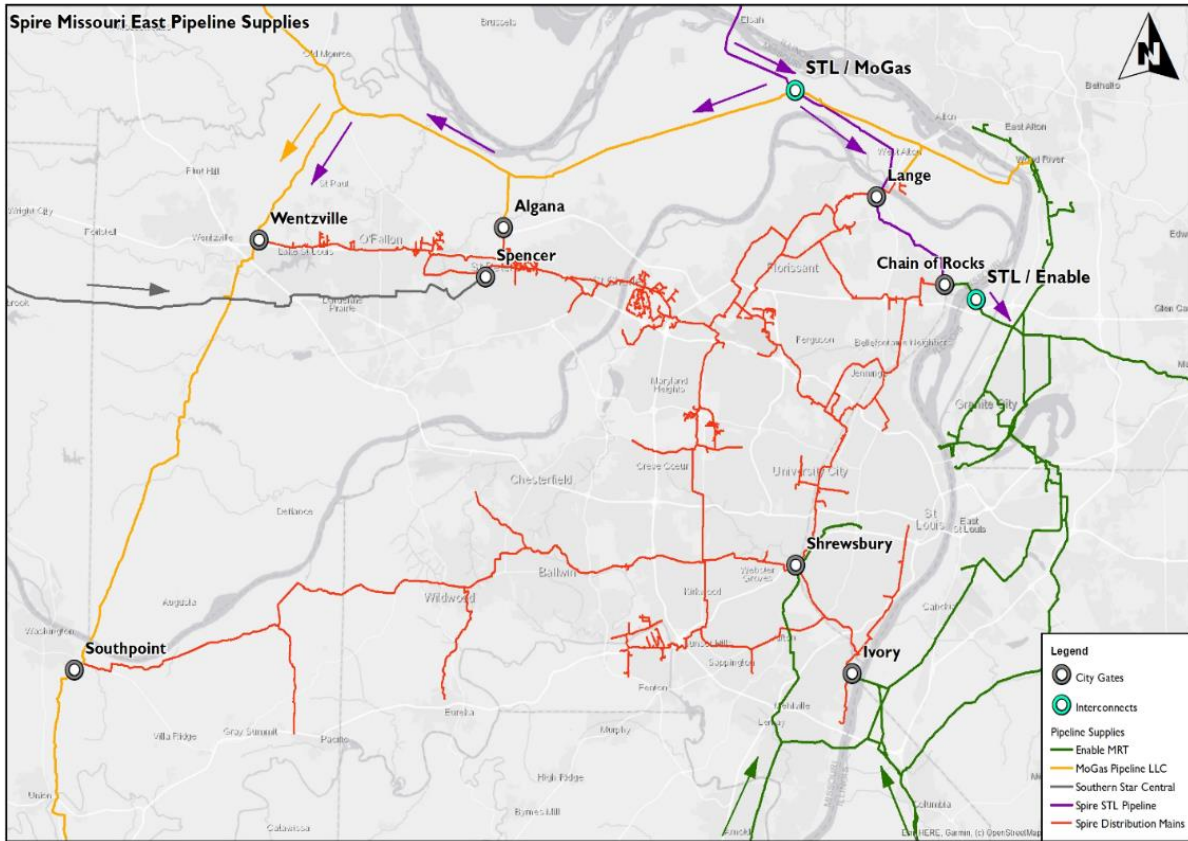
In Missouri East, we've contracted for capacity on all four of the interstate pipelines that interconnect with a Spire city gate. In addition to city gate deliveries, we also utilize the withdrawal capabilities of a behind-the-gate aquifer storage facility to meet peak demand requirements. Current city-gate capacity for a peak day and peak hour are as follows:

Missouri East City Gate Capacity

Pipeline	City Gate Capacity (dth/day)	City Gate Capacity (dth/hour)
Enable MRT (forward haul)	480,779	24,039
Enable MRT (back haul)	80,000	3,333
Mogas Pipeline (Mogas)	145,600	6,067
Southern Star Central (SSC)	30,300	1,515
Spire STL Pipeline (STL)	190,000	7,917
Spire Underground Storage	357,000	17,850
Total	1,273,679	60,721

Each winter we release approximately 23,000 dth of the MRT (Mississippi River Transmission) capacity above to marketers serving schools through the School Aggregation program. These releases are recallable and would be recalled if a marketer were unable to perform. We also have a contract with MRT for 150,000 dth per day of southbound MRT Main Line capacity, of which 80,000 can be sourced from the Spire STL Pipeline. This 80,000 dth per day sourced from the Spire STL Pipeline will be delivered to support the southeast portion of our system. In addition, we have leveraged Spire STL Pipeline to deliver an additional 90,000 dth per day to the western and southwestern portions of our system, through a new interconnect with MoGas. This new portfolio provides: (1) high pressure supply from the Spire STL Pipeline so we can serve the growing demands in St. Charles County, (2) adequate pressure to free flow gas into the on-system underground storage facility, and (3) a very resilient portfolio due to the ability to shift volumes around the system as needed to meet peak day needs when pipeline issues tend to be most prevalent. The map below illustrates these gas flow dynamics:

Missouri East Pipeline Map



In Missouri West, we’ve contracted for capacity on all four of the interstate pipelines that have interconnects with the Spire city gate. Current city-gate capacity for peak days and peak hours is as follows, shown below:

Missouri West City Gate Capacity

Pipeline	City Gate Capacity (dth/day)	City Gate Capacity (dth/hour)
Southern Star Central Gas Pipeline (SSC)	860,512	43,026*
Tallgrass Interstate Gas Transmission (TIGT)	145,000	6,042
Panhandle Eastern Pipeline (PEPL)	27,062	1,353*
Rockies Express (REX)	20,000	833
Total	1,052,574	51,254

*These pipelines are capable of 1/16th hourly flows as defined in their tariffs. For planning purposes we use 1/20th.

While Spire is positioned well currently with city-gate capacity, it’s important to note that portfolio changes are becoming increasingly challenging due to the lack of available capacity in the market. Regional pipelines serving Missouri East have very limited remaining city-gate capacity. Enable MRT has no capacity available from its field zone to the market zone, which serves the St. Louis area. Southern Star has no capacity available to serve the western side of St. Louis, while Spire STL Pipeline has 50,000 dth per day, and MoGas Pipeline only has 15,000 dth per day available to source into St. Louis. The regional pipelines serving Missouri

West have even less available capacity, with Spire being limited in its ability to pull more gas into its distribution system directly from Rockies Express Pipeline and Panhandle Eastern Pipeline. Southern Star has no available market area capacity where it is currently needed on the eastern side of Kansas City, and Tallgrass Interstate Pipeline has roughly 12,500 dth per day available into our Jackson city-gate.

6.2.2 Upstream pipeline transportation capacity

In Missouri East, we contract for upstream capacity from four pipelines that serve our portfolio. We do this to ensure capacity to improve the overall liquidity of our supply portfolio and to allow for access to supplies that would otherwise not be available without the upstream contracts. Absent unforeseen changes, we do not expect any near-term changes to this supply portfolio. Current upstream transportation contracted volumes are shown below:

Missouri East Upstream Pipeline Transport Capacity

Pipeline	Contracted Capacity (dth/day)
Enable Gas Transmission (EGT)	60,000
Rockies Express Pipeline (REX)	20,000
Panhandle Eastern Pipeline (PEPL)	35,466
Spire STL Pipeline (Spire STL)	170,000
Total	285,466

In Missouri West, we contract for upstream capacity from two pipelines that service our portfolio for the same reasons we contract for upstream capacity in Missouri East.

Missouri West Upstream Pipeline Transport Capacity

Pipeline	Contracted Capacity (dth/day)
Southern Star Central Gas Pipeline (SSC)	243,824
Panhandle Eastern Pipeline (PEPL)	65,000
Total	308,824

6.2.3 Contracted pipeline storage capacity

Contracted storage is an essential supply source for the Missouri East system. On a basic level, underground natural gas storage allows us to inject gas in the summer at lower prices and then withdraw it during the winter when demand and prices peak. More importantly, storage enhances our ability to balance volatile changes in supply and demand and help protect customers from higher gas prices. More specifically, storage allows us (1) to smooth loads over weekends and holidays and (2) to manage unpredicted load changes due to weather volatility, unplanned outages, or maintenance issues.

In Missouri East, we contract with MRT for 22,000,000 dth of firm storage capacity. This storage provides a “no-notice” service that delivers almost immediate supply and demand balancing capability. Our maximum daily withdrawal capability ranges from 334,522 dth per day to 383,226 dth per day, depending on whether MRT exercises its right to recall the storage.

During recent rate case settlement negotiations, MRT agreed to amend its storage tariff to allow for more storage flexibility for its firm shippers. The tariff changes did away with the minimum and maximum monthly injection and withdrawal requirements and allows for firm counter-seasonal injection and withdrawal activity which did not exist in the past. The withdrawal season for MRT's firm storage service is now Nov. 1 through Apr. 30. MRT's tariff provides a deliverability curve based on our firm storage agreement for the withdrawal season.

In Missouri West, we currently have two storage contracts. One contract is with Southern Star Central pipeline with a maximum storage quantity of 16,297,974 dth and a maximum deliverability of 493,878 dth per day. The second contract is with Panhandle pipeline for a maximum storage quantity of 1,471,800 dth, and a maximum deliverability of 20,000 dth per day. Together, this means that we've contracted for a maximum storage quantity equal to 17,769,774 dth and a maximum deliverability of 513,878 dth per day.

6.2.4 On-system underground storage capacity

Our on-system underground storage aquifer known as "Lange" provides Missouri East with approximately 4 bcf of working capacity from its location in north St. Louis County. Lange's withdrawal capability is not constant; rather, it depends on several variables, including storage field pressure, pressure in the downstream distribution system, time of year, etc. Through careful analysis of past operating results and performance data, Spire has developed a flow capability curve that models Lange's performance ability and allows us to maximize the facilities' capacity.

6.3 Supply alternatives

6.3.1 Renewable natural gas

Renewable natural gas (RNG) may be considered carbon neutral (and in some circumstances, carbon negative) and a sustainable local alternative to supplement geologic natural gas. RNG can be produced from abundant amounts of organic waste from sources like farms, wastewater plants, and landfills. Instead of allowing methane to escape into the atmosphere from decomposing organic waste, the released gases can be used to produce methane-rich biogas. There are applications in which biogas can be used as a valuable energy source. Alternatively, biogas can undergo additional processes to clean and condition the gas to meet pipeline quality requirements. RNG that has been through these additional processes is interchangeable with conventional, geologic natural gas. Renewable gas facilities provide a suite of benefits, including cross-sector emission reductions, beneficial use of waste methane (with RNG), resiliency and fuel diversity through additional locally sourced supply options, local economic investment, local jobs, increased flexibility, and utilization of the natural gas system.

RNG is a developing resource for integration in the conventional natural gas system. States are at different stages in incorporating RNG into their statewide fuel resource mix. The availability of resources to support RNG development is one of the major factors impacting the incorporation of RNG. The American Gas Foundation's 2019 Renewable Sources of Natural Gas study, conducted by ICF, estimated national RNG potential as between 1,660 trillion Btu and 3,780 trillion Btu per year for pipeline injection by 2040. For comparison, the study states that residential consumption of natural gas is 4,846 trillion Btu nationally. Accordingly, while RNG cannot fully replace the use of geologic natural gas, potential RNG volumes are sufficient to be a

major part of an overall strategy to decarbonize the natural gas system, especially in those areas which have considerable agriculture components to their economies. In 2021, Spire also commissioned a feasibility study with ICF for sources of renewable natural gas in Missouri. The study indicated that the state of Missouri, including Spire’s operating territory, has strong RNG production potential.

The Missouri Public Service Commission recently published new rules for utilities to file renewable natural gas programs and to seek recovery of related costs. Additionally, existing gas quality standards were expanded to include requirements for RNG transportation and distribution to Missouri utility customers. This rulemaking provides guidance for Missouri utilities and will promote the incorporation of RNG into Missouri customers’ energy usage.

As the largest natural gas distributor in Missouri, Spire has a role in assessing the prudent inclusion of RNG in its supply plan to meet the needs of its customers. Spire plans to invest in cost-effective RNG supplies in Missouri and help bring RNG onto our distribution system. There are three projects currently being contemplated. Of these three projects, two will be interconnects with third-party developers (producing between 1.0 and 1.5 BCF/year) with gas flowing in 2025 and an RNG upgrading facility that Spire owns/operates (producing up to 0.5 BCF) is expected to be operational by the end of calendar 2026.

Spire recognizes the importance of providing customers with clean, safe, reliable, and affordable energy. As Spire seeks to advance decarbonization opportunities for customers, renewable gas will play a key role. Spire is well positioned to draw on its initial learnings from interconnecting projects under the current legislation and build on those learnings to make investments in renewable gas project opportunities to provide benefits to customers, communities, and the environment.

6.3.2 Hydrogen

The natural gas industry is also developing the ability to utilize hydrogen as an energy source. According to the U.S. Energy Information Administration, hydrogen is “useful as an energy source/fuel because it has a high energy content per unit of weight...” While hydrogen is not currently widely used as a fuel, it has potential for increased usage in the future. However, there are limits to how much hydrogen can be blended into the current gas system. The recent RNG related rulemaking discussed above included specific language regarding hydrogen gas programs. The Missouri Public Services Commission will evaluate any programs brought forward on a case-by-case basis.

Spire has performed initial assessments on this energy source and currently has no plans to bring it onto our distribution system at this time. However, we will continue to monitor other utility pilot programs and industry trends for potential future incorporation.

6.4 Non-pipeline alternative pilot

Non-Pipeline Alternatives (NPA) refers to using natural gas more efficiently to avoid needing to build traditional pipeline capital projects. NPA strategies may include initiatives, programs, or technologies such as demand response, energy efficiency, or beneficial electrification. These investments must be cost-effective and meet the specified gas system needs.

In addition to our efforts with RNG as an NPA, we continue to look for new demand side mechanisms to promote energy efficiency and conservation. These mechanisms may include new appliance technologies and new ways to recover energy efficiency gains. We regularly partner with GTI Energy to support the development of technologies to benefit our customers. Spire plans to work with our regulatory stakeholders to introduce a pilot opportunity in Missouri during its next general rate case.

We plan to expand our current energy efficiency efforts to encourage customers to adopt more efficient appliances and HVAC equipment. Spire will introduce a Natural Gas Heat Pump Pilot program as part of our residential rebate program to test out the technology with the goal of bringing the heat pumps to our market and will target low-income communities with this program. Natural Gas Heat Pumps are extremely efficient with an AFUE over 100% and the ability to work in extremely cold environments. This technology has a chance to help Spire in both our residential and C&I markets. The pilot will focus on installer training and education, field deployments to validate cost-effectiveness and environmental benefits while reducing market barriers, and coordination with larger industry efforts to gather additional insights into performance, cost-effectiveness, installation and commissioning best practices, and consumer education. Spire will continue to offer our current energy efficiency portfolio of rebate incentives and explore adding emerging technologies in the very near future to give our customers even more options to reduce their overall gas usage.

6.5 Future portfolio

Spire continuously evaluates ways to optimize our gas supply portfolio to improve resiliency and affordability. We monitor and evaluate industry developments and constantly seek more affordable, reliable and efficient ways to access natural gas. Our transport contract with the Spire STL Pipeline is a great example of successfully achieving these goals by bringing online a new transportation alternative for our Missouri East customers, which accesses affordable and abundant natural gas. This contract significantly improved resiliency and provided material cost savings during winter storm Uri.

Based on the results of the 20-year demand forecast prepared by ScottMadden and our current supply portfolios in our Missouri operating units as described previously, we do not forecast needing to add incremental transportation capacity at this time. The supply forecasts are shown below. With that said, our reserve margins are thinning in our Missouri West region so we'll be closely monitoring that to ensure we have adequate supply to reliably serve our customers. Additionally, as growth areas on our systems continue to expand from residential and commercial development, we may need to make changes to our gas supply portfolio or distribution system to accommodate for that growth. This may not ultimately result in incremental supply, but where the supply hits our system will be key and may result in portfolio changes or projects to ensure we're able to reliably serve our load in those growing areas.

East 20-year supply forecast

Winter Season >>>>	24 - '25	25 - '26	26 - '27	27 - '28	28 - '29	29 - '30	30 - '31	31 - '32	32 - '33	33 - '34	34 - '35	35 - '36	36 - '37	37 - '38	38 - '39	39 - '40	40 - '41	41 - '42	42 - '43	43 - '44	44 - '44
Firm Design Day Forecast	1,225,982	1,224,238	1,223,767	1,227,405	1,222,240	1,221,277	1,220,047	1,222,830	1,216,643	1,214,835	1,212,976	1,215,190	1,208,637	1,206,084	1,203,577	1,205,044	1,197,831	1,194,833	1,191,815	1,193,026	1,193,026
Min. Reserve @ 5%	61,299	61,212	61,188	61,370	61,112	61,064	61,002	61,141	60,832	60,742	60,649	60,760	60,432	60,304	60,179	60,252	59,892	59,742	59,651	59,651	59,651
Total Requirement with 5% Reserve	1,287,281	1,285,450	1,284,956	1,288,776	1,283,352	1,282,341	1,281,050	1,283,971	1,277,475	1,275,577	1,273,625	1,275,950	1,269,069	1,266,388	1,263,756	1,265,296	1,257,723	1,254,575	1,251,405	1,252,677	1,252,677
Firm Transport Contracted (City Gate)																					
Energy Transfer MRT (Forward Haul)	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779	480,779
Energy Transfer MRT (Back Haul)	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000
Spire STL Pipeline	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600	193,600
Mogas Pipeline	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600	145,600
Southern Star Pipeline	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300	30,300
Underground Storage (Lange)	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000	357,000
Confirmed Third Party FT	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	
Current Projected Available Capacity	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,280	1,287,281	1,287,282	1,287,283	1,287,284	1,287,285	1,287,286	1,287,287	1,287,288	1,287,288	1,287,289	1,287,290
Reserve Margin Percentage	5.00%	5.15%	5.19%	4.88%	5.32%	5.40%	5.51%	5.27%	5.81%	5.96%	6.13%	5.93%	6.51%	6.73%	6.95%	6.82%	7.47%	7.74%	8.01%	7.90%	7.90%
Resource (Shortfall)/Sufficiency	(2)	1,829	2,323	(1,497)	3,927	4,938	6,229	3,308	9,804	11,702	13,655	11,331	18,213	20,895	23,528	21,989	29,563	32,712	35,883	34,612	34,613
Future FT																					
Capacity Release	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future Projected Available Capacity	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,279	1,287,280	1,287,281	1,287,282	1,287,283	1,287,284	1,287,285	1,287,286	1,287,287	1,287,288	1,287,288	1,287,289	1,287,290
Reserve Margin Percentage	5.00%	5.15%	5.19%	4.88%	5.32%	5.40%	5.51%	5.27%	5.81%	5.96%	6.13%	5.93%	6.51%	6.73%	6.95%	6.82%	7.47%	7.74%	8.01%	7.90%	7.90%
Resource (Shortfall)/Sufficiency	61,297	63,041	63,512	59,874	65,039	66,002	67,232	64,449	70,636	72,444	74,304	72,091	78,645	81,199	83,707	82,241	89,455	92,454	95,473	94,263	94,264

West 20-year supply forecast

Winter Season >>>>	24 - '25	25 - '26	26 - '27	27 - '28	28 - '29	29 - '30	30 - '31	31 - '32	32 - '33	33 - '34	34 - '35	35 - '36	36 - '37	37 - '38	38 - '39	39 - '40	40 - '41	41 - '42	42 - '43	43 - '44	44 - '44
Firm Design Day Forecast	997,147	1,002,240	1,007,310	1,014,620	1,013,553	1,015,422	1,016,436	1,020,835	1,017,208	1,017,198	1,017,217	1,021,537	1,017,964	1,017,205	1,017,157	1,020,162	1,015,290	1,014,350	1,013,737	1,016,990	1,016,990
Min. Reserve @ 5%	49,857	50,112	50,366	50,731	50,678	50,771	50,822	51,042	50,860	50,860	50,861	51,077	50,898	50,860	50,858	51,008	50,765	50,718	50,687	50,850	50,850
Total Requirement with 5% Reserve	1,047,004	1,052,352	1,057,676	1,065,351	1,064,231	1,066,193	1,067,258	1,071,877	1,068,068	1,068,058	1,068,078	1,072,614	1,068,862	1,068,065	1,068,015	1,071,170	1,066,055	1,065,068	1,064,424	1,067,840	1,067,840
Firm Transport Contracted (City Gate)																					
Southern Star Pipeline	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512	860,512
Tallgrass Interstate Gas Transmission	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000
Panhandle Eastern Pipeline	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062	27,062
Rockies Express	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Confirmed Third Party FT	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	
Current Projected Available Capacity	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,575	1,052,576	1,052,577	1,052,578	1,052,579	1,052,580	1,052,581	1,052,582	1,052,583	1,052,584	1,052,585
Reserve Margin Percentage	5.56%	5.02%	4.49%	3.74%	3.85%	3.66%	3.56%	3.11%	3.48%	3.48%	3.48%	3.04%	3.40%	3.48%	3.48%	3.18%	3.67%	3.77%	3.83%	3.50%	3.50%
Resource (Shortfall)/Sufficiency	5,570	222	(5,102)	(12,777)	(11,657)	(13,619)	(14,684)	(19,303)	(15,494)	(15,484)	(15,503)	(20,038)	(16,285)	(15,487)	(15,436)	(18,590)	(13,474)	(12,486)	(11,841)	(15,256)	(15,255)
Future FT																					
Capacity Release	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future Projected Available Capacity	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,574	1,052,575	1,052,576	1,052,577	1,052,578	1,052,579	1,052,580	1,052,581	1,052,582	1,052,583	1,052,584	1,052,585
Reserve Margin Percentage	5.56%	5.02%	4.49%	3.74%	3.85%	3.66%	3.56%	3.11%	3.48%	3.48%	3.48%	3.04%	3.40%	3.48%	3.48%	3.18%	3.67%	3.77%	3.83%	3.50%	3.50%
Resource (Shortfall)/Sufficiency	55,427	50,334	45,264	37,954	39,021	37,152	36,138	31,739	35,366	35,376	35,358	31,039	34,613	35,373	35,422	32,418	37,291	38,232	38,846	35,594	35,595