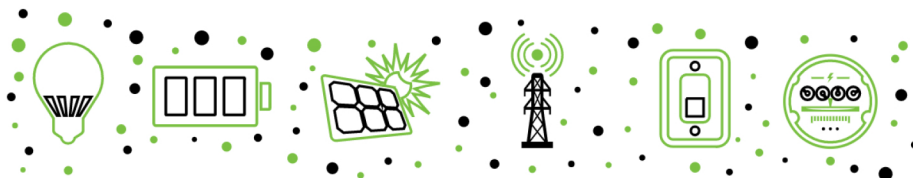


## WELCOME

Thank you for your participation in our online engagement! The slides in this session are filled with information about Limestone Ridge Project. Please read the materials, submit responses to the survey questions and share valuable input with us through our interactive comment map.



### How to NAVIGATE

Click the arrows on the right of your screen to go forward or the left to go backward. Use the navigation bar on the top or along the right side of your screen to revisit any part of the meeting.

### How to COMMENT

Provide a comment at any point by clicking the "Comment" button at the top right of your screen. Once finished, please make sure to hit "Submit" to confirm that your comment is sent to the project team. Close the form to continue through the slides.

*To prevent the further spread of COVID-19, Ameren has indefinitely postponed all public meetings and in-person events. Public engagement remains a top priority for our project team and we appreciate you joining us online to learn more about this project. Our team has engagement opportunities tentatively scheduled for later this fall, pending the status of COVID-19 restrictions.*

## The Project Team

### Ameren Transmission Company of Illinois

#### ➡ Show me another fact

Ameren will be supporting real estate, design and construction of the transmission line and substation. Ameren is adding the Whipple Substation in Cape Girardeau County right next to Trail of Tears Substation.

### Project Partners



Wabash Valley Power Alliance serves more than 321,000 members - including Citizens Electric Cooperation.

Wabash will be supporting the real estate, design and construction of the project substation.



Citizens Electric Cooperation serves more than 27,000 members (90% are residential), including Ste. Genevieve, Perry, eastern St. Francois and northern Cape Girardeau counties.

# Project Overview

The Limestone Ridge Project is a 138 kV transmission line and associated facilities located in Southeastern Missouri. The new line will connect two new substations in Perry and Cape Girardeau counties.

The project is proposed to be in service by December 2023.

## Project Benefits



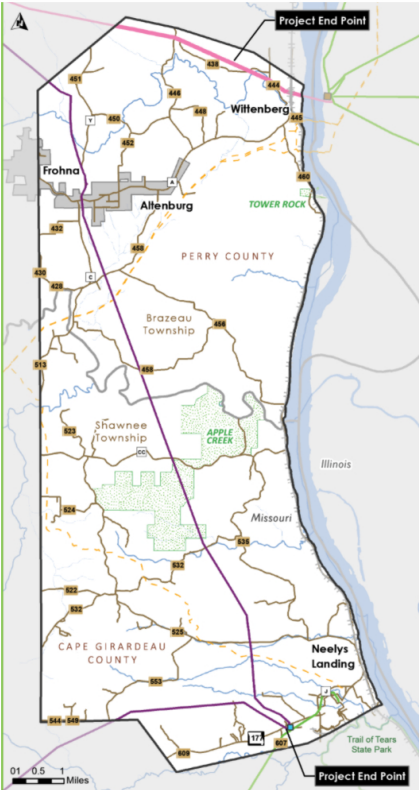
Improve energy reliability for local homes and businesses.



Provide additional energy support to local manufacturing facilities.



Support continued area economic growth.



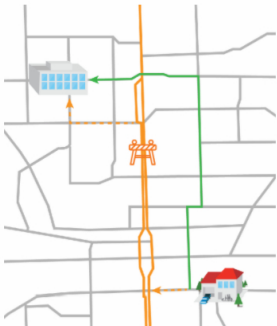
Click on the image to enlarge.

# What is energy reliability?

Energy is generated at power plants, wind turbines and solar panels and transferred along transmission lines to areas where the electricity is needed. Transmission lines are similar to highways in the way they allow energy to travel short or long distances.

## Moving energy is like road construction.

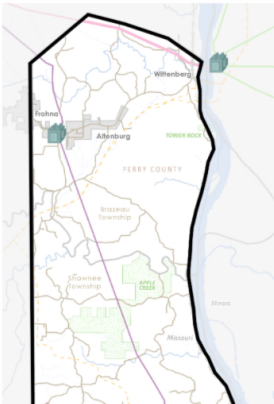
Think of reliability like road construction. When your main route is closed you review your options and find an alternative.



But, some of these alternatives aren't able to handle the increased traffic. This is no different with the energy grid! Unfortunately, the problems can be much worse when more than one transmission "route" is out of service - for example, if a large storm were to take out multiple transmission or distribution lines.

## Reliability is providing more options.

The Study Area includes substations and transmission lines that connect them but is primarily supplied by a single 161 kV transmission line originating from the Cape Girardeau area. If this line is out of service, homes and businesses in the area would be served by the lower voltage system that has a much lower capacity to serve existing and future energy needs.





By adding more capacity or "alternative routes", we improve local reliability, add more energy to the system and support continued economic growth for businesses, homes and communities in Southeast Missouri. The Limestone Ridge Project will connect the existing 161 kV system in the south to the 138 kV system in the north, to provide safe, affordable and reliable energy for the local region.

## Structure Design

This project anticipates using a typical 138 kV steel monopole structure that will have the potential of carrying a 345 kV line in the future. The structures will be approximately 100 to 160 feet tall with 7 to 12 foot-diameter foundations.

A 125 foot easement will be needed for the project.



[Click on the image to enlarge.](#)

## Project Schedule

📅 2020	📅 2021	📅 2022	📅 2023
<ul style="list-style-type: none"> <li>Collect data</li> <li>Gather public input</li> <li>Develop routes</li> </ul>	<ul style="list-style-type: none"> <li>Engineering &amp; permitting</li> <li>File Certificate with PSC</li> <li>PSC review process</li> </ul>	<ul style="list-style-type: none"> <li>Engineering &amp; permitting</li> <li>Field surveys</li> <li>Real estate acquisitions</li> <li>Preconstruction activities</li> </ul>	<ul style="list-style-type: none"> <li>Construction</li> <li>Project in-service (December)</li> </ul>

*All items shown are pending regulatory approvals. Schedule is subject to change.*

## Routing Process & Stakeholder Outreach

Click or tap on the steps below to learn more!

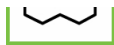


Ongoing  
Gather and Review Data

- We collect data from federal, state and local agencies, stakeholders, public comments and publicly-available data sources.



April – June 2020  
Study Area



- Formation of the Routing Team
- Development of Routing Criteria (see next slide) and identification of project parameters
- Identification of Study Area
- Review of publicly available information
- Virtual Community Representative Forums (June 23 and June 24)



#### ★ July - August 2020 Route Corridors

- Evaluation of stakeholder input
- Development of Route Corridors
- **Phase 1 Public Engagement – present potential route corridors (we are here!)**



#### September – October 2020 Preliminary Route Alternatives

- Evaluate input received from first phase of public engagement
- Development of Route Alternatives
- Phase 2 Public Engagement – present preliminary route alternatives (early Fall 2020)



#### Late Fall 2020 Identify, Analyze and Select Final Route

- Evaluate input received from second phase of public engagement
- Develop a final route



#### Early 2021 Prepare regulatory (or PSC) documents

- Once the regulatory documents are submitted, an official review process begins.

## Routing Criteria

Our goal is to take advantage of **Opportunities** while understanding and minimizing impacts to **Sensitivities** and adhering to **Technical Guidelines** and **Statutory Requirements**. We use these three categories to develop a preferred route.

### Opportunities

Linear features that are oriented in the direction of the project, such as:

- Field lines
- Property lines
- Section lines
- Roads
- Utility corridors

### Sensitivities

Area resources or conditions that can potentially limit transmission line development:

- Agricultural conflicts
- Airports/VOR
- Cemeteries
- Communication Towers
- Conservation Areas/Nature Preserves

### Technical Guidelines

Ameren also evaluates cost, construction, operation and maintenance when routing a transmission line. The following guidelines are considered when building transmission lines:

- Minimize length
- Ensure adequate access for construction and maintenance activities



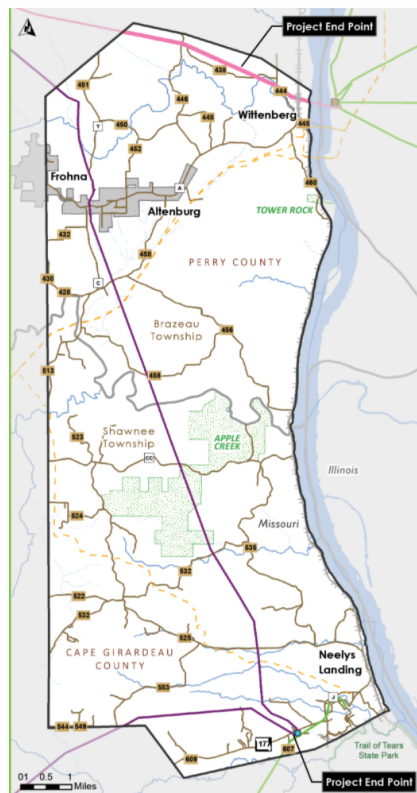
- Cultural Resources
- Planned Development (future)
- Floodplains (more difficult construction and many times have sensitive species)
- Forest
- Hospitals
- Karst Areas
- Levees
- Mines/Quarries
- Pipelines\*
- Railroads\*
- Religious Facilities
- Residences (especially large clusters of homes)
- Scenic Highway
- Schools/Daycares
- Streams/Wetlands
- Wells
- Comply with horizontal and vertical clearance requirements
- Maintain required or sufficient setbacks from roads and highways
- Minimize angle structures
- Minimize crossing of existing transmission lines
- Minimize impractical construction requirements (e.g. steep slopes)
- Minimize non-standard designs

*\*Linear features with additional precautions and studies needed.*

## Route Corridors

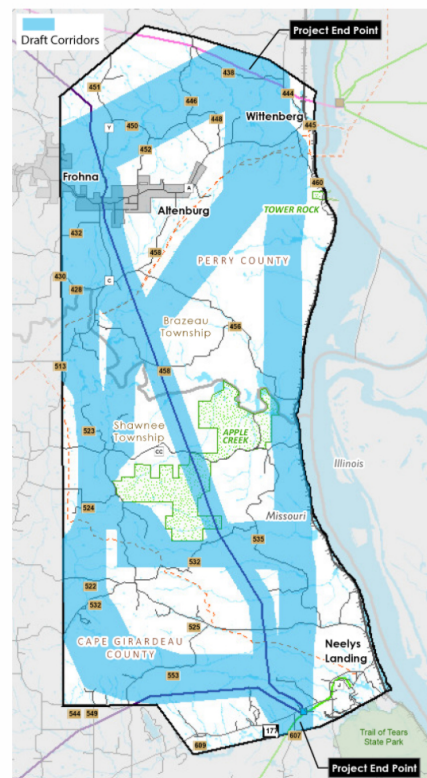
Our team started by using data from federal, state and local agencies, stakeholders and publicly-available data sources to create our study area. We take into account existing utility corridors, resource areas, natural environment data and field survey data to help minimize impacts while providing a feasible route opportunity.

We start with a study area that meets the purpose and need of the project.



[Click on the image to enlarge.](#)

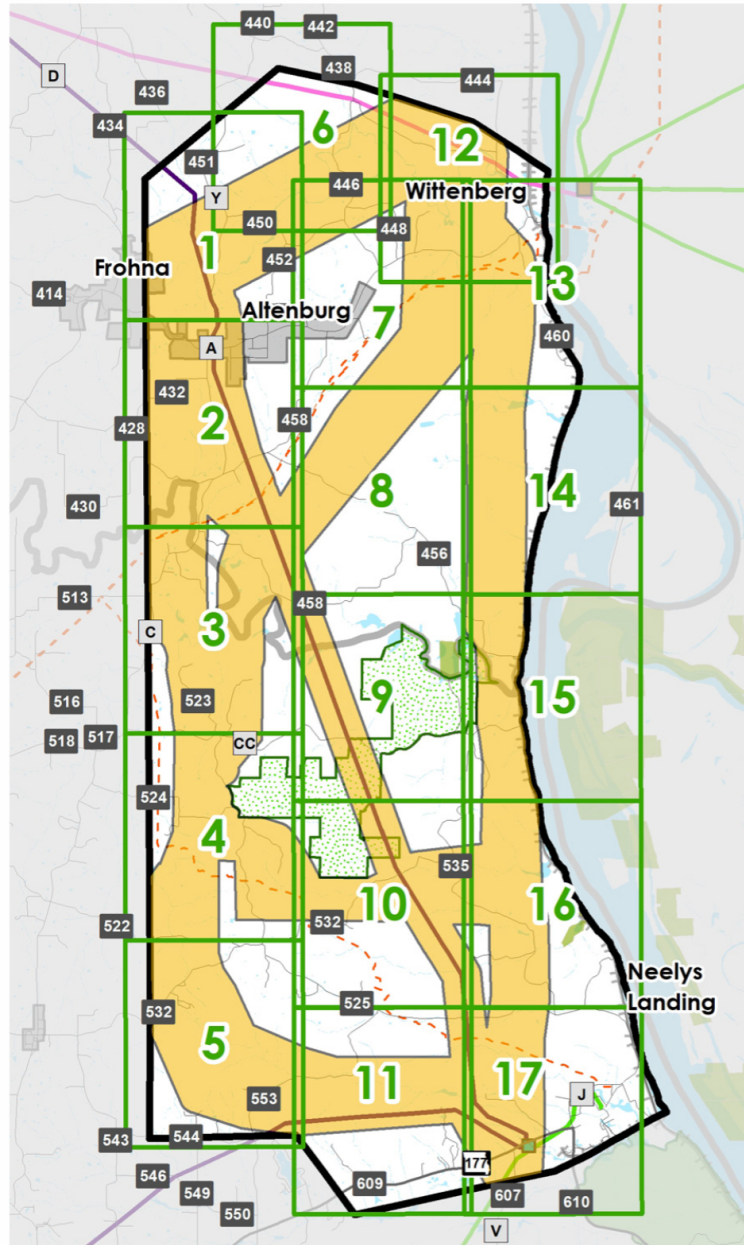
Then we take all that data and input from our stakeholders, evaluate it and create route corridors.



[Click on the image to enlarge.](#)

## Detailed Corridor Maps

Click or tap on the numbered squares below to view a detailed pdf map of the area.



## Input Opportunity! Routing Sensitivities

Select the top three Sensitivities that are most important to you and click "Submit" at the bottom of this page:

- ☐ Agricultural conflicts
- ☐ Airports/VOR
- ☐ Cemeteries
- ☐ Communication Towers
- ☐ Conservation Areas/Nature Preserves
- ☐ Cultural Resources
- ☐ Planned Development (future)
- ☐ Floodplains (more difficult construction and many times have sensitive species)
- ☐ Forest
- ☐ Hospitals

- ☐ Karst Areas (more difficult construction and many times have sensitive species)
- ☐ Levees
- ☐ Mines/Quarries
- ☐ Pipelines\*
- ☐ Railroads\*
- ☐ Religious Facilities
- ☐ Residences (especially large clusters of homes)
- ☐ Scenic Highway
- ☐ Schools/Daycares
- ☐ Streams/Wetlands
- ☐ Wells

*\*Linear features with additional precautions and studies needed*

Submit

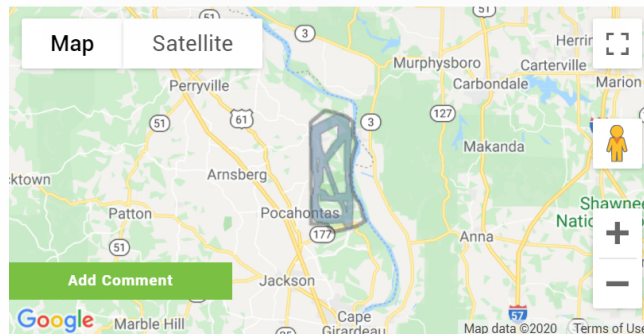
## Input Opportunity! Comment Map

Now that you've learned about the project, routing criteria and how the route corridors were identified, we'd like your input to identify opportunities and sensitivities within the Study Area.

The Route Corridors are shown on the map below.

Click on the 'Add a Comment' button below to provide our team information about your area. You can submit several comments. If you have a general comment – use the comment form button at the top of your screen.

For best results, view map in Chrome, Firefox, or Edge.



Consider the routing criteria when submitting your comments on the interactive map. Click on the boxes below for review.

### Opportunities

Linear features that are oriented in the direction of the project, such as:

- Field lines
- Property lines
- Section lines
- Roads
- Utility corridors

### Sensitivities

Area resources or conditions that can potentially limit transmission line development:

- Agricultural conflicts
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- Wells

*\*Linear features with additional precautions and studies needed.*

### Technical Guidelines

Ameren also evaluates cost, construction, operation and maintenance when routing a transmission line. The following guidelines are considered when building transmission lines:

- Minimize length
- Ensure adequate access for construction and maintenance activities
- Comply with horizontal and vertical clearance requirements
- Maintain required or sufficient setbacks from roads and highways

- Minimize angle structures
- Minimize crossing of existing transmission lines
- Minimize impractical construction requirements (e.g. steep slopes)
- Minimize non-standard designs

## Agency Coordination

Our project team coordinates with federal, state and local agencies regarding protected or sensitive resources in a project area when siting a new transmission line. Sometimes additional permits or approvals from these agencies are necessary to construct a project.

### Coordinating Agencies

U.S. Fish and Wildlife Service



U.S. Army Corps of Engineers



Missouri Public Service Commission



Missouri Department of Conservation



Missouri Department of Natural Resources



Missouri Department of Transportation



Cape Girardeau County



Perry County



## Real Estate

Once the Missouri Public Service Commission reviews and approves a final route (anticipated 2021), notification letters will be mailed to all landowners along the route. Ameren will request access to landowner's property to conduct land, environmental and civil (soil) surveys and studies.

Once a final route has been approved, Ameren will begin negotiations for acquiring easements.

### Easement Discussions

Project representatives will meeting with affected landowners to discuss:

- Land surveys and studies
- Proposed easement
- Right-of-way clearing
- Type(s) of structures
- Compensation

### What is an easement?

An easement is an interest or right to use the land of another for a specific purpose. Ameren and our partners will be seeking to obtain easements from affected landowners for the construction, operation and maintenance of the electric transmission line.

- Property restoration
- Damage settlements



[Click on the image to enlarge.](#)

## Preconstruction Activities

### Field Surveys

The field data we collect allows our scientists and engineers to plan and design the line with the information necessary for construction.

[Field Survey Handout](#)

### Wildlife Surveys

Wildlife surveys provide important data about the species living in the area, helping us plan how to minimize impacts to wildlife species and habitat.

### Archaeological Surveys

Archaeological surveys consist of walking the easement area to look for cultural artifacts on the ground. If artifacts are found, they are collected for further analysis.

### Wetland and Stream Surveys

The purpose of the surveys is to determine if these features can be classified as a wetland or a stream based on U.S. Army Corps of Engineers guidelines. The crew will collect data on vegetation, hydrology and soil characteristics.

### Soil Surveys

The design process requires information about the soil where the structure will be located. Collecting soil information is completed using the following steps by our geotechnical field survey crews:

- Gather samples from each site by digging a 4-6 inch wide hole into the ground, known as a soil boring. Soil boring areas will be filled back in after the survey.
- Review samples to determine the physical properties and layering of the soil.
- Use soil information to design each structure.

## Construction

### Construction Phases

A one-year construction season is anticipated in 2023. There will be six major stages of construction including:



Survey structure locations



Auger holes and pour foundation



Assemble structure on the ground



Lift and place structure on foundation



### What to expect during construction

We will do our best to minimize impacts during construction. However, the following temporary impacts may occur:

- Noise, dust and lights for nearby landowners
- Equipment, materials and construction crews located along the road and in project right-of-way
- Crews will be working during daylight hours with potential for some work to be completed after dusk
- Temporary, intermittent lane and road closures
- Removal of all incompatible vegetation within the easement area
- Installation of erosion control measures to reduce impacts to streams and wetland areas

We will provide more information before construction begins.





String wires



Restore easement  
and energize line

Construction of the transmission line occurs in phases and will not be constant on a landowner's property for a full year.

## Get Involved & Stay Updated

Thank you for your interest in the Limestone Ridge Project! It is important to understand the project, its benefits to Southeast Missouri and be informed of what's happening in your community.

Now is the right time to provide your feedback to Ameren Transmission as we begin creating preliminary route alternatives.

### Join our **MAILING LIST**

Our team has engagement opportunities tentatively scheduled for later this fall, pending the status of COVID-19 restrictions. Be sure to sign up for updates to be informed of scheduled engagement opportunities.

[Join the Mailing List](#)

### Submit a **COMMENT**

Submit a comment form by clicking the "submit a comment" button at the top of your screen. Routing comments will be accepted through August 21.

### Share **THIS INFO**

Please pass along the link to this online open house to family, friends and coworkers who live in the area.



(573) 232-3003