

Evergy, Inc.
JADE SUBSTATION
FAQ DOCUMENT
9/25/19

The construction of the Jade Substation is necessary to increase the reliability of the electric transmission service in the Marion County and the surrounding area. Below are answers to some questions you might have about this project.

WHAT'S THE PROBLEM?

The current 115kV transmission line is a radial line thus reducing serviceability and reliability of the electric transmission service in the area.

WHAT'S THE SOLUTION?

Evergy planning engineers have determined that a new substation is the key to solving the issues. The new substation will contain equipment that function as switches and breakers that will allow personnel to perform maintenance on the line and substation equipment without subjecting customers to unnecessary outages. It will also increase the reliability of the customers in Marion County and the surrounding area.

WHY BUILD THE SUBSTATION IN THIS PARTICULAR LOCATION?

Several important factors led to the selection of the proposed substation site:

1. *The site is centrally located to the existing 115kV transmission lines that will be connected to the substation.* The compatible use of adjacent properties is considered good land use practice and minimizes the length of new transmission lines that must be built.
2. *Willingness of the owner to sell.* Evergy prefers to deal only with willing sellers when purchasing substation sites.
3. *Size of the tract.* The fenced portion substation will occupy approximately 1.64 acres of the 7.30 acres site.
4. *Future expansion.* The proposed size of the substation will allow us to accommodate future load growth for businesses and housing developments that may want to come to the area.

WHAT'S THE SCHEDULE?

The improvements are anticipated to be finished in 2022 and construction of the new substation is scheduled to start as early as 2020. Upgrades to the transmission line will coincide with the construction of the substation.

WHAT DOES THIS SUBSTATION DO?

The main purpose of this substation is to transform power from a higher voltage to a lower voltage and control the power flow to other substations in the area. Bulk power is transported more efficiently over long distances when it is at very high voltages, so substations like this one serve as the point at which bulk power for the area is transformed to a lower voltage before being distributed to homes and businesses.

Inside the substation, the transformer changes the voltage from 115kV to 34.5kV and 115kV to 13.09kV to feed distribution circuits. The switches and breakers are used to turn power to individual circuits off and on just like in a home but on a larger scale. The electronic devices are used for monitoring and remote switching.

WHAT WILL IT LOOK LIKE?

The electrical equipment will be in a 230' x 310' fenced yard with crushed rock surface and drive. The fenced yard is approximately 1.64 acres with the remainder of the property (approximately 5.66 acres) used for green space and agricultural use.

The fence will be 8'-0" high chain link plus 3 strands of barbed wire for a total height of 9'-0". The tallest equipment within the substation is approximately 30' tall, with exception of the pole structures.

Yard lights will only be used during emergencies. However, if security becomes an issue, motion sensing security lights may be installed to temporarily illuminate the substation.

WILL THE SUBSTATION IMPACT FUTURE DEVELOPMENT OF NEARBY PROPERTY?

Based on similar projects in several other counties, we have found that home builders and developers who know about the plans for a future substation in advance are rarely reluctant to build on the adjacent lots. The value of property adjacent to a substation site has not been measurably different from similar property further away.

HOW WILL IT AFFECT PUBLIC FACILITIES AND SERVICES?

The substation will not generate waste, increased traffic, etc., and does not require water or sewer, so no additional services will be necessary. Ample parking space for maintenance vehicles is available inside the substation.

WILL THERE BE A LOT OF TRAFFIC?

Except during construction, the substation will be unmanned. An employee will go in to check on the equipment approximately once a month.

WHAT DO WE DO IF THERE IS AN EMERGENCY AT THE SUBSTATION?

Do the same thing you do for all other emergencies - call 911. Evergy will give the fire department our emergency contact information and a fire preplan so they will be able to respond quickly and correctly.

HOW WILL THE SUBSTATION IMPACT THE ENVIRONMENT?

A substation does not generate or produce a product, so it does not pollute air, land or water. A substation does not produce dust, fumes, odors, smoke or vibration.

The humming sound many people associate with a substation comes from the transformer. Today's transformers are significantly quieter than older models, and the sound dissipates rapidly with distance. With the buffer areas provided the sound level on adjacent properties should be minimal.

We have contacted the Kansas Department of Wildlife & Parks, the U.S. Fish & Wildlife Service, and the Kansas State Historical Society and asked them to assess the impact of our project on fauna, flora and nearby historical sites.

Standard sediment and erosion control measures will be used during construction. Crushed rock inside the substation and grass outside will provide permanent erosion control.

Evergy is pleased that the location and design of the proposed substation will ensure an adequate supply of electricity to our customers and yet minimize the impact on the surrounding area.