

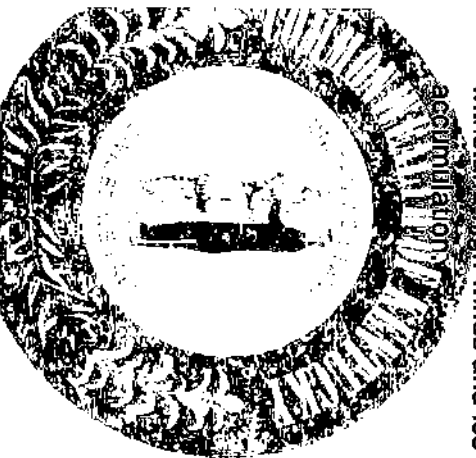
KV Power Up Public Meeting - July 6, 2010

Name	H.O.	Address	City	Phone	Email	Did you receive a letter via mail?
Chuck Stragg	H.O.					<input checked="" type="checkbox"/>
Alarence Newton	R					
Wena Nopp	H.O.	4754 Hwy 136 West				
Kenneth Knight	H.O.					
Sam Johnson	H.O.					
David Spainward	R					
David Caser	H.O.					
Miss Carney						
Spencer Ross						
Kelly Edmondson						<input checked="" type="checkbox"/>
Stell Edmondson						<input checked="" type="checkbox"/>
Quill V. Olson						
David Sellers						
Shirley F. ...						
Dennis ...						
Yvonne ...						
Linda ...						
George M. ...						
Chuck ...						



## Benefits to Kentucky Residents

- No construction cost to Kentucky residents!
- Increases electricity import and export capability including access to more renewable energy;
- Enhances electric reliability and adds flexibility to the power supply in high demand or peak periods by relieving some of the load on the existing transmission system; and
- Improves overall transmission system safety and reliability by creating an additional source of electricity through a transmission network with stronger structures. Structures are designed to withstand high winds and ice accumulation.



## Who is Vectren?

Vectren Corporation (NYSE: VVC) is an energy holding company headquartered in Evansville, Ind. Vectren's energy delivery subsidiaries provide gas and/or electricity to more than one million customers in adjoining service territories that cover nearly two-thirds of Indiana and west central Ohio. Vectren's non-utility subsidiaries and affiliates currently offer energy-related products and services to customers throughout the Midwest and Southeast. These include gas marketing and related services, coal production and sales, and energy infrastructure services.

To learn more about Vectren, visit [www.vectren.com](http://www.vectren.com).



## Who is Big Rivers?

Big Rivers Electric Corporation is a custom-owned, not-for-profit, generation and transmission cooperative (G&T) headquartered in Henderson, Ky. Big Rivers is owned by three not-for-profit member cooperatives that distribute retail electric power to more than 111,000 homes, farms, businesses and industries across 22 counties in western Kentucky. Big Rivers supplies the wholesale power needs of the member cooperatives and markets surplus power to non-member utilities and power markets. Big Rivers is a member of NERC and SERC.

To learn more about Big Rivers, visit [www.bigrivers.com](http://www.bigrivers.com).



**KY INDIANA**  
**POWER UP**

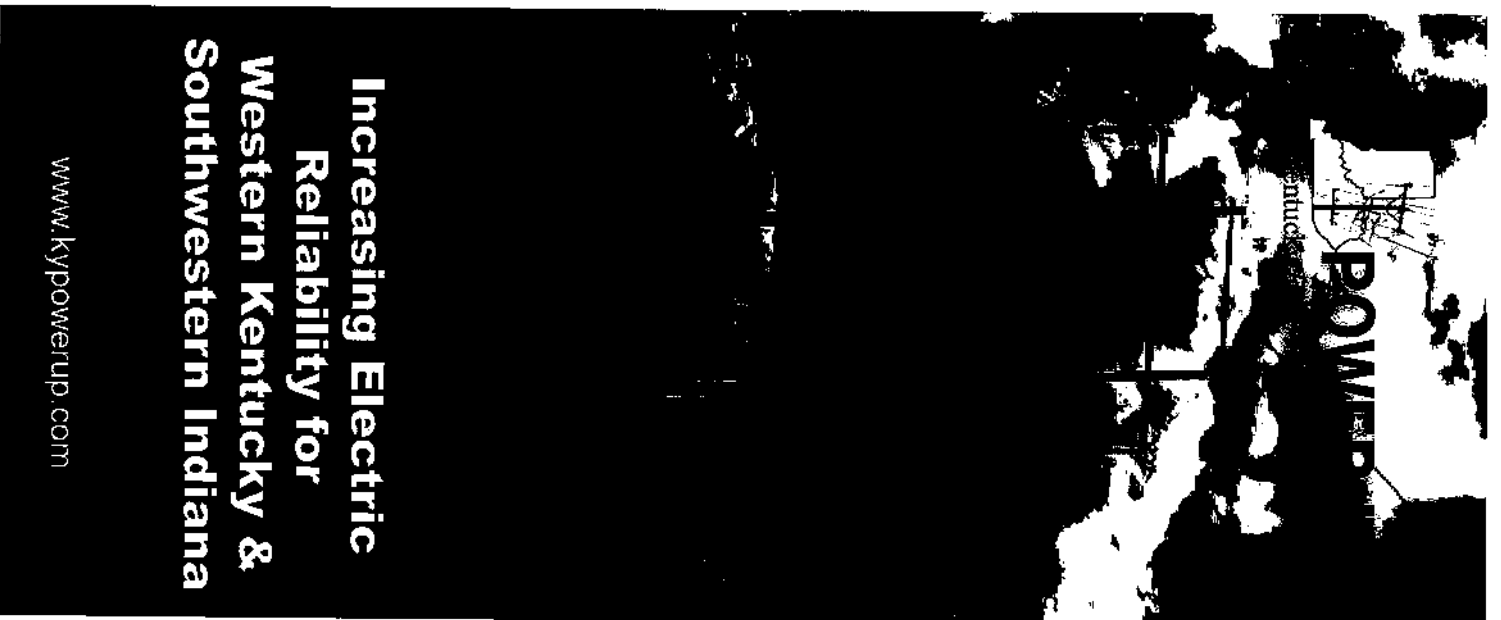
Indiana-Kentucky *Electric Transmission Line*

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**Increasing Electric  
Reliability for  
Western Kentucky &  
Southwestern Indiana**

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## Project Overview

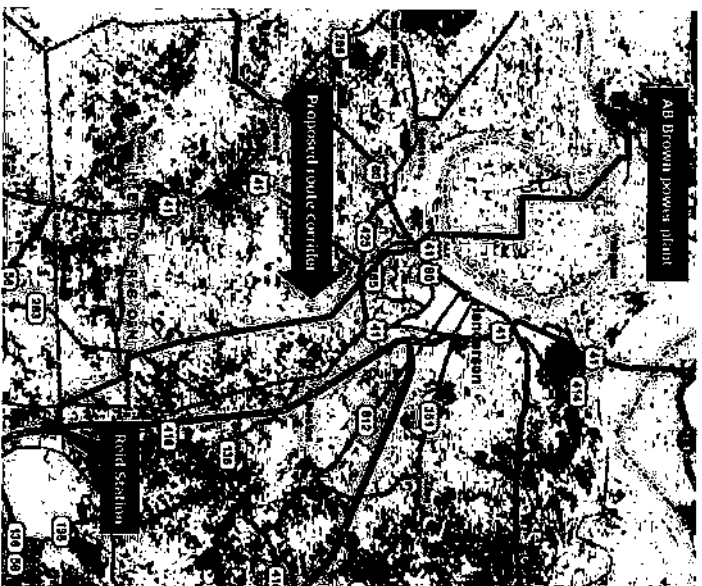
Vectren Energy Delivery (Vectren) has filed to construct a new transmission line connecting Big Rivers Electric Corporation's Reid Station in Webster County, Ky to Vectren's A.B. Brown plant in Posey County, Ind. This transmission line will reduce line overloads and increase reliability to the entire region.

## Why is this line needed?

- Electric system reliability is crucial in today's environment. Outages can result in significant economic impacts and public inconveniences.
- Identified congestion on the electric transmission system in southwest Indiana and western Kentucky can limit access to available generation capacity in the energy markets.
- Limiting access to low cost generation capacity can result in higher energy costs to the systems constrained by congestion, which results in higher costs for their customers.

Visit [www.kypowerup.com](http://www.kypowerup.com) for an online resource to this project.

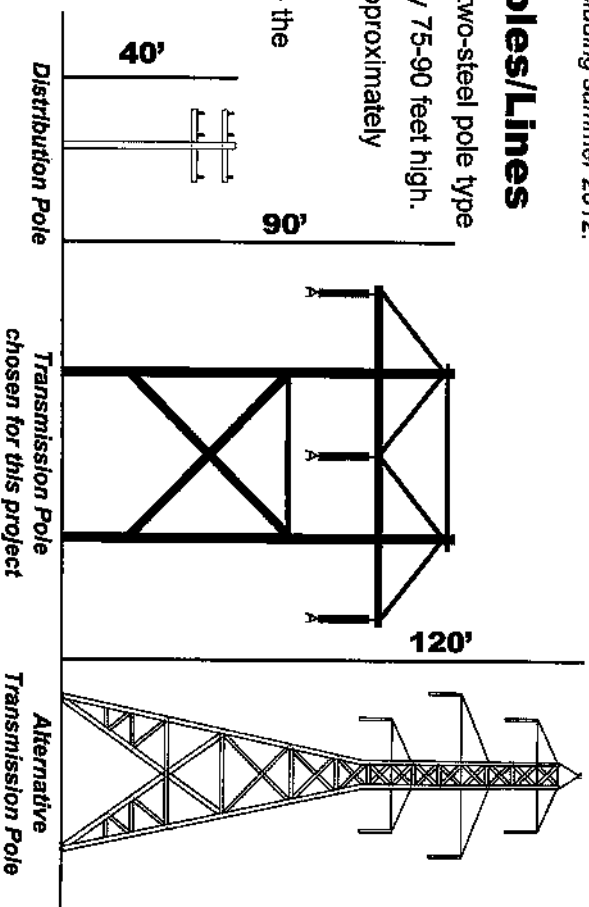
## Proposed Route



The Kentucky portion of the transmission line route will be approximately 13 miles long with construction beginning early 2011 and concluding summer 2012.

## Transmission Poles/Lines

- Most structures will be the two-steel pole type (cover photo) approximately 75-90 feet high.
- Typical structures will be approximately 900 feet apart.
- Steel poles will age to have the appearance of wood poles.



## Right of Way and Land Owner Information

- Right of way will typically be 150 feet wide and approximately 60% will be alongside existing easements.
- Fair compensation will be paid to landowners who may have transmission facilities on their property.
- Construction crews will work with land owners for clearing trees and disposal of the wood.
- Vectren and its contractors will perform all environmental soil erosion mitigation during the construction.
- The landowner will be compensated and kept whole for any losses of crop value or similar short-term impacts during construction.

## **What Happens Next?**

In early Fall 2010, you may be contacted by appraisers, surveyors, ecologists and engineers, as they gather essential information for completing plans, caring for the environment and determination of impacts for the project. While much of the preliminary design is underway, much remains to be done. When the final project design is completed and ready for construction, you will be visited by a Land Agent.

Each parcel owner whose property may be visited will be contacted in advance by letter, email and/or phone and will have appropriate identification. If a person cannot produce identification to your satisfaction, please do not allow them to come into your home or business, and contact the police. Participating companies and organizations are KYPOWERUP, Big Rivers Electric, Vectren Energy, Qk4 Engineering and Red Wing Environmental Services.

### **Each of the above groups performs a specific function:**

The Appraiser will assess the impacts to properties along the line and will identify like properties and values. While they may not visit every parcel, they will study similar properties as a group. If you have information you wish to share with them prior to a visitation, please feel free to contact KYPOWERUP, at the above phone number or via email.

A Surveyor's job is to accurately describe and determine not only the property areas affected by the project, but to verify information from official records on file in the Court House. This will be the basis of determining the land over which, an easement may be requested. You will still own and have use of your lands. While we will need to be on your property during engineering, construction and design; for the most part, our future disturbances are normally limited only for maintenance purposes. We are especially mindful of crops and livestock.

An Ecologist will assess impacts to wetlands, animal species and note any unusual environmental issues of concern.

Our Engineers will receive the information obtained through survey, environmental, design standards and regulations, and then complete the final plans to make the project ready for construction. They may make special studies of soils and/or adverse conditions to determine the most effective means and methods of construction.

Once the above groups are nearing completion of their work, you will be visited by a Land Agent. The agent will be prepared to review the plans and the easement requirements in detail. They will be prepared to make an offer for the requested easement. The job of the agent is to answer your questions and concerns, and will have the ability to close the transaction at that time!

**We hope this information is helpful and we look forward to working with you on this important regional electric reliability project!**



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# Proposed Transmission Line Structures

Typical transmission line structure  
(not selected for this project)

120'

Pole structure chosen  
for this project

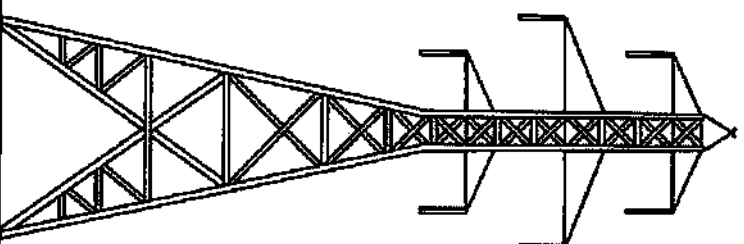
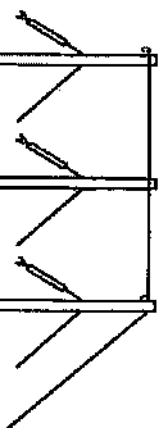
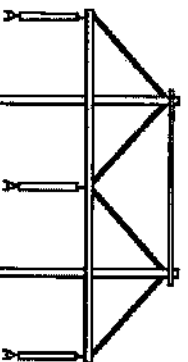
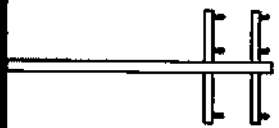
≈90'

3-pole structures would be utilized for  
some line angle and dead end locations

≈90'

Typical distribution line pole found  
in residential neighborhoods

≈40'



# Process Overview

Summer 2010

Initial Site Visits  
 Initial Meetings With Property Owners

Meetings With Property Owners

Final Site Visits  
 Final Meetings With Property Owners

Final Site Visits  
 Final Meetings With Property Owners

Final Site Visits  
 Final Meetings With Property Owners

Final Site Visits  
 Final Meetings With Property Owners

Summer 2012



**and how could it affect me?**

**EMF**

**What is**

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# Electric & Magnetic Fields (EMF)

EMF are found wherever there is electricity, whether it is wiring, appliances, computers, or power lines. Electric fields are associated with voltage, while magnetic fields are associated with the flow of current. Exposure to any EMF source (e.g., a blender, computer, or power line) is determined by how strong the field is at its source, how far away you are from the source, and how long you stay near the source. The strength of EMF drops off quickly as you move away from the source.

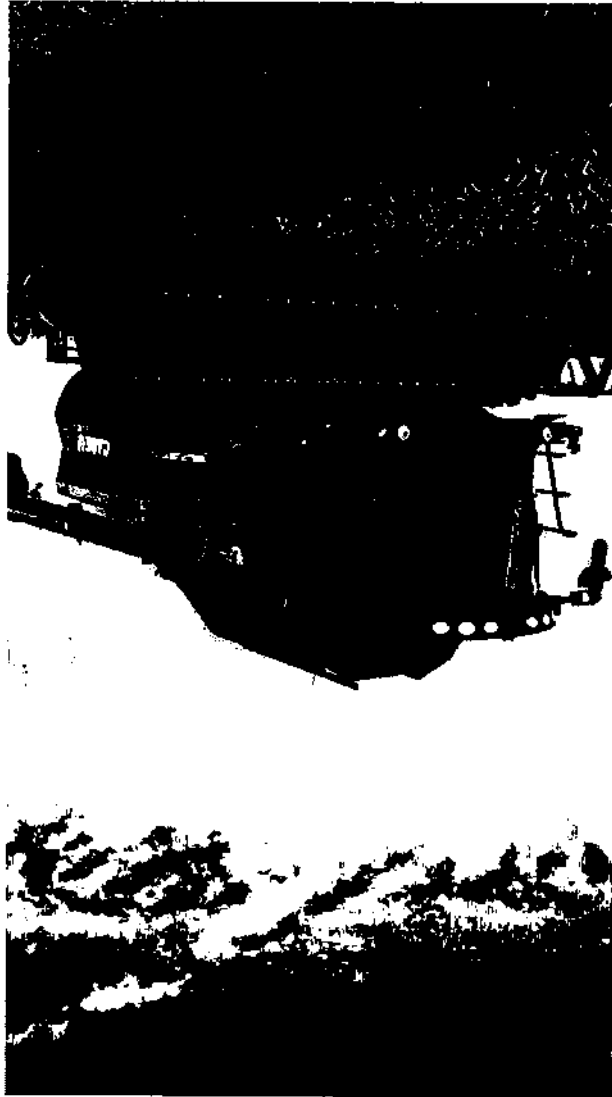
Utility companies joined with many others during the 1990s to provide funds for the National Institute of Environmental Health Sciences (NIEHS) to run the EMF Research and Public Information Dissemination Program so that independent scientists could determine whether exposure to EMF involves a risk to human health.

At the completion of the extremely low frequency (ELF) EMF research program in 1999, the Director of the NIEHS reported to Congress that: "The probability that ELF-EMF exposure is truly a health hazard is currently small. The weak epidemiological associations and lack of any laboratory support for these associations provide only marginal, scientific support that exposure to this agent is causing any degree of harm."

The Institute of Engineering and Technology also concluded overall that "the balance of scientific evidence to date still does not indicate that harmful effects occur in humans due to low-level exposure to EMFs."

Sources: EMF - Electric and Magnetic Fields Associated with the Use of Electric Power: Questions and Answers (PDF, 11.4 MB; National Institute for Environmental Health Safety and the National Institutes of Health, June 2002.)  
UK Institution of Engineering and Technology, *The Possible Harmful Biological Effects of Low-Level Electromagnetic Fields of Frequencies up to 300 GHz*; <http://www.theiet.org/publications/iee/bepag/postal02final.pdf>

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**Global Positioning System (GPS)**  
**Will transmission lines interfere with GPS?**

# Global Positioning System (GPS)

According to a study by the Institute of Electronics and Electrical Engineers (IEEE), power line conductors are unlikely to cause signal degradation to GPS signals. The study noted no loss of satellite signals as the GPS receiver moved across a power line easement. A GPS receiver relies on a dispersed constellation of satellites - at least four and often more.

A series of measurements to evaluate GPS signal reception quality under power lines was performed in both fair and foul weather across easements of two different 345-kV transmission lines like those that will be built in your area. The signal strength of a GPS carrier was logged for each satellite in view at one-second intervals while driving across the 345-kV easements and directly under the transmission lines. The results revealed no practical change in each satellite's signal strength.

Known potential causes of GPS satellite signal interference:

- Out-of-band emissions by radio, TV, communications and radar transmitters
- Gasoline engine ignition systems
- TV and computer monitors
- Fluorescent lights
- AC-DC converters
- Generators

*Source: Use of Global Positioning System (GPS) Receivers Under Power-Line Conductors (IEEE Transactions on Power Delivery, Vol. 17, No. 4, October 2002.)*

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**Will transmission lines  
interfere with electronic  
devices?**

## **Electronic Devices**

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## **Electronic Devices**

There are **NO** reports of transmission lines affecting common electronic devices such as:

- Cable Television
- Satellite Television
- Cardiac Pacemakers
- Wireless Internet Systems
- Cellular Phone Service

However, on rare occasions TV reception problems may occur when using conventional analog receivers and can often be solved by either changing or relocating the television antenna.

There have also been reports of interference with AM and CB radio reception, particularly when directly under any power line. The amount of interference depends on the type of radio and antenna.



**What is being done to  
protect the local residents  
and environment?**

## **Environment & Safety**

*Indiana-Kentucky Electric Transmission Line*



## **Public Safety**

The safety of stakeholders is a top priority for the Vectren team. The transmission line will be designed and constructed to meet all applicable regulations, standards and codes, which have been developed with a view to ensuring public safety. Vectren has Emergency Response Plans (ERPs) to respond to events such as tornados and other emergency scenarios. These plans are coordinated with local municipal authorities including fire and police departments. In addition, Vectren has both internal crews and contractor crews ready to respond in the event of a downed line or pole.

## **Environment**

Major environmental features, such as protected areas, environmentally significant areas and species at risk have been identified on the potential routing maps as constraints to be avoided when possible.