

# GRAND PRAIRIE GATEWAY PROJECT

ComEd's proposed Grand Prairie Gateway Project is a new 345kV electric transmission line to be constructed between ComEd's existing substations near the communities of Byron and Wayne. The new line will connect these substations and travel across the counties of Ogle, DeKalb and Kane. The proposed transmission line will include single-pole steel structures.

## IMPROVED ELECTRICITY DELIVERY

High voltage electricity is moved across the electric grid by transmission lines. Just like highways that don't have enough lanes, transmission lines with insufficient capacity become congested, reducing efficiencies and increasing costs of delivering power. PJM Interconnection, the independent regional transmission grid operator and planner for the ComEd service territory, has approved the Grand Prairie Gateway Project as the best solution for addressing current system congestion and ensuring the continued efficient flow of electricity across northern Illinois.

## PROJECT BENEFITS

The addition of this new transmission line will allow for more efficient flow of electricity across the grid, alleviating congestion and reducing costs. The proposed line adds a third west-east path across the ComEd territory, which provides ComEd with more options to meet customer needs.

## TRANSMISSION LINE SITING PROCESS

The project requires approval by the Illinois Commerce Commission (ICC) following a public proceeding. This summer and fall, ComEd will conduct a series of public open houses in Ogle, DeKalb and Kane counties. These events will be advertised in local newspapers and a website ([ComEd.com/GrandPrairieGateway](http://ComEd.com/GrandPrairieGateway)) will provide additional information and updates.

Through an integrated process incorporating input from the public and other community stakeholders, ComEd will identify a primary route for the transmission line and at least one alternate route within the project study area (see reverse side). The final route must be approved by the ICC.

## PROJECT TIMELINE

ComEd expects to file a request for approval with the ICC before the end of 2013, and the Commission has up to 225 days to announce its decision. The project is anticipated to be completed and begin service by June 2017.

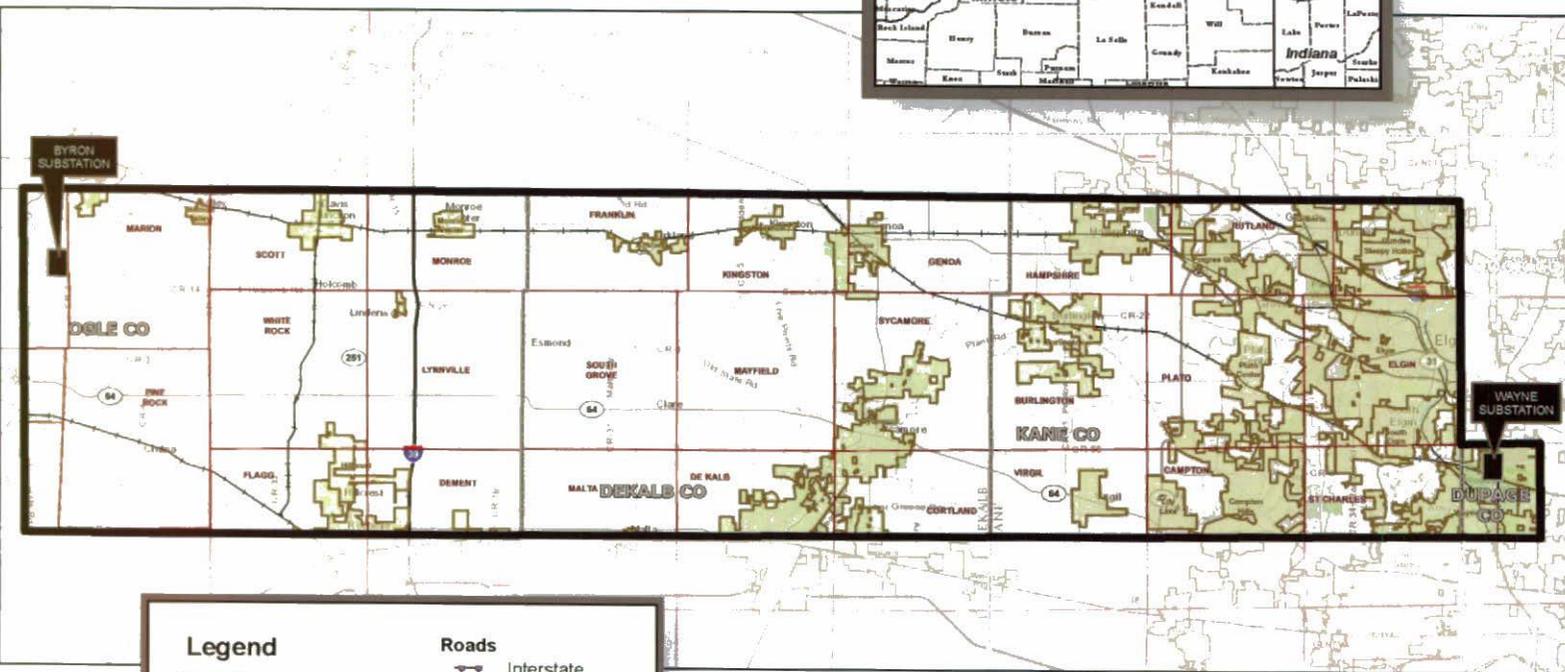
## FOR MORE INFORMATION

Please visit [ComEd.com/GrandPrairieGateway](http://ComEd.com/GrandPrairieGateway) or call the project hotline at 1-877-279-4732.

**ComEd**

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## TRANSMISSION LINE STUDY AREA



**Legend**

Project Study Area	<b>Roads</b>
Existing Substation	Interstate
Township Boundary	US Highway
County Boundary	State Highway
Municipal Boundary	

### FOR MORE INFORMATION

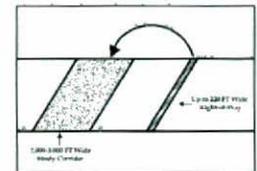
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**Grand Prairie Gateway Project**

**Potential Route Corridors**

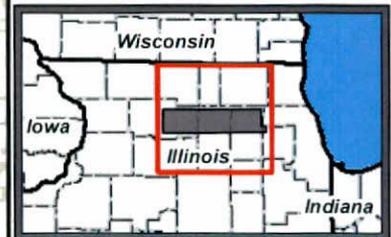
**Legend**

-  Potential Route Corridors
-  Existing Substation
-  Project Study Area
-  Township Boundary
-  County Boundary
-  Municipal Boundary
-  Railroad
- Existing Transmission Line**
-  345kV
-  138kV
- Roads**
-  Interstate
-  US Highway
-  State Highway



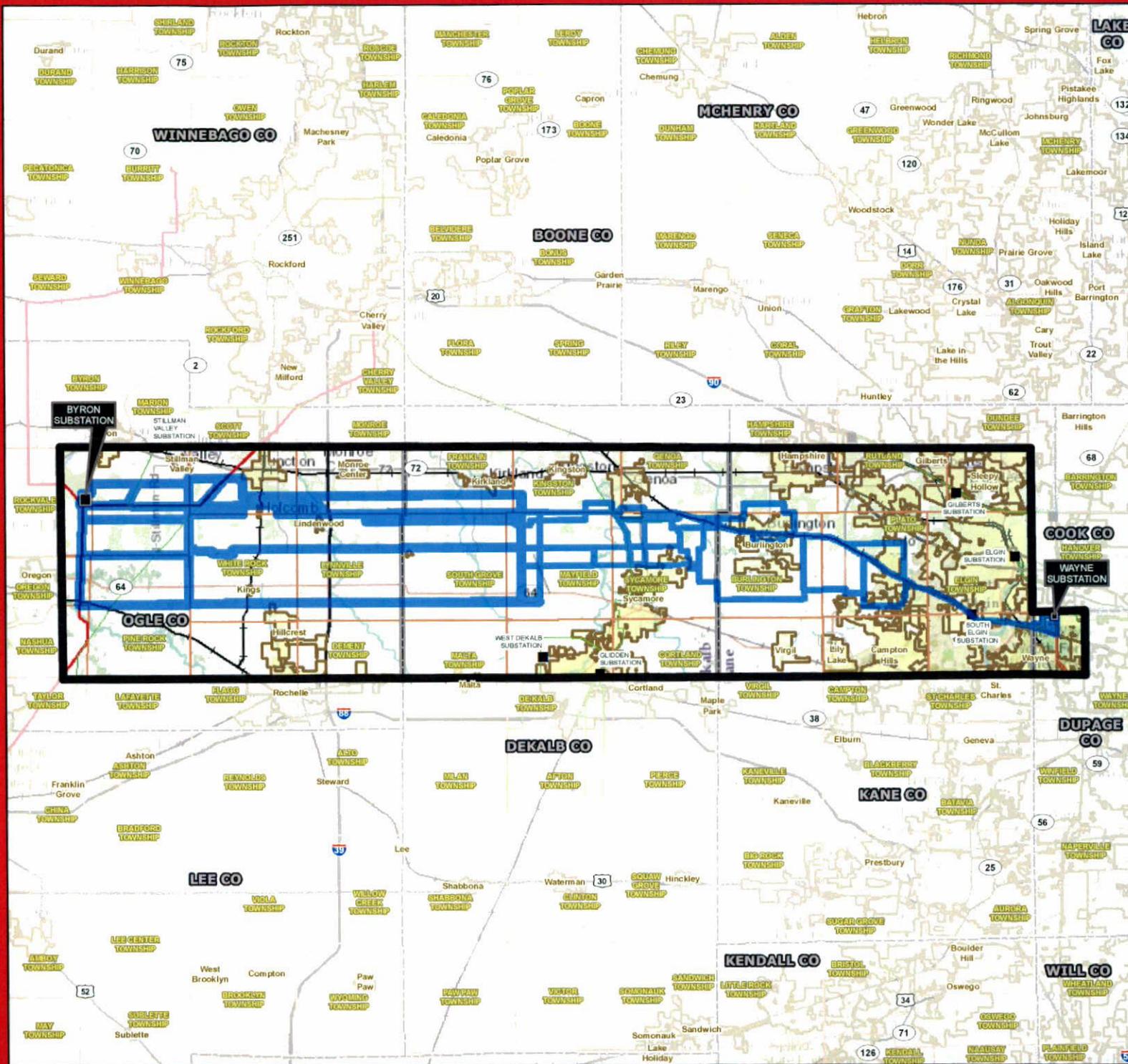
The potential route corridors, as depicted, represent broad study corridors that are being further evaluated. The corridors range from 2,000 feet to 3,000 feet in width for study purposes. These corridors are not transmission line routes. They are simply broad areas within which we intend to analyze for purposes of identifying potential routes. The width of the right-of-way that ComEd requires to install the transmission lines will be up to 220 feet.

1 in = 8 miles



Drawn by: AJPHELPS

Date: 8/6/2013



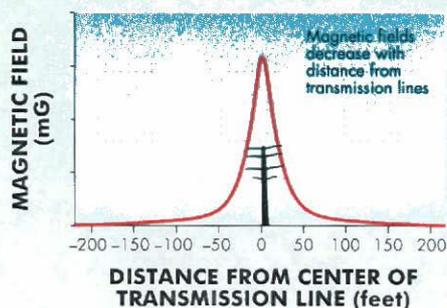
## The What, Where and Why of EMF

Electric and magnetic fields surround anything that generates, transmits, or uses electricity. When generating plants produce electricity, current flows through transmission and distribution lines and provides power to the many appliances and electrical devices we use in our homes, schools, and workplaces.

**Electric fields** are produced by voltage (i.e., the difference in electrical potential between two points of an electrical circuit). Electric fields are measured in units of kilovolts per meter (kV/m).

**Magnetic fields** result from the movement of current and are measured in units called milligauss (mG).

Both electric and magnetic fields decrease rapidly in strength with increasing distance from the source, just as the heat from a radiator diminishes as one walks away from it. More research has been conducted on magnetic fields because, among other reasons, most objects block electric fields.



Our body relies on electrical signaling to perform functions, such as the beating of our heart. These electrical communication systems have been the subject of research for decades. Therefore, scientists have a great deal of knowledge about how EMF in the environment can induce tiny currents and voltages in the body.

## WHO International EMF Project

In June 2007, the World Health Organization (WHO) released a weight-of-evidence review as part of its International EMF Project. The goal of the Project was to provide international guidance on EMF.

The conclusions of the WHO review are consistent with previous reviews. The WHO did not conclude that exposure to either electric fields or magnetic fields at the levels typically encountered in our environments are the cause of any adverse health effects. Therefore, the WHO did not recommend exposure standards at these levels or taking any drastic steps to reduce our exposures. Since 2007, reviews conducted by other national and international scientific agencies have confirmed the WHO's findings. In their current summary of health research, the WHO states:

**Based on a recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields.**

**Even the exposure of people living in the vicinity of high voltage transmission lines differs very little from the average exposure in the population.**

(<http://www.who.int/peh-emf/about/WhatisEMF/en/index1.html>)

### Other Information Resources:

- World Health Organization, International EMF Project  
<http://www.who.int/peh-emf/about/en>
- National Institute of Environmental Health and Safety (NIEHS)  
<http://www.niehs.nih.gov/health/topics/agents/emf/>
- National Cancer Institute (NCI)  
<http://www.cancer.gov/cancertopics/factsheet/Risk/magnetic-fields>

**ELECTRIC  
and MAGNETIC  
FIELDS (EMF)  
and HEALTH**

Power lines are a source of electric and magnetic fields (EMF). This brochure summarizes the conclusions that panels organized by authoritative scientific organizations have reached about whether EMF can effect health.

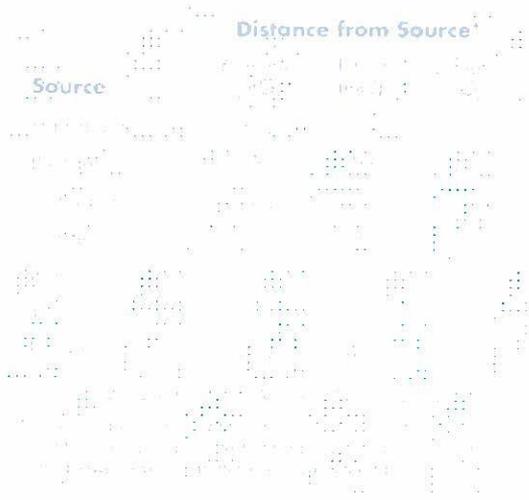


## Our EMF Environment

Since electricity is used to do so many things, EMF can be measured nearly everywhere. In our homes, for example, magnetic fields are generated from appliances, wiring, current flowing on water pipes, and (if they are close enough) nearby power lines.



The strongest sources of magnetic fields indoors are electrical appliances. The magnetic fields produced by household appliances vary greatly, as shown in the table below.



At very high strengths, electric and magnetic fields induce currents in our body that can lead to the stimulation of tissue, causing a shock-like effect. Exposure guidelines have been developed by scientific agencies to protect against this effect. Our home environments contain far lower EMF levels, so these shock-like effects are not a concern. It is our exposure to much lower magnetic field levels and the possibility of long-term health effects that has been the subject of hundreds of studies conducted over the past 35 years.

## The Scientific Review Process

The first step to answering the question of whether an exposure causes an adverse effect on health is to study the effects of the exposure in different ways.

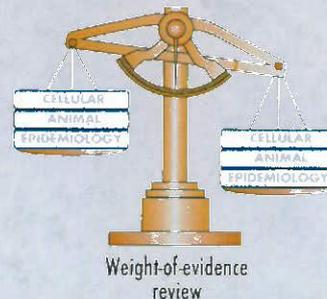
- Epidemiologists conduct studies on people, where they observe whether persons with a disease are more likely to have a history of a particular exposure (**epidemiology studies**).
- Researchers in laboratories study whether high exposure under controlled conditions cause increased rates of disease in animals (**animal studies**), or initiate a disease process in isolated cells and tissues (**cellular studies**).

Scientists reach conclusions about the effects of exposure by examining all of the research together, giving more weight to studies of better quality. This process is called a weight-of-evidence review.

Studies are not given equal weight in a weight-of-evidence review because they vary widely in terms of the information provided and validity of their methods. Each study is evaluated, and a final conclusion is reached by weighing the total body of research. It is essential to consider epidemiology, animal, and cellular studies together because they provide complementary pieces of information.

## Weight-of-Evidence Reviews on EMF

Since the late 1970s, scientists have conducted studies to understand whether long-term exposure to magnetic fields at low levels could cause long-term adverse health effects. The first group of studies looked at childhood cancer, and over time epidemiology studies were conducted on a variety of diseases.



## Timeline of Scientific Reviews

1995	National Institute for Environmental Health Sciences
2002	International Agency for Research on Cancer
2004	National Health and Environmental Effects Research Administration
2007	World Health Organization
2009	Department of Health and Human Services, National Institute for Environmental Health Sciences
2010	Environmental Protection Agency, National Institute for Environmental Health Sciences
2012	Health Research Panel, American Institute of Biological Sciences
2013	Swedish Radiation Safety Authority

As illustrated in the above timeline, numerous reputable scientific organizations in the United States and abroad have assembled panels of scientists to conduct weight-of-evidence reviews.

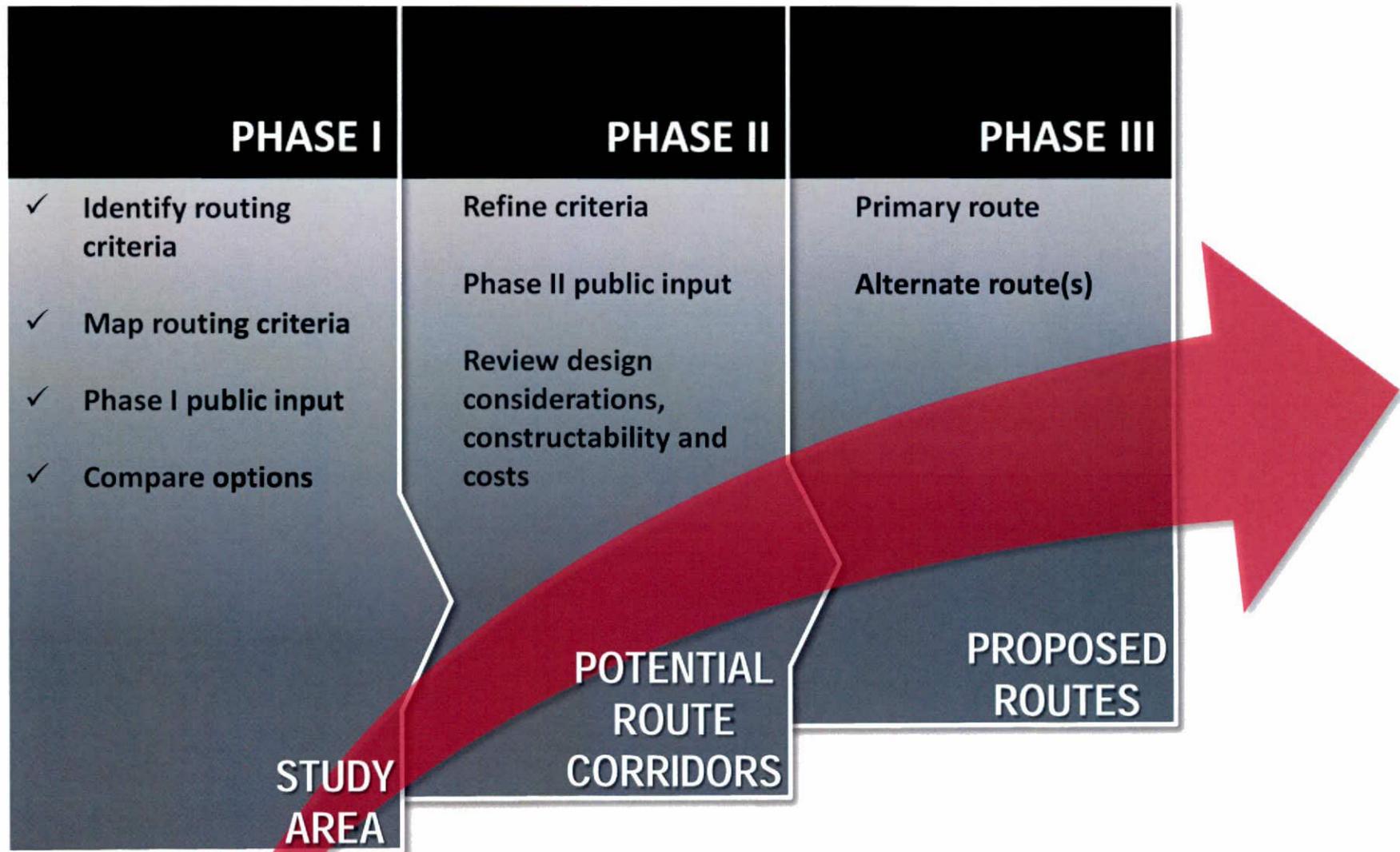
## Conclusions

- None of the panels concluded that EMF is the cause of any long-term, adverse health effect.
- Some epidemiology studies of childhood leukemia reported statistical associations between childhood leukemia and estimated daily average exposure to magnetic fields greater than 3–4 mG. The review panels, however, did not conclude that magnetic field exposure was likely to be a cause of childhood leukemia, because of the uncertainty associated with epidemiology findings in general and the lack of support from animal and cellular studies.
- No consistent increases in cancer were reported in animal studies, nor did researchers conducting cellular studies find a mechanism that would explain how magnetic fields could initiate disease at the cellular level.

The conclusions of these review panels have been similar. The conclusions of the World Health Organization (WHO) weight-of-evidence review are discussed on the back page.

# GRAND PRAIRIE GATEWAY PROJECT

## ROUTE DEVELOPMENT AND SELECTION PROCESS



# GRAND PRAIRIE GATEWAY PROJECT

## PUBLIC PROCESS

2013

STUDY AREA

Phase I  
SWG



JUN

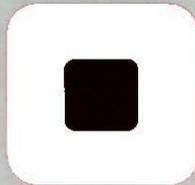
Phase I  
OH



JUL

POTENTIAL  
ROUTE  
CORRIDORS

Phase II  
SWG/OH

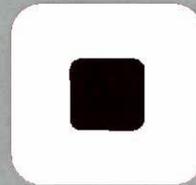


AUG

SEP

PROPOSED  
ROUTES

Phase III  
SWG/OH



OCT

FILE

NOV

SWG Stakeholder Working Group  
OH Open House

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# GRAND PRAIRIE GATEWAY PROJECT

## ILLINOIS COMMERCE COMMISSION (ICC) REVIEW PROCESS

### Certificate of Public Convenience and Necessity (CPCN)



Once the Petition is filed, the ICC will issue a docket number.

For more information, visit the ICC Web site at <http://www.icc.illinois.gov>.

Docket documents can be viewed via the ICC e-Docket Web site at <http://www.icc.illinois.gov/e-docket>.

 Pre-Route Selection  
 Post-Route Selection

\*Landowners from whom an easement may be required.

\*\*Opportunity for intervening stakeholders and landowners to present evidence in support of, or in opposition to, the proposed Project or route occurs in the context of the evidentiary proceedings.

**ComEd's proposed Grand Prairie Gateway Project is a new 345kV electric transmission line to be constructed between ComEd's existing substations near the communities of Byron and Wayne. The new line will connect these substations and cross the counties of Ogle, DeKalb, Kane and DuPage.**

**We are seeking your input and feedback as it relates to the project.**

**1** Name \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Representing (if any) \_\_\_\_\_  
E-mail Address \_\_\_\_\_  
Today's Date \_\_\_\_\_

**2** Please identify the categories which apply to you.

Renter/Leaser	_____
Resident Property Owner	_____
Non-Resident Property Owner	_____
Business Owner	_____
Elected Official	_____
Other	_____

**3** How did you hear about this meeting?

Mailer       Word-of-mouth       Newspaper  
 Project Website       Other \_\_\_\_\_

**4** What key factors should be addressed as it relates to this project?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**5** What routing criteria are most sensitive to you?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**6** In your opinion, were the project benefits adequately explained? If not, what additional information is needed?

\_\_\_\_\_  
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\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_

**7** After attending this meeting, is there any additional information that you'd like to receive regarding the project?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**8** Please provide any other comments for this project.

\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**9** Was this an effective way to reach you with information?  
Yes \_\_\_\_\_ No \_\_\_\_\_

*Thank you for your participation!*

Please leave your completed form at the comment table or fold and mail.

For more information, please visit  
[ComEd.com/GrandPrairieGateway](http://ComEd.com/GrandPrairieGateway) or  
call the project hotline at 1-877-279-4732.

Please fold along this line.

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Postage

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Attn: Grand Prairie Gateway Project  
Three Lincoln Centre  
Oakbrook Terrace, Illinois 60181-4260