

# EASTERN FORT WAYNE TRANSMISSION LINE REBUILD PROJECT

## WELCOME TO OUR VIRTUAL OPEN HOUSE

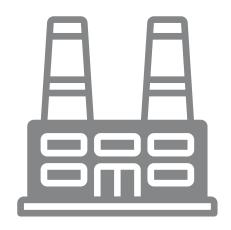
As a result of the COVID-19 pandemic and social distancing recommendations made by the Centers for Disease Control and Prevention (CDC), Indiana Michigan Power invites you to attend this virtual open house in order to minimize in-person contact. Indiana Michigan Power remains committed to listening to your concerns and answering your questions, but we are also committed to keeping our customers and employees safe and healthy. We welcome your feedback via telephone and email as we strive to make the most informed decisions possible.



## HOW THE SYSTEM WORKS

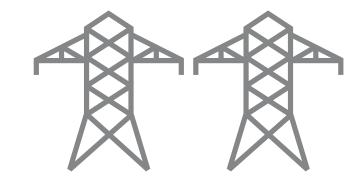
#### **LOCAL TRANSMISSION >>**

## **HIGH VOLTAGE**



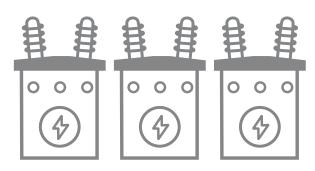
#### 1) GENERATION STATIONS

Utilities produce electricity at coal, natural gas, nuclear, wind and hydroelectric power stations and then transport it long distances over transmission lines.



#### 2) EHV TRANSMISSION

Extra-high Voltage electric transmission lines are generally 765 kilovolt (kV), 500 kV, and 345 kV on I&M's system.



## 3) SUBSTATIONS

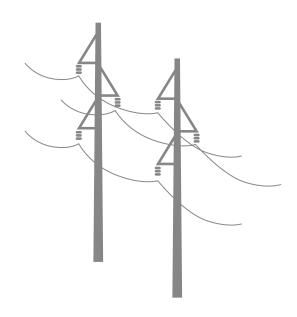
Substations direct the flow of electricity and either decrease or increase voltage levels for transport.



## HOW THE SYSTEM WORKS

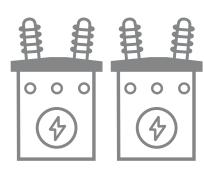
#### **DISTRIBUTION** >>

## **LOCAL TRANSMISSION**



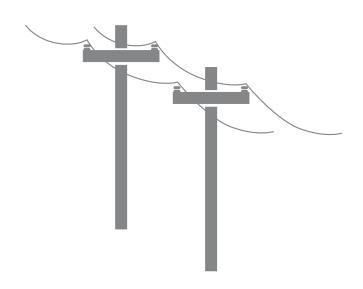
#### 4) LOCAL TRANSMISSION

I&M typically uses 69 kV and 138 kV transmission lines to move power shorter distances - for example, to different parts of a city or county.



## 5) SUBSTATION

Substations transform 69 kV and 138 kV electricity into lower distribution level voltages such as 34.5 kV, 12 kV, or 7.2 kV.



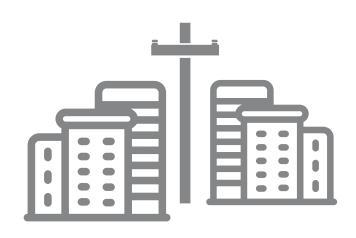
## 6) PRIMARY DISTRIBUTION

These main lines (also called circuits) connect substations to large parts of the community.



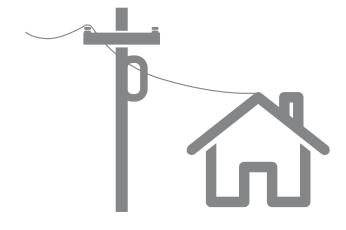
## HOW THE SYSTEM WORKS

## **DISTRIBUTION**



#### 7) LATERAL DISTRIBUTION

These smaller capacity lines deliver electricity to neighborhoods and other smaller groups of customers.



#### 8) INDIVIDUAL SERVICE

Smaller transformers step down voltage to levels customers can use. Individual residences typically use 120/240 volts.

# TO USE AN ANALOGY, ELECTRIC TRANSMISSION IS SIMILAR TO OUR NATIONAL ROAD SYSTEM. THREE KINDS OF POWER LINES EXIST BETWEEN POWER PLANTS AND HOMES AND BUSINESSES:

- Extra-high Voltage lines are like electrical interstate highways.
- High-voltage local transmission lines are like four-lane roads.
- Distribution lines are like two-lane roads that eventually connect to your driveway.



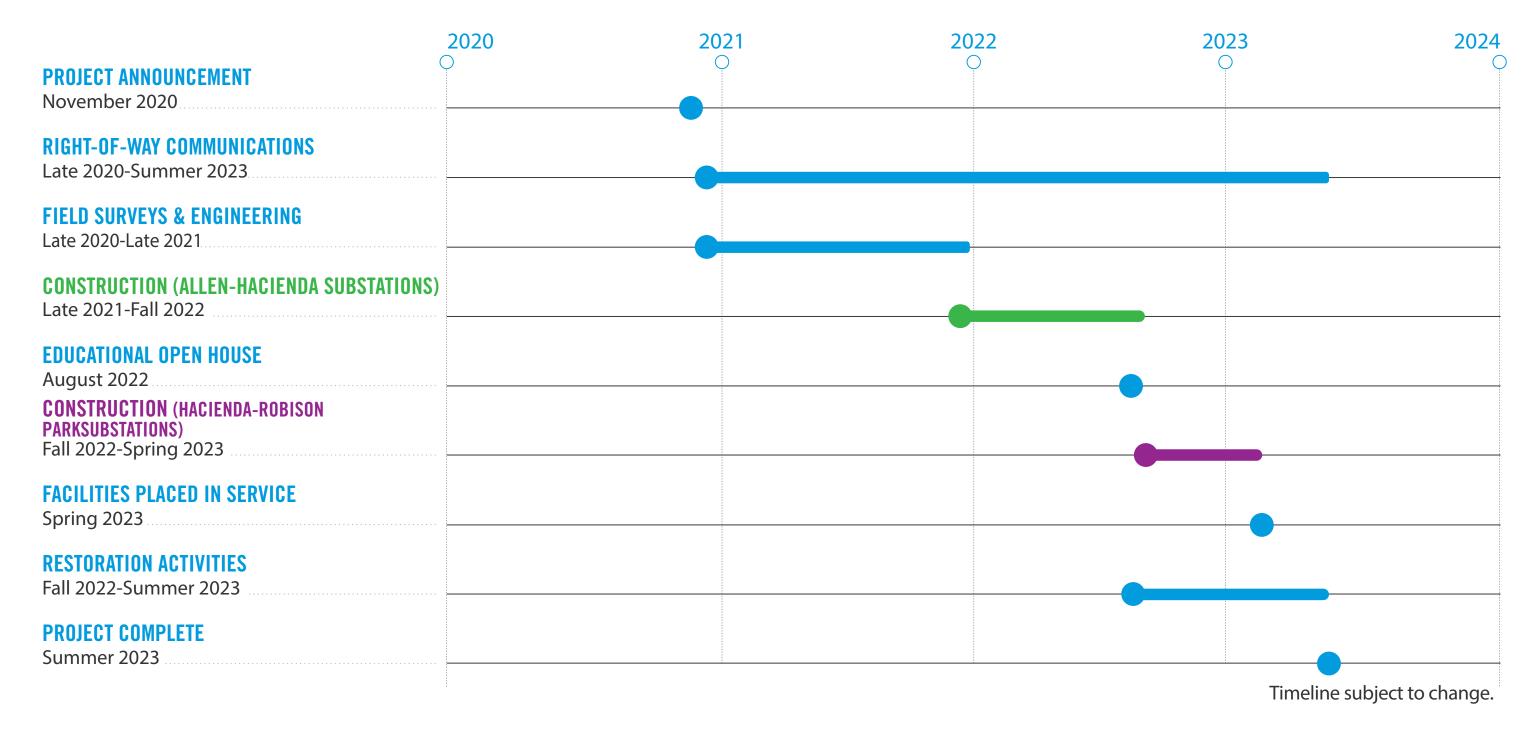
## PROJECT NEED & BENEFITS

## WHY IS THE PROJECT IMPORTANT TO OUR COMMUNITY?

The existing transmission line consist of deteriorating equipment that requires frequent maintenance. In the past decade, over 20 towers needed recurring maintenance. Modernizing the line with steel poles improves the line's operational performance, reduces the likelihood of extended power outages and enhances electric reliability for area customers.



## PROJECT SCHEDULE





## PROPOSED STRUCTURES



The project involves installing Breakthrough Overhead Line Design® (BOLD) structures, developed by American Electric Power engineers.

Typical Pole Height: Approximately 100 feet\*

Typical Right-of-Way Width: Approximately 100 feet\*

\*Exact structure, height, base width and right-of-way requirements may vary



## **RIGHT-OF-WAY**

# I&M HAS TWO KEY PHILOSOPHIES THAT PERTAIN TO POWER LINE RIGHTS-OF-WAY:



Routes should cause the least possible disturbance to people and the environment.



Property owners should be fairly compensated for any land rights that must be acquired.



## **RIGHT-OF-WAY**

I&M studies the land and proposes routes that reduce impacts on property owners. I&M reaches out to landowners in the following ways:

#### TO GAIN RIGHT-OF-ENTRY TO BEGIN:

- Environmental assessments
- Appraisal work
- Land surveying, soil boring and other field activities
- Cultural and historic resource reviews

#### TO SECURE RIGHT-OF-WAY AND COMMUNICATE:

- Landowner compensation
- Terms and conditions of easement
- Width of the right-of-way

#### TO OUTLINE I&M'S CONSTRUCTION PROCESS WITH A SPECIFIC FOCUS ON:

- Property restoration
- Damage mitigation as appropriate



## **VEGETATION MANAGEMENT**



#### WHAT IS VEGETATION MANAGEMENT?

The practice of controlling the growth of trees and other woody stemmed vegetation in line corridors and around substations, while maintaining respect for the environment.

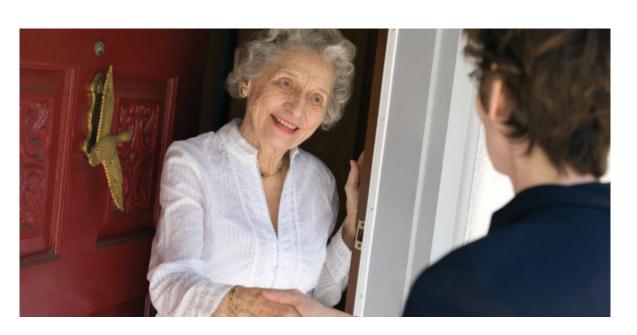
#### WHY IS IT DONE?



To minimize power outages caused by trees and other plants coming into contact with power lines.

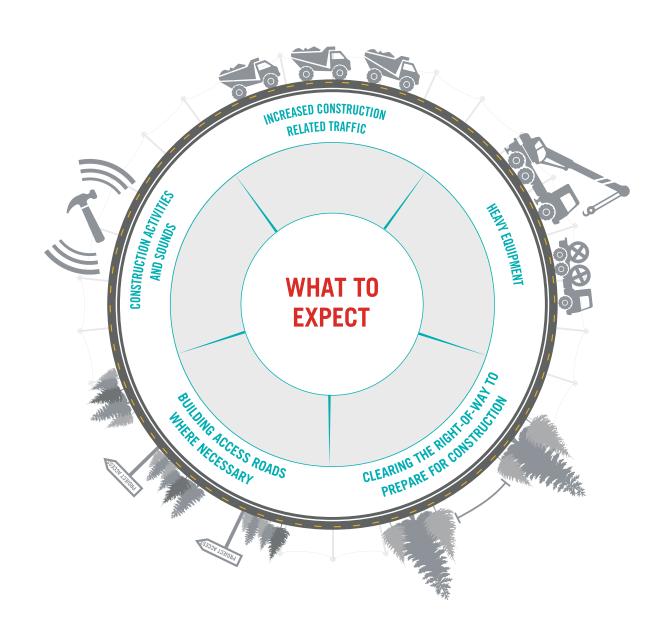
## THE GOALS OF I&M'S VEGETATION MANAGEMENT PROGRAM ARE TO:

- Protect our system and minimize outages
- Minimize any adverse environmental impacts
- Ensure compliance with all applicable laws and regulations
- Perform our work as safely as possible, and
- Maintain a positive relationship with land owners and the public





## **CONSTRUCTION PROCESS**



I&M understands the work related to transmission grid improvements can sometimes be an inconvenience. That's why the company makes every effort during the construction process to respect the environment and our neighbors, while working safely to ensure reliable electric service.

I&M plans to work with individual property owners throughout the construction process. Team members provide details of upcoming work and listen to customer feedback. If damages occur during the construction process, the company works to restore property as close to its original state as possible.



## EASTERN FORT WAYNE TRANSMISSION LINE REBUILD PROJECT

## **THANK YOU!**

Thank you for visiting the project virtual open house. For more information and project updates please visit the project website, or contact us with any additional questions.



REPLAY OPEN HOUSE



DOWNLOAD SLIDE DECK



**CONTACT US** 



VISIT PROJECT WEBSITE