



# Minimizing Environmental Impacts

Working closely with the community and environmental experts

- We are committed to identifying routes with the least overall impacts.
- Environmental and engineering experts will conduct extensive research and field reviews.
- Public input will be collected through stakeholder briefings, meetings and community open houses.
- Project will undergo formal environmental review under the California Environmental Quality Act (CEQA), providing additional opportunities for public input.

**CEQA requires a comprehensive environmental assessment analyzing a project's effects and identifying appropriate mitigation in these areas:**

Aesthetics
Agricultural resources
Air quality
Biological resources
Cultural resources
Geology and soils
Greenhouse gases
Hazards and hazardous materials
Hydrology and water quality
Land use and planning
Mineral resources
Noise
Population and housing
Public services
Recreation
Transportation and traffic
Utilities and service systems

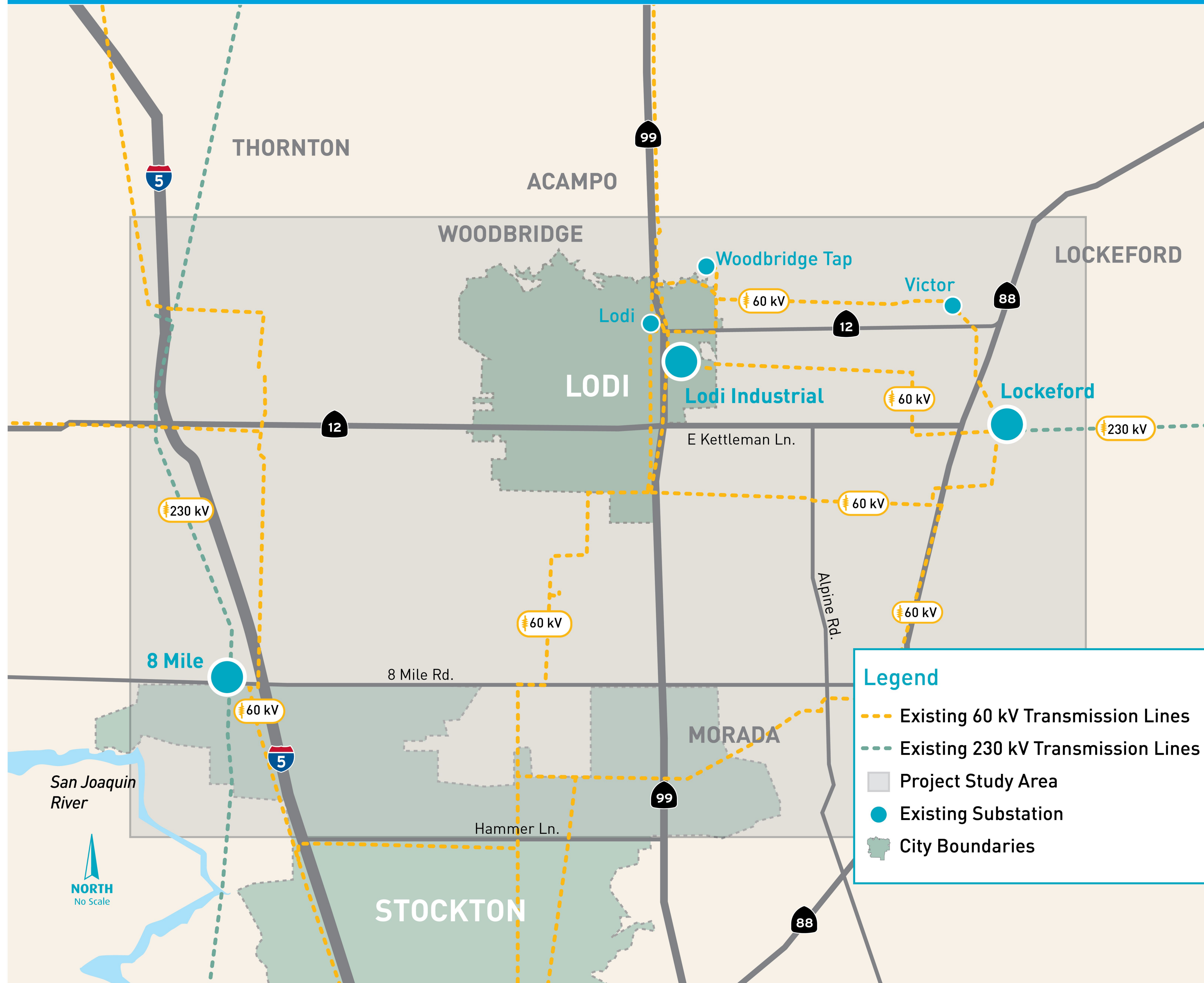




# Project Overview

Increasing electric reliability for northern San Joaquin communities

## Project Study Area



Northern San Joaquin Power Connect will help accommodate the region's growing energy demands and provide a highly reliable and stable electricity source for 50,000 customers in the area. The proposed project will include:

### Constructing new 230 kV high-capacity transmission lines to connect:

- PG&E's existing Lockeford Substation, which is east of Lodi;
- PG&E's existing 8 Mile Substation, which is just north of Stockton; and
- Lodi Electric Utility's existing Industrial Substation, which is in eastern Lodi

### Upgrading and potentially expanding:

- PG&E's existing Lockeford Substation;
- PG&E's existing 8 Mile Substation;
- Lodi Electric Utility's existing Industrial Substation



# Providing Reliable Energy

Increasing electric reliability for northern San Joaquin communities

- Increases the capacity of the local electric grid, ensuring PG&E continues to stay in front of the area's growing energy demands.
- Increases efficiencies when dealing with service interruptions, benefiting residents, businesses and growers across the region.
- Addresses a need for a new transmission source to avoid potential voltage and thermal overload concerns in the area identified by the California Independent System Operator (CAISO), which manages the state's electric grid.





# Supporting Economic Growth

Investing in local electric infrastructure



- Helps provide a highly reliable and stable electricity source that meets the needs of the area's leading manufacturing and industrial firms.
- Strengthens the grid to respond to growing energy demands from the region's evolving economy and the thriving wine industry.
- Promotes a strong commercial environment that attracts and retains a diverse group of employers and industries.

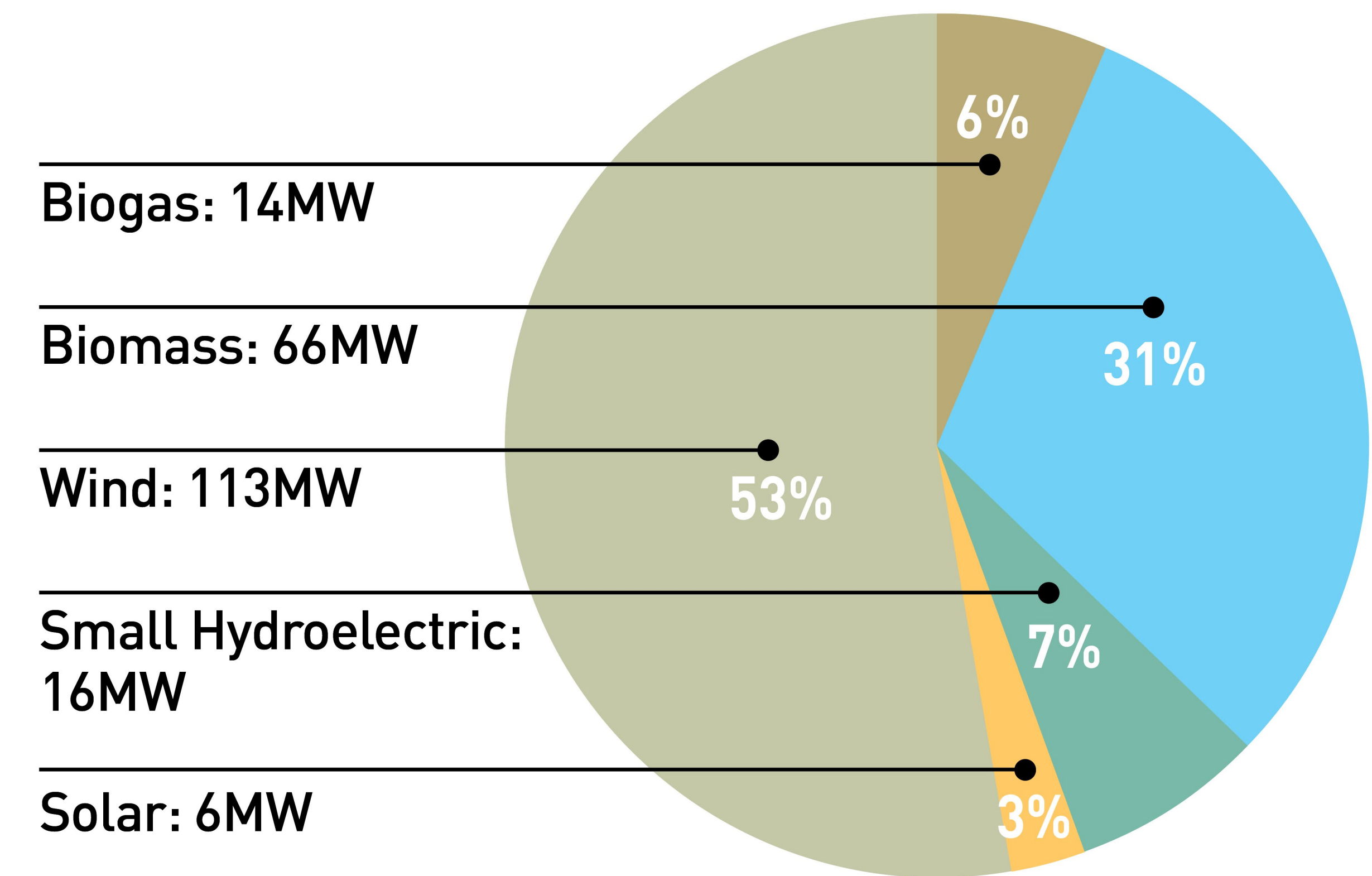




# Supporting Clean Energy Goals

Helping deliver electricity generated from renewable energy sources

- PG&E is aggressively adding more renewable energy to our power mix under California's renewable portfolio standard, and we are well on our way toward 50 percent renewables by the end of 2030. Currently, more than 50 percent of the electric power supplied to PG&E customers comes from carbon-free sources.
- We deliver some of the nation's cleanest energy to our customers, and more than half of our electric power comes from renewable sources.
- Investments in the grid are important as we continue to explore new sources of renewable technology and actively expand our renewable energy supplies to support our commitment to meeting California's renewable energy goals.



Renewable Energy Capacity for Stockton Division



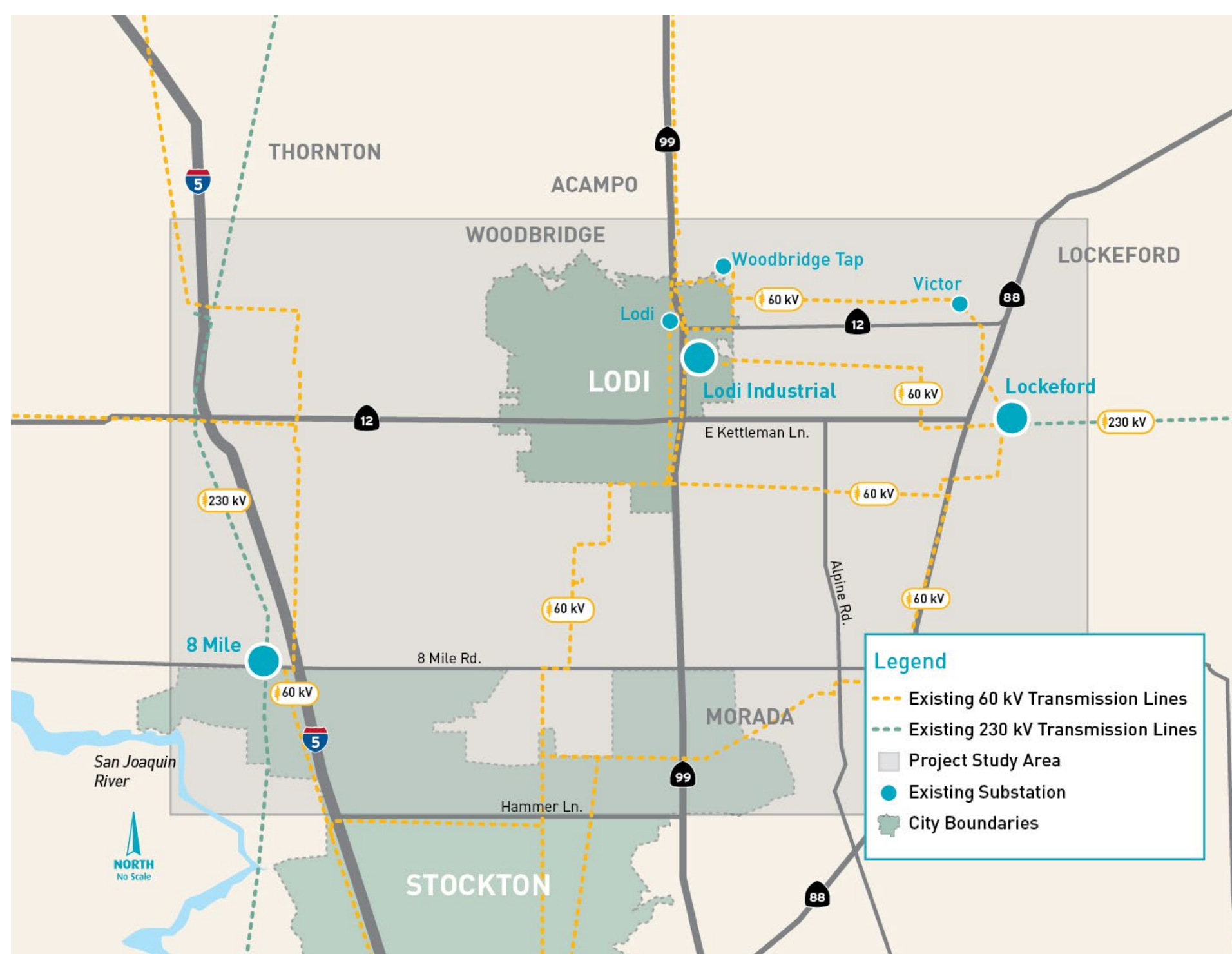


# Phases of Outreach

Committed to community engagement

## Phase 1

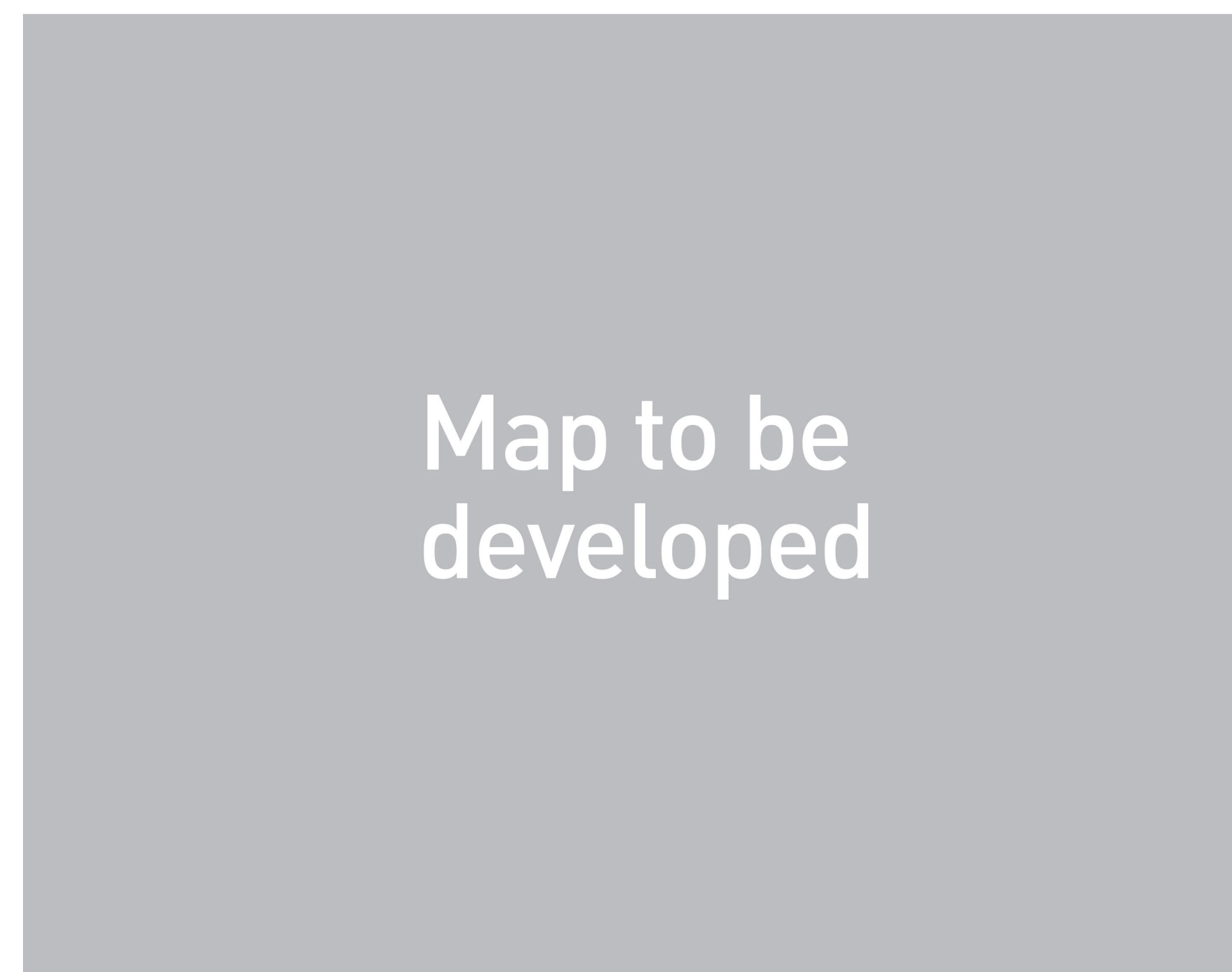
Initial stakeholder outreach and feedback



- Identify large geographic area where project could reasonably be located.
- Introduce the project, educate community about the process and listen to what matters to them before developing potential routes.

## Phase 2

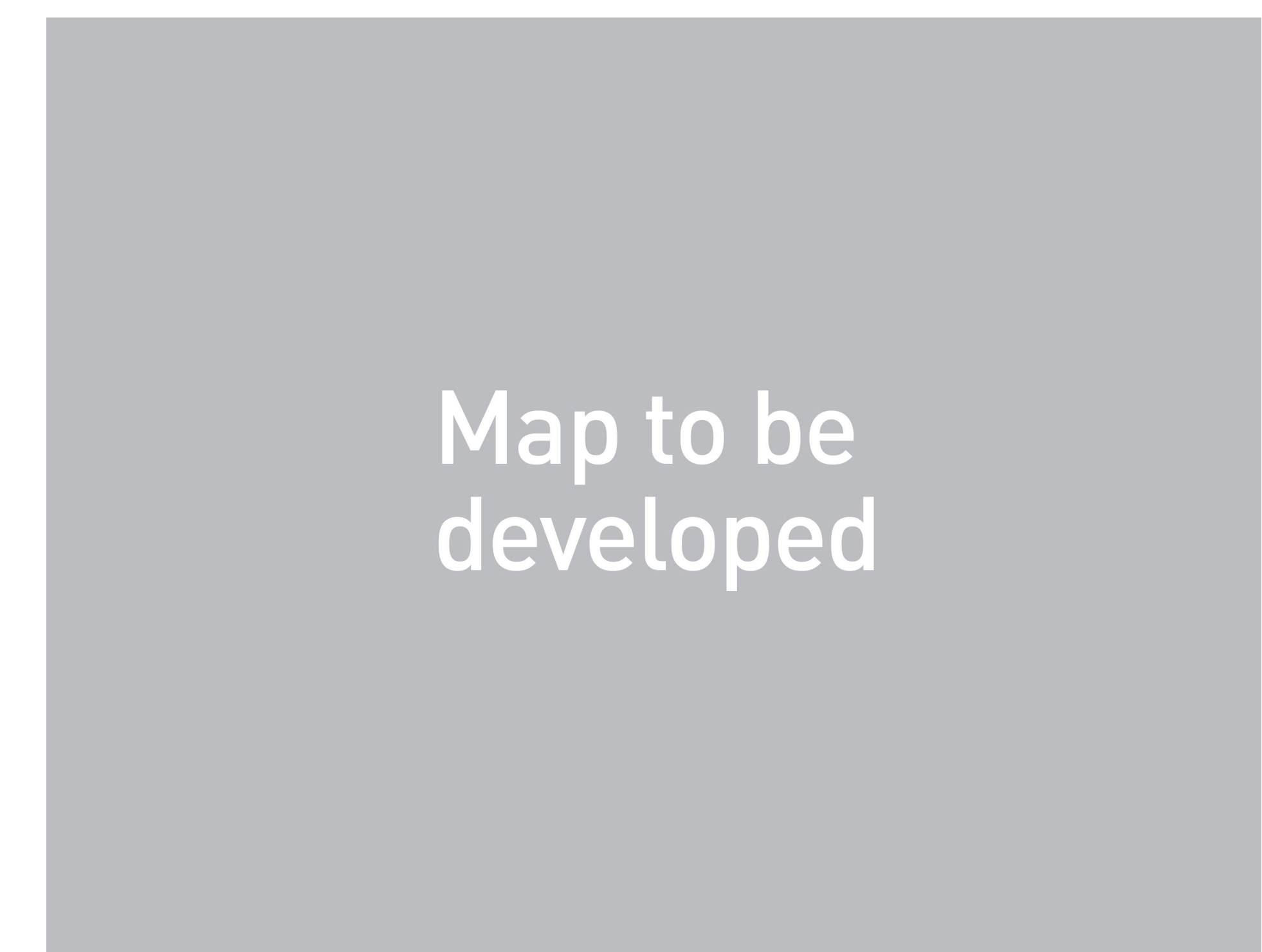
Project and route development and feedback



- Conduct outreach and field reviews to determine opportunities and constraints.
- Refine the project study area and determine potential routes for the public to provide feedback.
- Hold public workshops and open houses to engage the local community.

## Phase 3

Environmental analysis of potential alternatives and continued outreach



- Continue gathering community input.
- Refine options for routes based on community feedback.
- Continue community engagement leading up to regulatory submittal.



# Routing Criteria

Reducing impacts to the environment and local community

- We will work closely with the local community, government agencies and organizations to gather stakeholder input to help identify potential corridors and routes that minimize potential impacts.
- The California Public Utilities Commission, which has sole jurisdiction over the siting of transmission lines, will decide the final route following a robust review process that provides numerous additional opportunities for public input.

Potential routes take into consideration:

Established land uses;

Agricultural uses and crops, such as vineyards and orchards;

Length of the electric transmission line to improve reliability;

Biological, cultural and visual resources;

Constructability and engineering issues; and

Costs to customers.



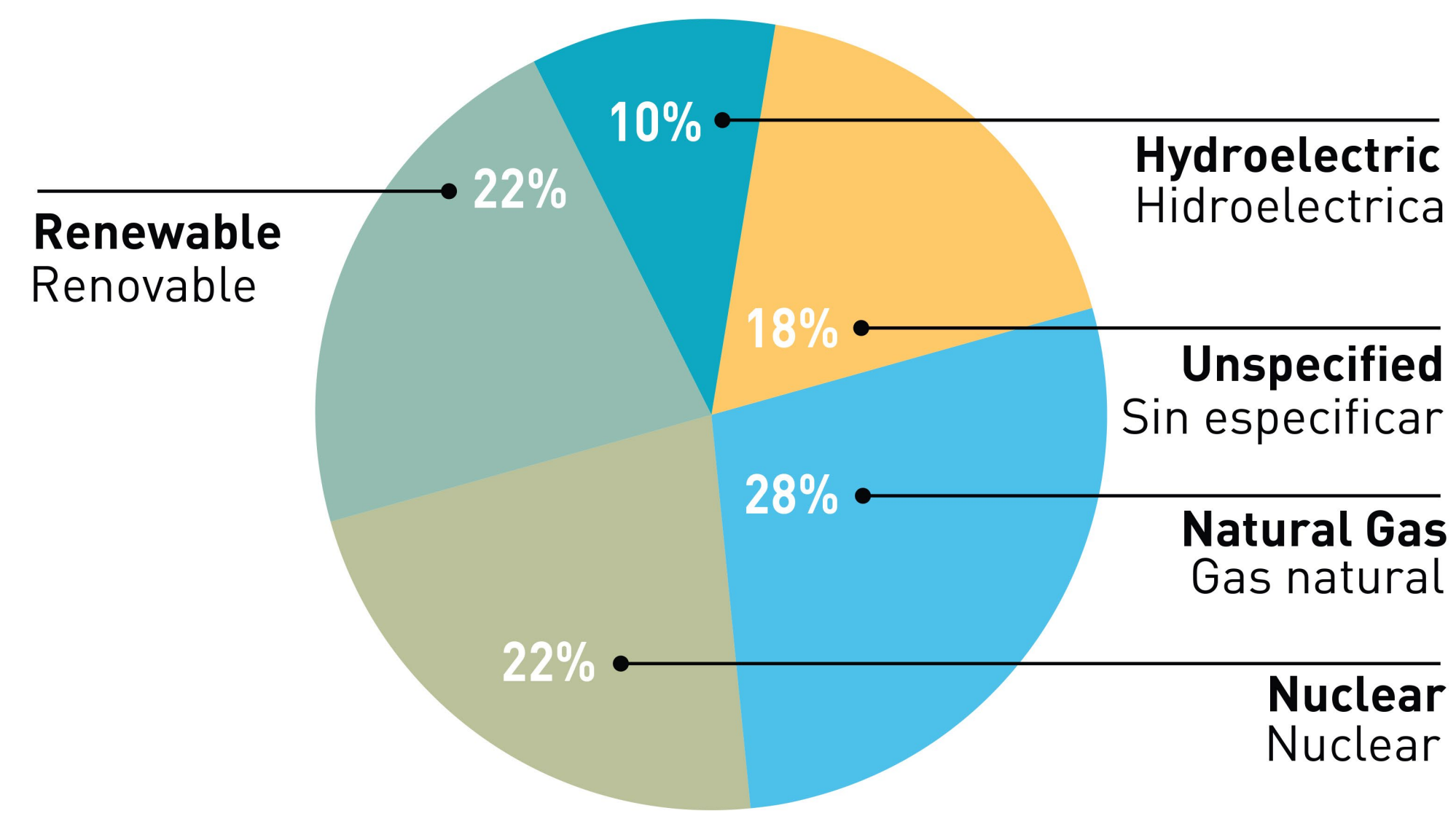


# Electric Grid Overview

## Información general de la red eléctrica

How electricity moves from its source to your home or business

Cómo se mueve la electricidad desde su fuente hasta su hogar o negocio



Power Generation  
Generación de energía



Transmission Substation  
Subestación de transmisión



Transmission Lines  
Líneas de transmisión



Homes and Businesses  
Hogares y negocios



Distribution Lines  
Líneas de distribución



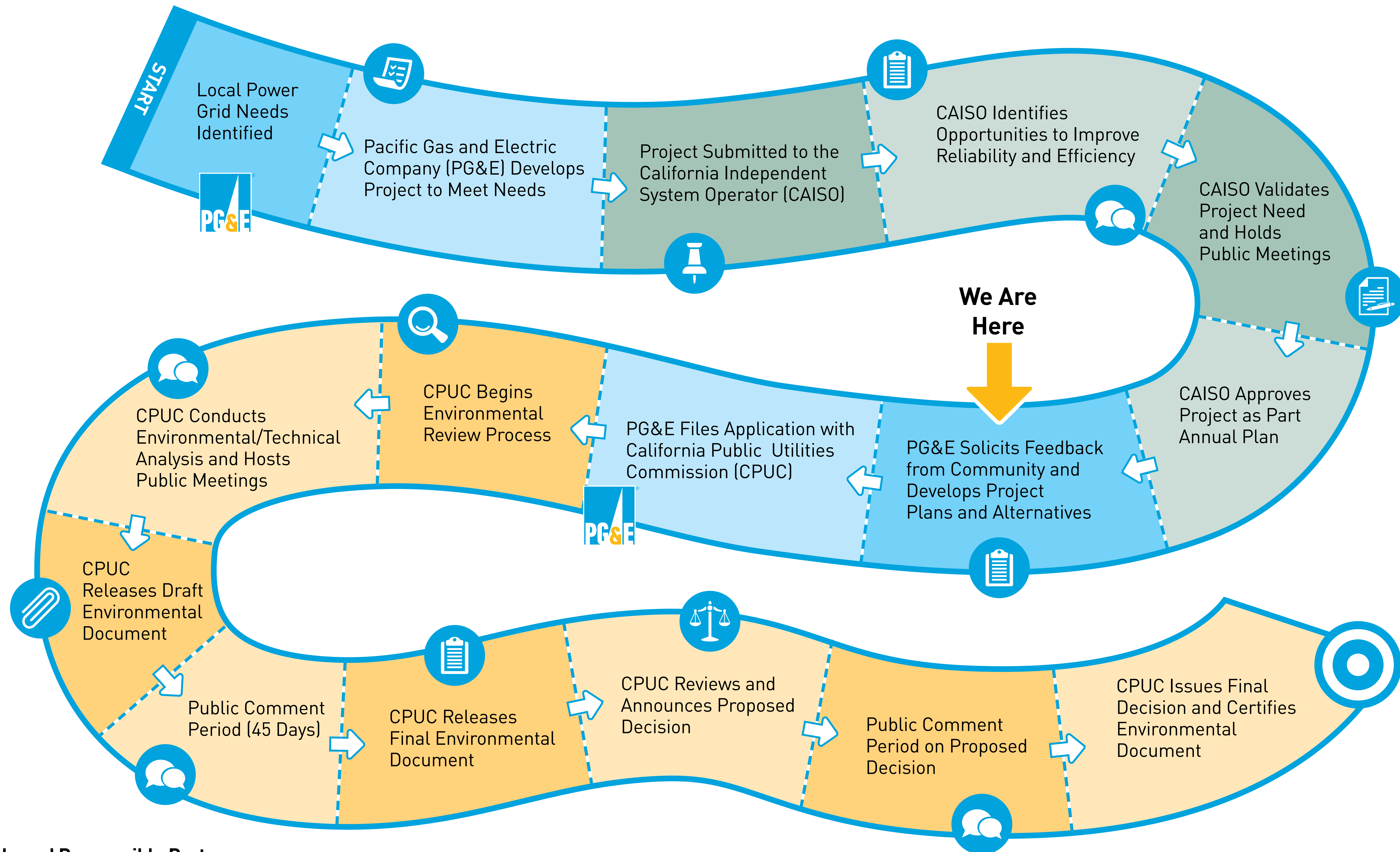
Distribution Substation  
Subestación de distribución





# California Electric Projects Approval Process

## Breaking down the regulatory process



### Role and Responsible Party:

- Pacific Gas and Electric Company (PG&E) employees are responsible for safe transmission and delivery of energy.
- California Independent System Operator (CAISO) – impartial grid operator charged with ensuring the safe and reliable transportation of electricity on the “electron superhighway” we know as the power grid.
- California Public Utilities Commission (CPUC) is charged with regulating investor owned utilities including PG&E.



# Typical Transmission Line Structures

Potential options for project structures

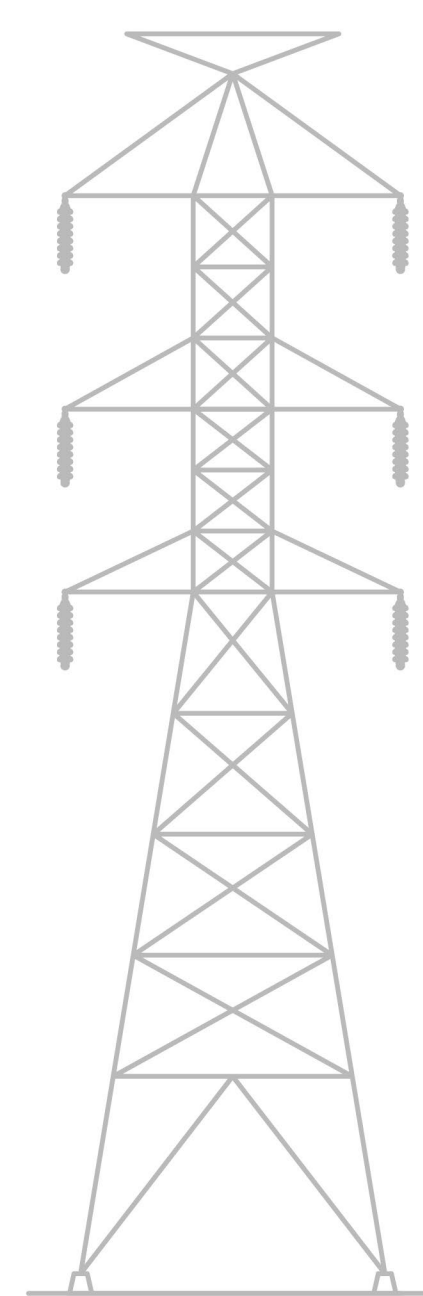
# Estructuras típicas de la línea de transmisión

Posibles opciones para las estructuras del proyecto

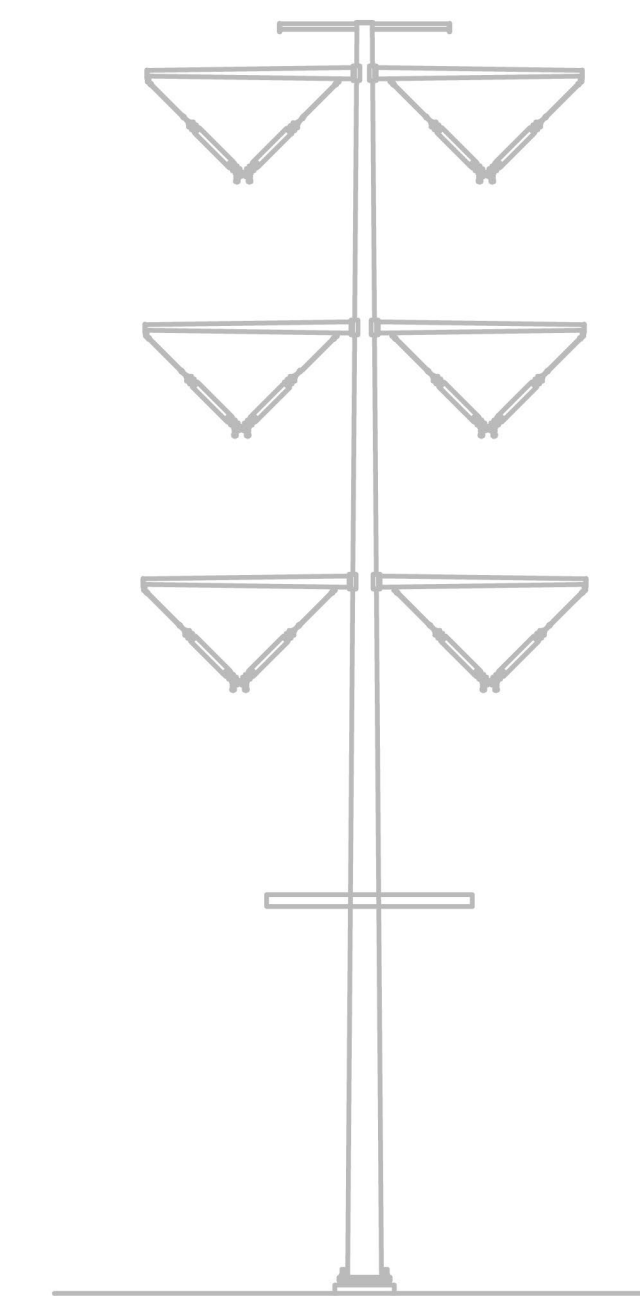
- We are committed to working with the community to minimize impacts while providing reliable energy for our future.
- Input gathered from the community will help direct the selection of the structures used for this project.

- Nuestro compromiso es trabajar con la comunidad para minimizar impactos mientras suministramos energía confiable para nuestro futuro.
- Los comentarios de la comunidad ayudarán a dirigir la selección de las estructuras que se usarán en el proyecto.

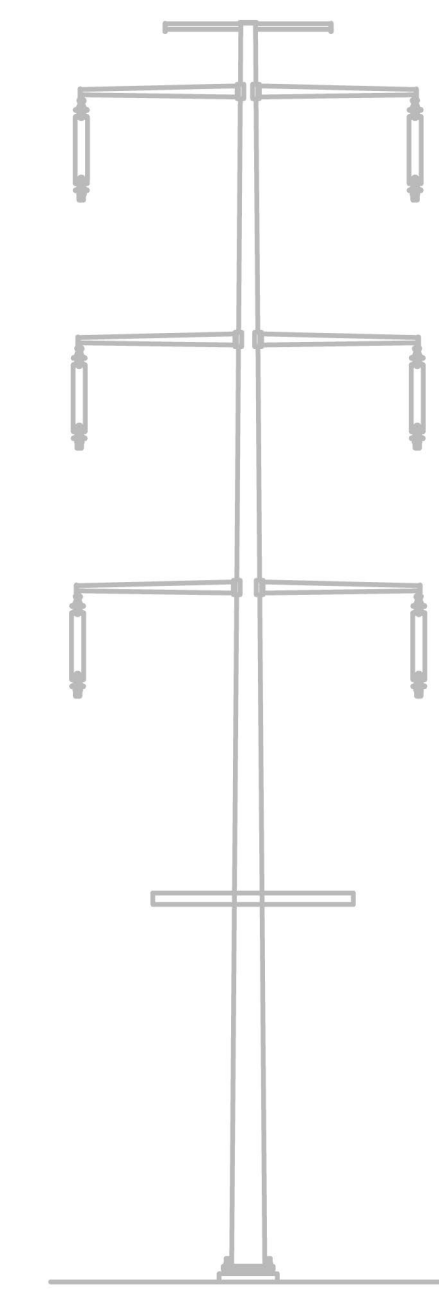
## 230 kV



Lattice Tower  
*Torres de celosía*



Tubular Steel Pole  
*Postes de acero tubulares*



Tubular Steel Pole  
*Postes de acero tubulares*

Potential options for transmission lines.  
Posibles opciones potenciales para las líneas de transmisión.