

Project Overview

- 210-mile, double-circuit 500 kV line
 - Would bring existing and new generation to Willamette Valley.
 - No other project directly addresses need for cross-Cascades capacity.
- Current generation interconnection requests.
 - Includes three wind projects totaling 1200 MW.
 - Existing thermal: 640 MW at Coyote Springs and Boardman.
 - New thermal: 450 MW at Carty.
- Three new substations; upgrades to two others
- System upgrades (wire replacement) in Salem area
- Possible upgrades in Willamette Valley

Study Corridors

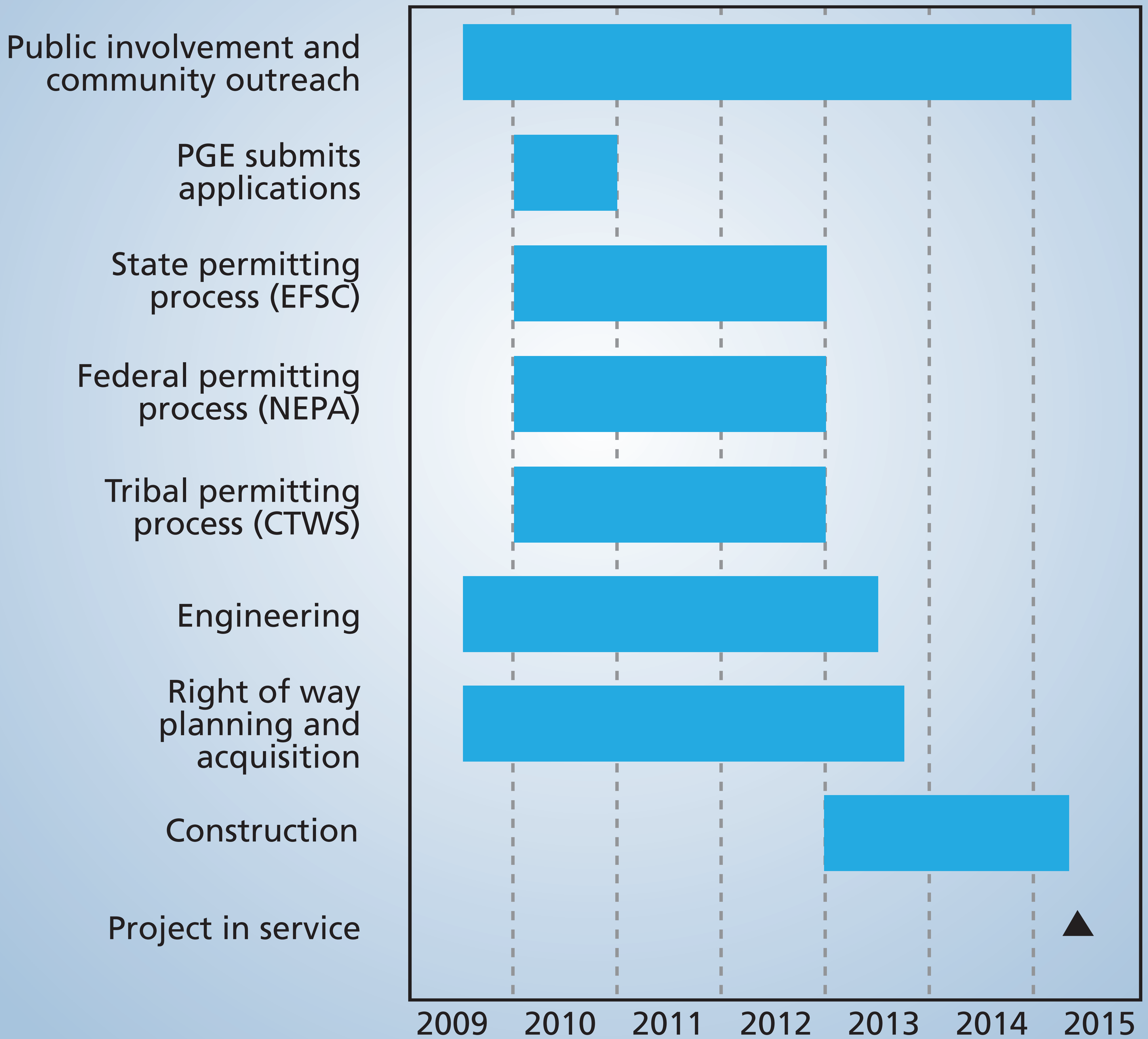


- Proposed Study Corridor
- Alternate Study Corridors
- Existing Transmission Corridor
- West-wide Energy Corridor
- Confederated Tribes of the Warm Springs Reservation
- Salem Area Reconductoring (Wire Replacement)
- Possible Willamette Valley Upgrades
- Wind Interconnection Requests
- National Forest

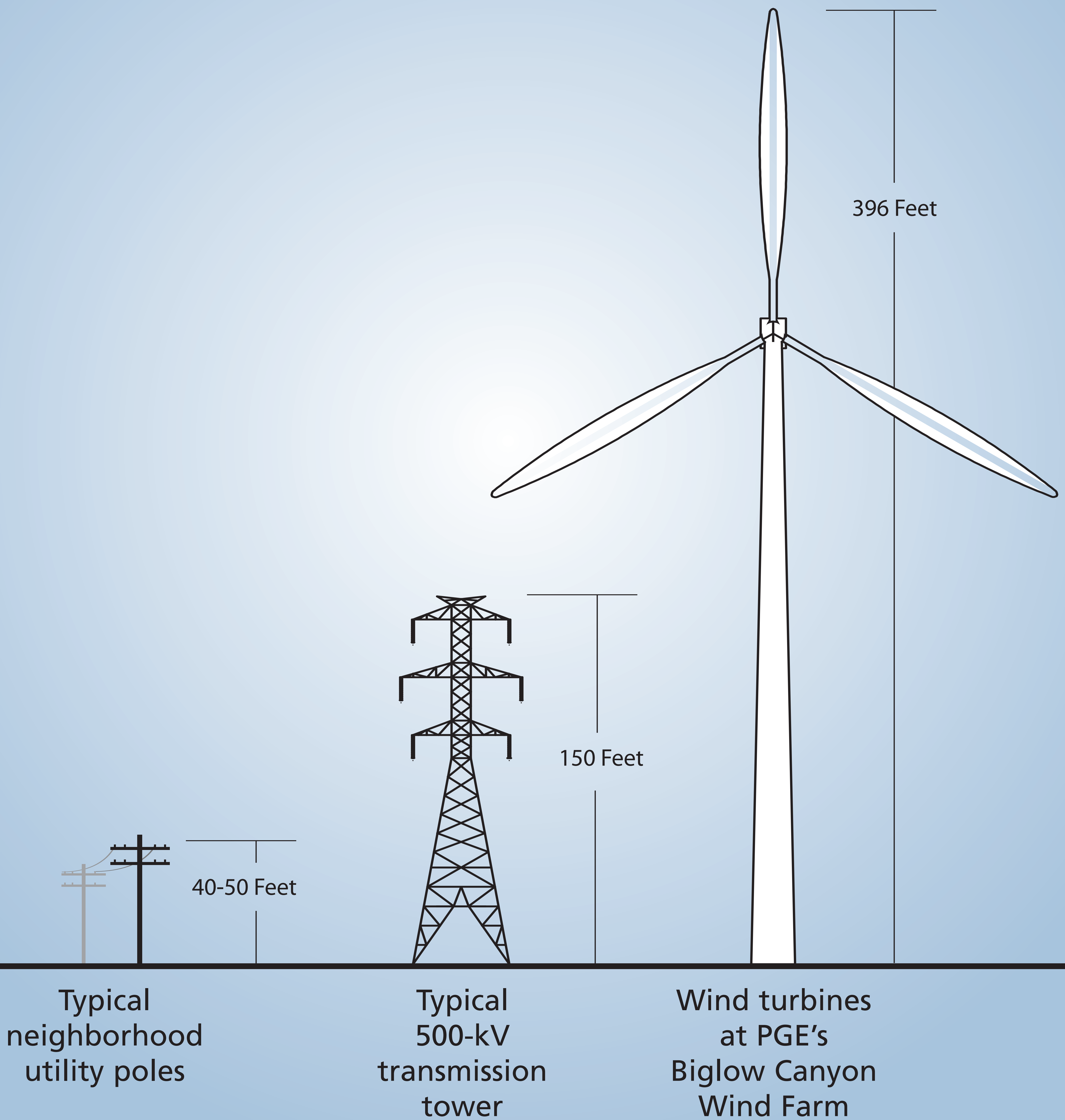
Key Principles

- Enhance reliability of the electrical grid.
- Provide access to more renewable energy.
- Minimize impacts on homes, businesses and the environment.
 - Follow existing transmission or energy corridors as much as possible.
- Listen and respond to community members and consider feasible alternatives.
- Plan for future power needs.
- Manage costs to keep prices affordable.

Estimated Project Timeline



Tower Height Comparisons



Real Estate/ Right of Way Acquisition

Acquiring Right of Way

- PGE will need easements for surveying, construction, operation, maintenance and repair.
- Easements will include right of access to clear, trim and remove vegetation and trees from right of way.
 - Includes tall and dangerously leaning trees adjacent to the right of way that may threaten the line if they fall.

Compensation

- If the route will cross private land, easement, compensation, terms and conditions will be negotiated individually with each property owner.
- PGE will work with landowners on micro-siting, payment for property and other issues.

Right of Way Uses

PGE designs and maintains its transmission lines to meet or exceed National Electrical Safety Code requirements.

- Rules intended for protection of property and safety of landowners, the public and utility employees.

Uses generally allowed (with PGE approval):

- Gardening, ranching and farming of certain crops. Vegetation generally limited to 15 feet.
- Compatible recreational activities.
- Drain fields, properly grounded and permitted irrigation systems.
- Non-metallic or properly grounded fencing.

Uses generally not allowed:

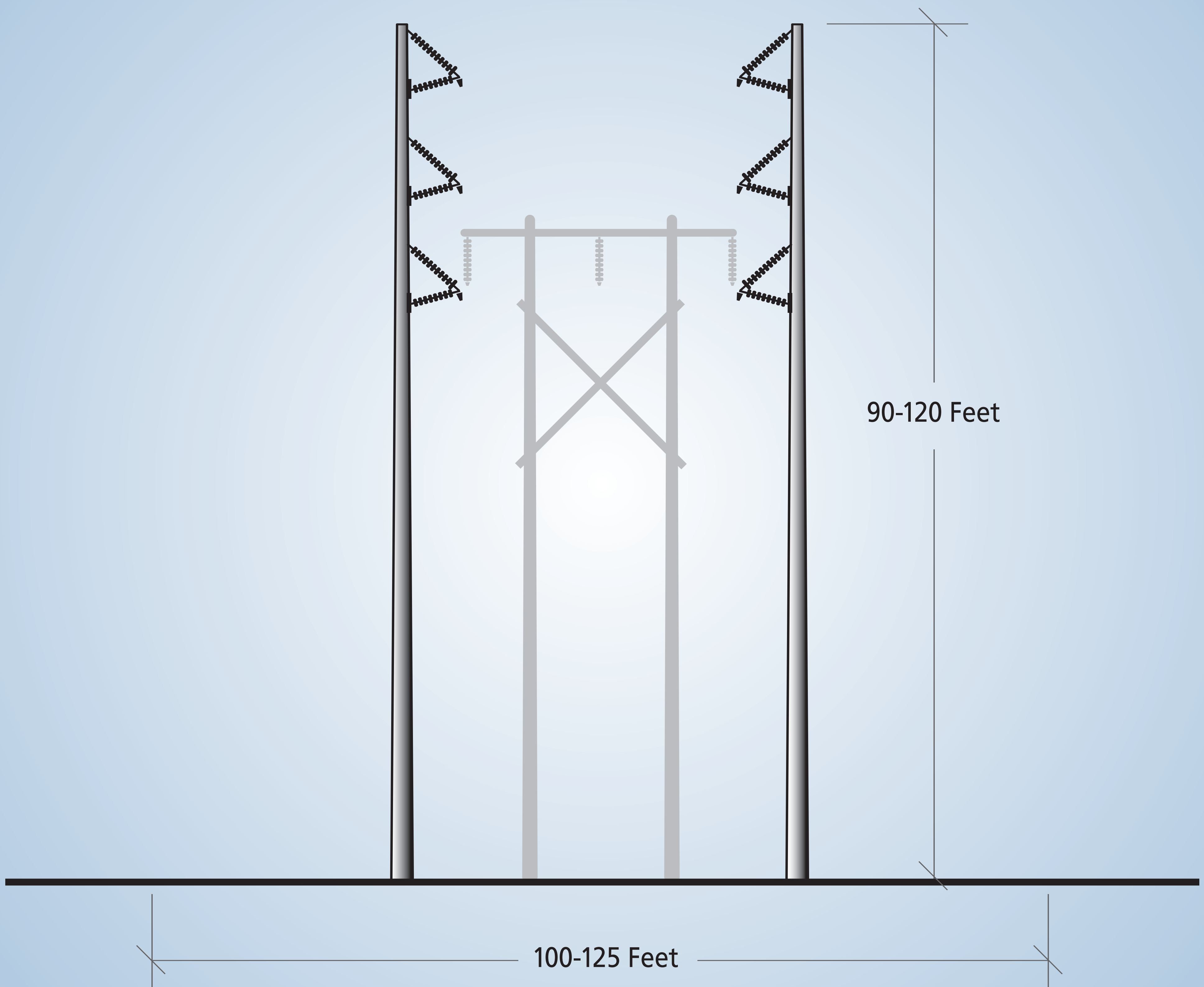
- Buildings and structures.
- Filling and excavation.
- Pumps, wells, swimming pools.
- Any use involving flammable materials.

Willamette Valley Upgrades

- Upgrades proposed to existing 36-mile transmission project from Salem to Oregon City.
- Upgrades needed to reliably distribute additional electricity Cascade Crossing would bring to Willamette Valley.
- In most areas*, project involves:
 - Removing existing wooden H-frame structures holding single-circuit 230 kV line.
 - Replacing them with two parallel monopole structures that each carry a 230 kV line.
 - Upgrading Bethel and McLoughlin substations.

* Exceptions: 1-mile section south of McLoughlin sub; 4-mile section north of Bethel sub; various line crossings.

Preliminary Design Concept



In most places, existing H-frame structures would be removed and replaced by two steel monopoles. Typically, the monopoles would be 90-120 feet tall and about 55 feet apart, within a right of way ranging between 100 and 125 feet.