WHATCOM COUNTY
WASHINGTON

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Memorandum

TO:	Whatcom County Council
FROM:	Lucas Clark, Planner II
THROUGH:	Mark Personius, Director
DATE:	May 12, 2025
SUBJECT:	Public Utility Code Amendments

In 1990, Whatcom County residents voted to enact initiative 4-90, prompting the Whatcom County Council to pass Ordinance 1990-124 stating, "Except on land where such permits have already been granted or in those districts classified as industrial, no conditional use permit shall be granted for electrical power transmission lines carrying more than 115,000 volts." While the initial 1990 ordinance was codified, the Prosecuting Attorney's Office recently determined that it was in fact illegal, as any ordinance proposed by initiative that would repeal a portion of County zoning regulations is outside the scope of initiative power.

Since 1990, the language of this particular code section has changed several times. The most significant update was Ordinance 2004-041, which created stricter requirements for maximum wattage of transmission lines, in addition to voltage requirements.

Recently, Whatcom County's energy utility, Puget Sound Energy (PSE), advocated for the increase of maximum voltage requirements in WCC 20.82.030(9)(a-c) and the County Council approved a motion to request PDS to prepare such amendments on October 8, 2024. The Council docketed this proposal as PLN2024-00002. This change would allow electrical transmission lines of up to 230,000 volts or 230 kilovolts (kV) outside of industrial zones, aiding PSE in their ability to meet growing electricity demands.

Amending WCC 20.82.030(9)(a-c) would allow PSE the flexibility to make long-term choices as it plans for grid modernization. This code change will likely not result in instant or large-scale changes due to the cost involved, but specific plans and timelines would be up to PSE. Ultimately, if PSE decides to invest in upgrading transmission lines, it will likely result in an increase in the rates consumers pay (as determined as "fair" by the Washington Utilities and Transportation Commission). Increasing the voltage of transmission lines would help increase electrical grid capacity and efficiency, but it would also require infrastructure investments and construction.

Two main questions were brought up during the Planning Commission public hearing. Under the proposed code what would trigger a Conditional Use Permit vs what is outright allowed under Permitted uses. The amendments as written would allow installation of new lines below 55 kV and maintenance and replacement of existing lines and poles that were previously permitted as a permitted use. However, new power lines above 55 kV, or replacing existing 55 kV lines with higher voltage lines on existing poles would require either a Conditional Use Permit or Major Project Permit depending on the size and scale of the project.

The second question was related to what new 230 kV lines would look like in the landscape, and vegetation management standards. Attached to this memo are several examples that illustrate from a previous PSE project what 230 kV infrastructure looks like.

Attachment:

1. Fall 2017 Vegetation Management Standards

Vegetation Management Standards

230 kV transmission lines

Pole Structure Type: C-1

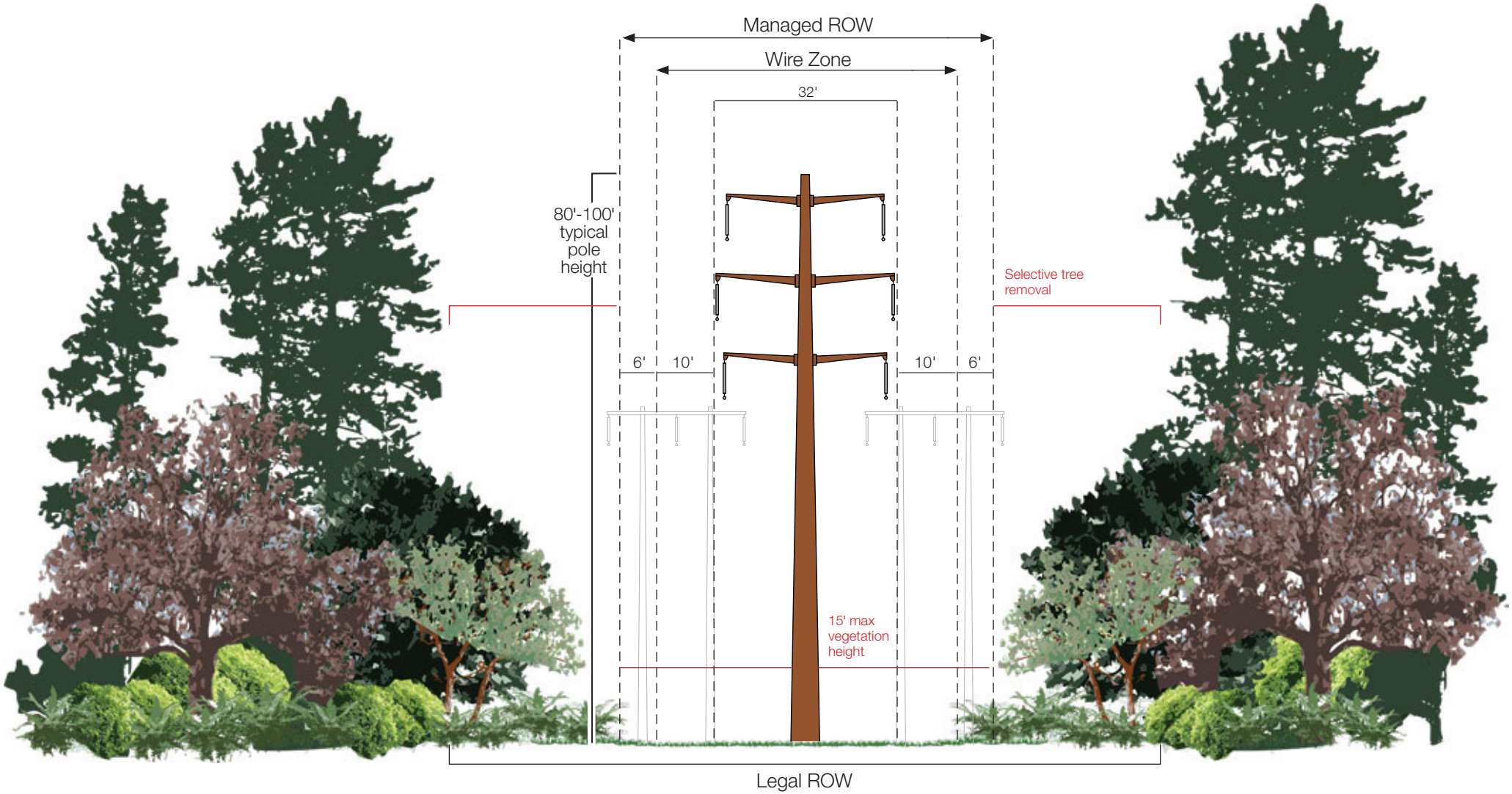
NOTE: Existing poles are shown in gray for reference.

PSE's 230 kV transmission vegetation management standards generally requires removing trees located in the wire zone that have a mature height of more than 15 feet.

Wire Zone: Section of a utility transmission right of way extending to 10 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Managed Right of Way (ROW): The section of a transmission right of way that extends roughly 16 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Legal Right of Way (ROW): The full width of the easement. Maximum height of mature vegetation between the Managed ROW and Legal ROW is dependent upon tree species, tree health, and distance from the wires.



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PSE PUGET SOUND ENERGY

Updated: Fall 2017

Vegetation Management Standards

230 kV transmission lines

Pole Structure Type: C-1B

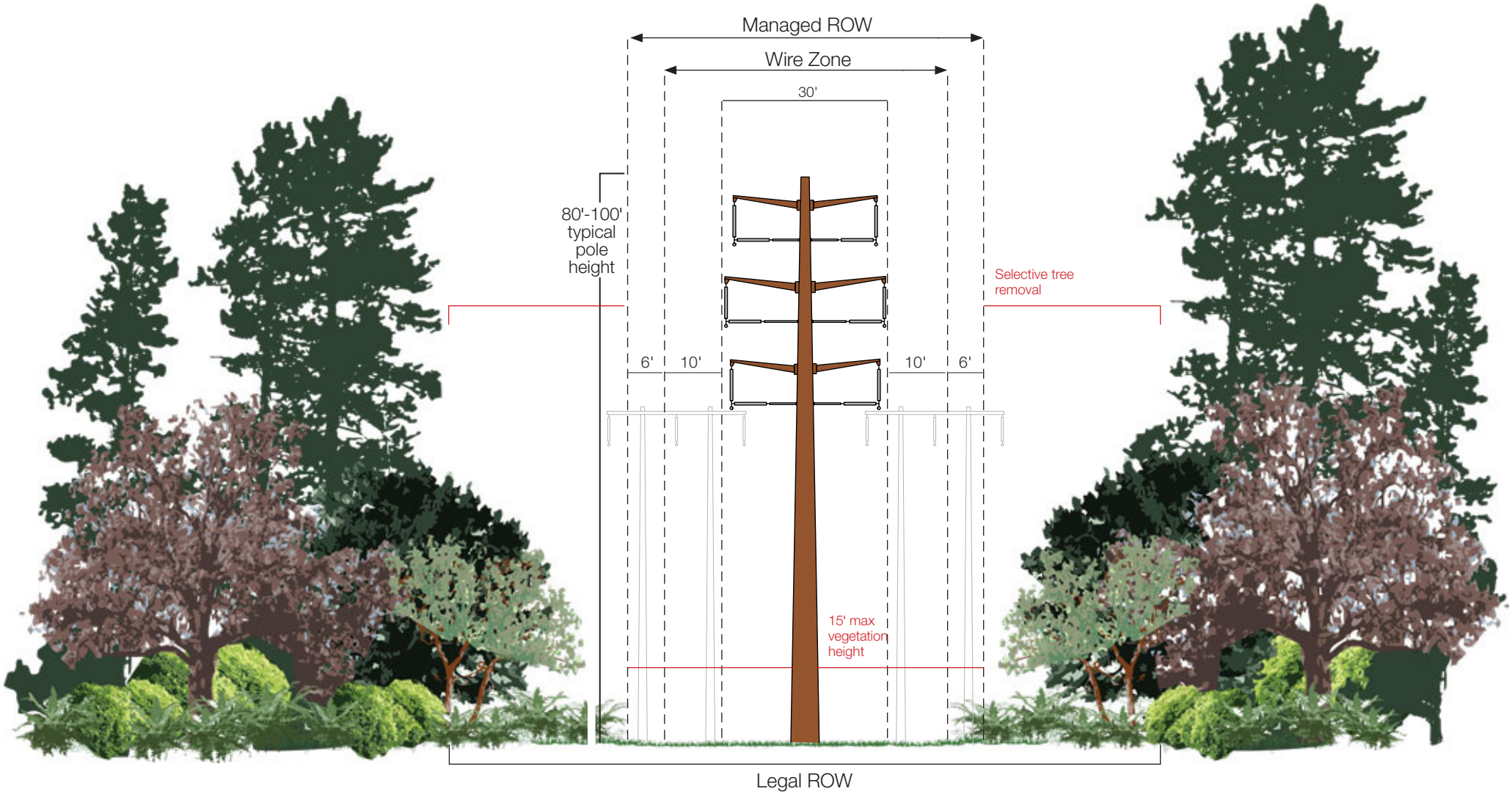
NOTE: Existing poles are shown in gray for reference.

PSE's 230 kV transmission vegetation management standards generally requires removing trees located in the wire zone that have a mature height of more than 15 feet.

Wire Zone: Section of a utility transmission right of way extending to 10 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Managed Right of Way (ROW): The section of a transmission right of way that extends roughly 16 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Legal Right of Way (ROW): The full width of the easement. Maximum height of mature vegetation between the Managed ROW and Legal ROW is dependent upon tree species, tree health, and distance from the wires.



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Vegetation Management Standards

230 kV transmission lines

Pole Structure Type: C-16

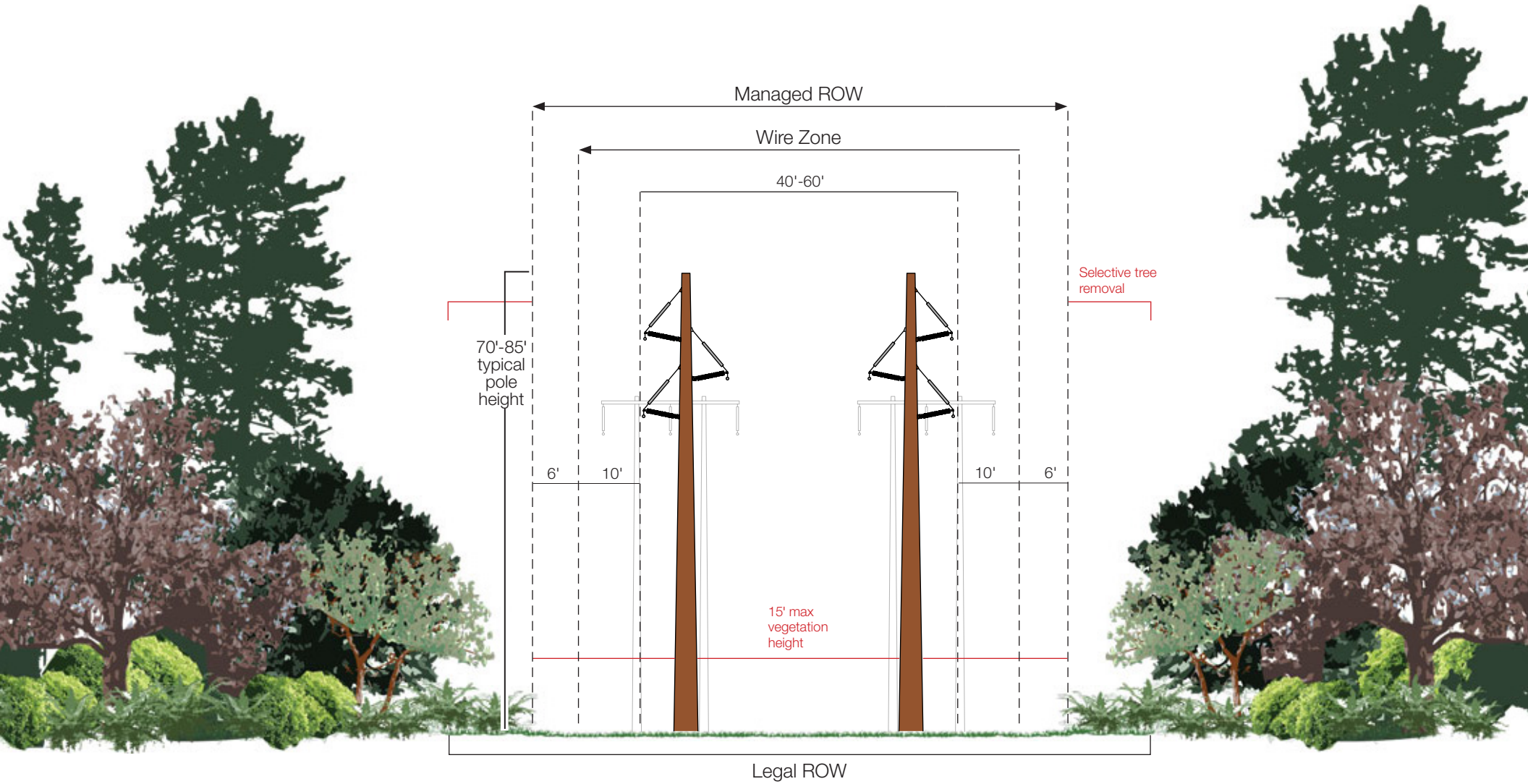
NOTE: Existing poles are shown in gray for reference.

PSE's 230 kV transmission vegetation management standards generally requires removing trees located in the wire zone that have a mature height of more than 15 feet.

Wire Zone: Section of a utility transmission right of way extending to 10 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Managed Right of Way (ROW): The section of a transmission right of way that extends roughly 16 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Legal Right of Way (ROW): The full width of the easement. Maximum height of mature vegetation between the Managed ROW and Legal ROW is dependent upon tree species, tree health, and distance from the wires.



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Vegetation Management Standards

230 kV transmission lines

Pole Structure Type: C-2

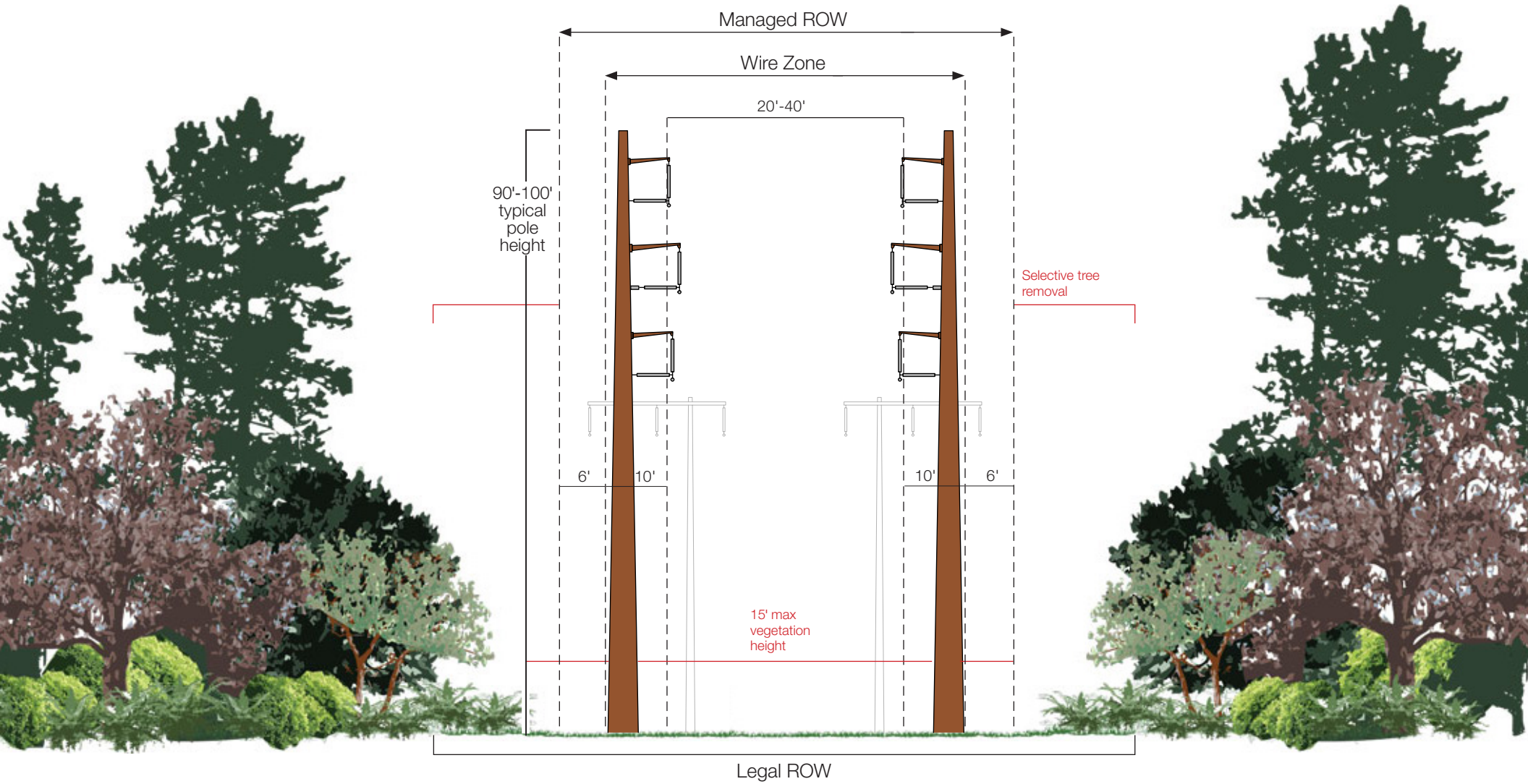
NOTE: Existing poles are shown in gray for reference.

PSE's 230 kV transmission vegetation management standards generally requires removing trees located in the wire zone that have a mature height of more than 15 feet.

Wire Zone: Section of a utility transmission right of way extending to 10 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Managed Right of Way (ROW): The section of a transmission right of way that extends roughly 16 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Legal Right of Way (ROW): The full width of the easement. Maximum height of mature vegetation between the Managed ROW and Legal ROW is dependent upon tree species, tree health, and distance from the wires.



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Vegetation Management Standards

230 kV transmission lines

Pole Structure Type: C-18

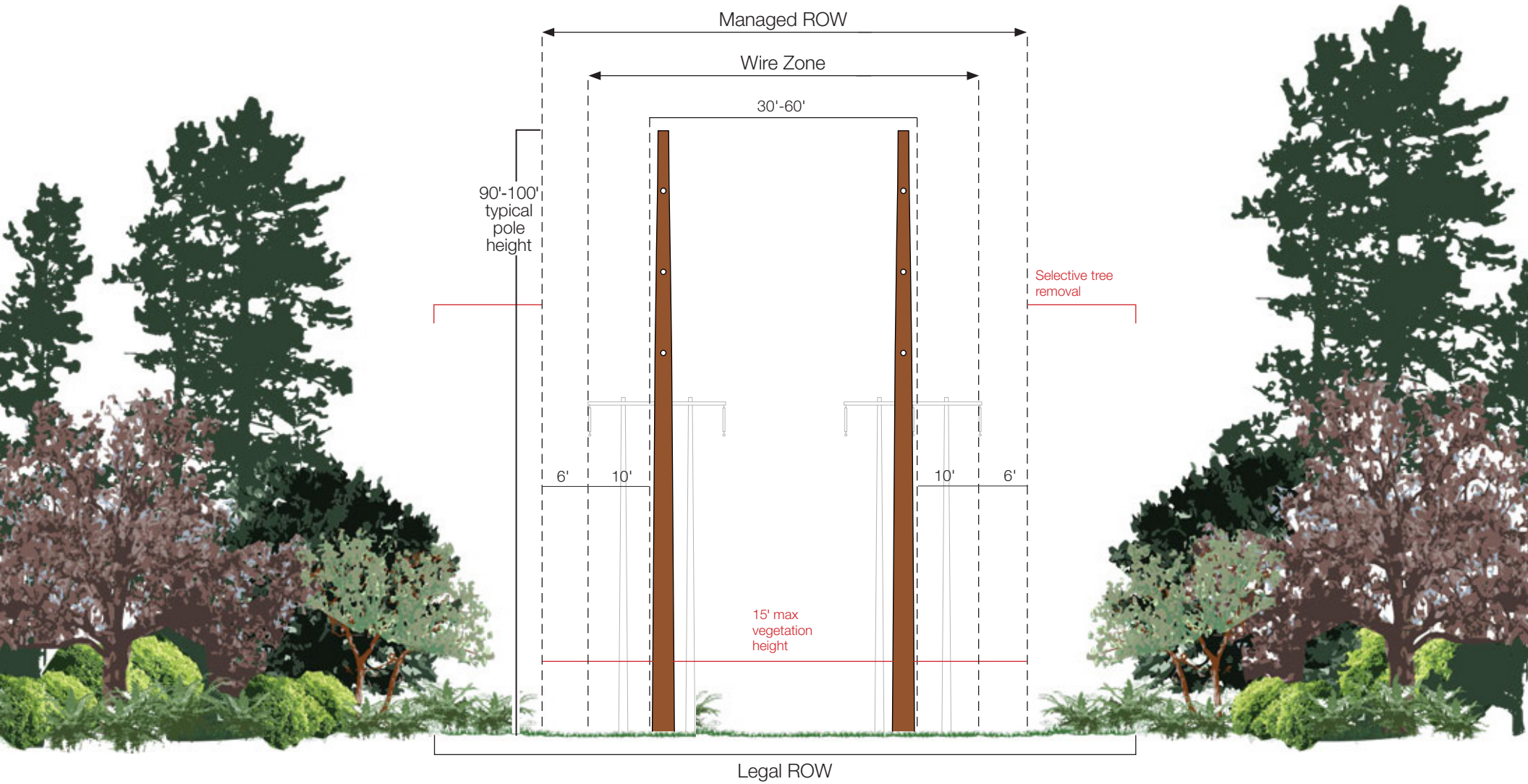
NOTE: Existing poles are shown in gray for reference.

PSE's 230 kV transmission vegetation management standards generally requires removing trees located in the wire zone that have a mature height of more than 15 feet.

Wire Zone: Section of a utility transmission right of way extending to 10 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Managed Right of Way (ROW): The section of a transmission right of way that extends roughly 16 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Legal Right of Way (ROW): The full width of the easement. Maximum height of mature vegetation between the Managed ROW and Legal ROW is dependent upon tree species, tree health, and distance from the wires.



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Vegetation Management Standards

230 kV transmission lines

Pole Structure Type: C-17

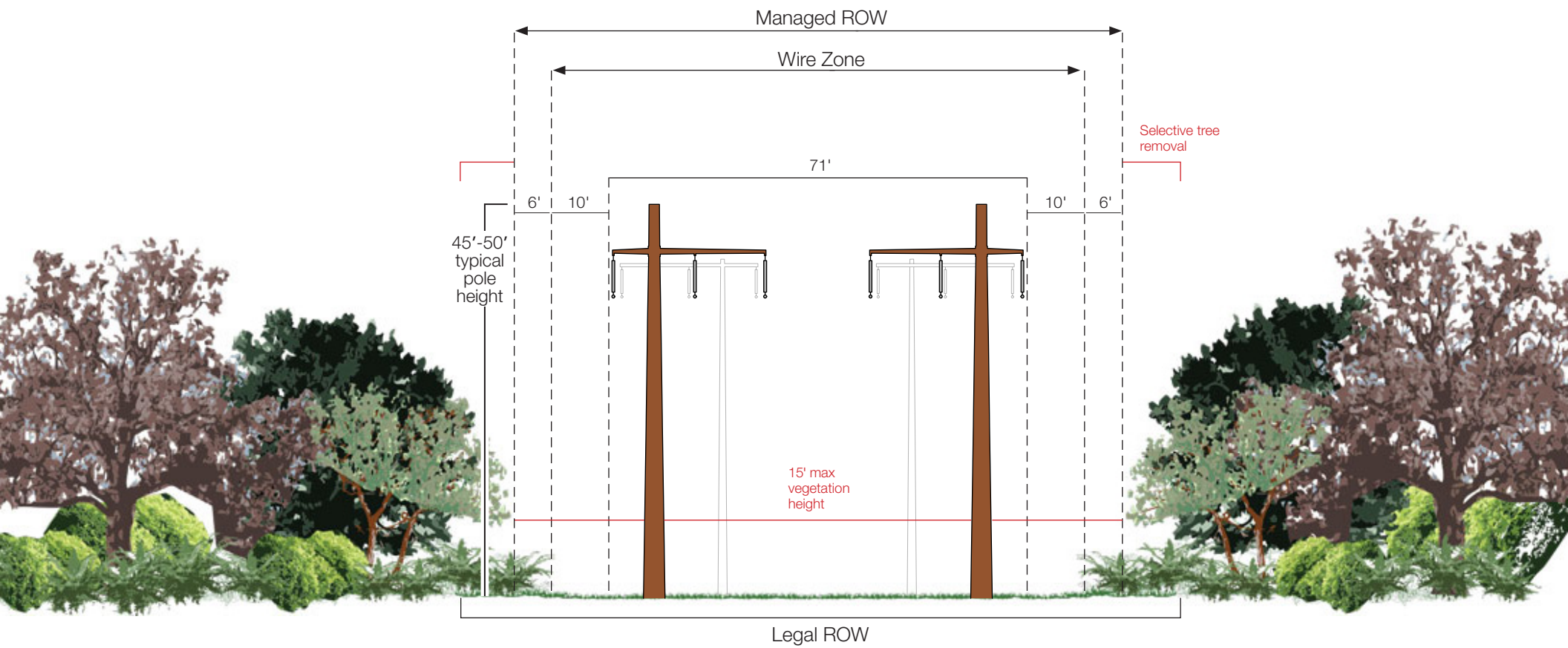
NOTE: Existing poles are shown in gray for reference. If the Managed ROW exceeds the Legal ROW, then vegetation management will be limited to the Legal ROW.

PSE's 230 kV transmission vegetation management standards generally requires removing trees located in the wire zone that have a mature height of more than 15 feet.

Wire Zone: Section of a utility transmission right of way extending to 10 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Managed Right of Way (ROW): The section of a transmission right of way that extends roughly 16 feet from the outside transmission wire(s). Vegetation with a mature height of 15 feet or less is allowed in this zone.

Legal Right of Way (ROW): The full width of the easement. Maximum height of mature vegetation between the Managed ROW and Legal ROW is dependent upon tree species, tree health, and distance from the wires.



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