Guidelines for Use of Transmission Line Right-of-Way

Purpose:
Work with property-owners and/or customers on easements, activities and construction in the vicinity of the District’s transmission lines.

Background:
Much of the District’s transmission system is on private property. In order for the District to own, operate and maintain its transmission system, the PUD works with property owners to obtain mutually agreeable easements. Easements are specific and unique to the individual property for which they are granted. The easement describes the allowable activities for both the District and the property owner. The District works with a property owner to ensure they have maximum use of their land while at the same time preserving the District’s ability to operate and maintain its transmission lines safely.

Safety and you!
Safety is one of our core values. We care about your safety as well as the safety of your property. We are guided by the safety requirements of the Washington State Administrative Code (WAC) and the National Electric Safety Code. If you have projects or activities planned near the PUD’s transmission lines, they must be allowed under the safety codes. There are many laws or codes which may apply however at a minimum we recommend that you review WAC 296-24-960 and WAC 296-307. If you have any questions about a proposed project, call us at (509) 661-8400 and we can talk before you get started.

The following are a few things that should be considered when in the vicinity of the PUD’s electric transmission system.

- **Calculating distances**: Talk to us when you are trying to calculate distances near a transmission line. Don’t try to measure or assume a distance. These lines are typically 115 or 230 Kilovolts (kV). Visual inspections of the lines and locations can be deceiving and/or incorrect. Power line locations can and do change significantly as the conductor heats and cools or is displaced by winds.

- **Grading near a transmission line**: Contact the PUD if you are considering doing any grading around the transmission line. In some instances, even minor grading can infringe on the required code clearances that are there for your safety. Additionally if you are grading within 50’ of any pole or 20’ of any guy anchor the stability of the structure could be affected.

- **Buildings & structures**: If you are placing a building or any other man-made structure near a transmission line we need to make sure that they are located in a safe area and that access to the transmission structures are preserved. We will provide you with written approval for your proposed project once we are sure that it meets the applicable codes and regulations.
• **Swimming pools**: Swimming pools and power lines don’t mix. Diving boards and other toys are often up in the air and many times long metal rods are used for cleaning the pool. It is too easy to forget that there is a power line overhead.

• **Trees & plants**: Check with the PUD before planting trees or other vegetation near the transmission lines. It’s important to keep in mind the long term growth potential of any vegetation. Our policy is that they should not exceed 12 feet in height at maturity. Even at this height there are limitations to where “non-qualified electrical workers” can work. For instance, WAC 296-24-960 (3)(a) requires that no work be performed, nor part of any tool be allowed, closer than 10.7’ to a 115 kV line and 12.8’ to a 230kV transmission line.

• **Equipment**: If you are going to be operating equipment or cranes around the transmission line there are specific codes which apply. The following table is taken from the WAC and is not meant to cover every situation but is provided for general use. You need to be aware of all required clearances for working in proximity of the lines. These are the absolute minimums for your safety. Stay as far away from the lines as possible! Remember we can help determine distances if you have any doubt.

<table>
<thead>
<tr>
<th>Normal Voltage</th>
<th>Minimum Required Clearance (feet)</th>
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</thead>
<tbody>
<tr>
<td>0 to 50,000 V</td>
<td>10</td>
</tr>
<tr>
<td>115,000 V</td>
<td>15</td>
</tr>
<tr>
<td>230,000 V</td>
<td>20</td>
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</tbody>
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**Things important to the District:**
In order to provide reliable and safe delivery of power, the following examples illustrate important safety concerns we have. This list is not all inclusive, but gives you some guidelines for frequently encountered items.

• **Fences**: Fences near power lines can be problematic for both the property owner and District crews. Metal fences in particular conduct electricity and can develop dangerous voltages if they are not properly installed. Fences cannot be attached to our poles. Fences also are a problem for us when we have to do maintenance and they can be a safety hazard for our crews. At least 10 feet of space between our poles and a fence is necessary to give our crews room to work and provide a safe working environment. Gates may also be required for District access.

• **Controlled burns**: No burning is allowed in the vicinity of the lines. Many of the structures are wood and the conductors are made out of soft metals. Excessive heat can damage the infrastructure.

• **Blasting**: The PUD needs to know if there is going to be any blasting near a transmission line. We need to be sure that our facilities are not damaged.

• **Protection barriers**: If there is significant traffic around our transmission structures we may want some form of physical barrier or protection. This may be as simple as a few ecology blocks or something more significant depending upon the situation.

• **Dust**: Activities that produce an excessive amount of dust are a concern to the District. Dust can accumulate on the insulators and cause an electrical flashover.

For more information about the transmission lines, safety and how we may assist you with your project, please contact your Chelan PUD Transmission Department at (509) 661-8400.