SOUTHERN CALIFORNIA EDISON®
Energy for What's Ahead®

RIGHT TREE RIGHT PLACE FAQ

WHAT IS RIGHT TREE RIGHT PLACE?

Right Tree Right Place (RTRP) is an industry accepted approach to tree and landscaping selection that ensures that only appropriately sized vegetation at maturity is selected when planting choices are made. For example, you would not plant a redwood tree under an overhang of your house or directly abutting your sidewalk. While it may look fine initially, when it grows it will ultimately damage your house and raise the concrete in your sidewalk. RTRP is a concept that also applies directly to overhead power lines and other infrastructure. In his industry classic textbook "Arboriculture" Dr. Richard Harris suggests:

Control of Plant Size: Pruning can reduce shade, the danger of wind-throw, and the interference with utility wires, can simplify pest control spraying, and can prevent the obstruction of views and traffic. If you choose plants that will be an appropriate size at maturity, this will minimize the need for pruning. If a plant must be pruned more than once every five to seven years to control its size, it is the wrong plant for the particular location or use.

Note: The majority of trees currently being pruned by utility companies in California require pruning more frequently than once every 5-7 years. In fact, many of these trees require pruning annually.

WHAT PROBLEMS OCCUR WHEN UNSUITABLE TREES ARE PLANTED UNDER OR NEAR OVERHEAD POWER LINES?

Currently, managing vegetation near power lines is one of, if not, the largest maintenance cost for utilities across North America. Ensuring RTRP is incorporated in future landscaping will reduce energy costs by billions of dollars annually.

In addition to adding significant, and erroneous energy costs, tree and power line conflicts in North America:

1. represent the single largest cause of power outages
2. present a public safety threat to people climbing trees near power lines
3. result in ugly and unhealthy trees due to frequent pruning
4. reduce property values by diminishing landscape values

ARE THERE SUITABLE TREE SPECIES TO PLANT UNDER OR NEAR OVERHEAD POWERLINES?

Yes. There are over 60,000 species of trees in the world and over 1,000 in North America. Trees come in all different mature sizes, shapes, colors, and landscape purposes. An excellent source for tree species and tree selection tools specific to California can be found at the Urban Forests Ecosystem Institute at Cal Poly:

https://selectree.calpoly.edu/right-tree-right-place/

WHICH CAME FIRST, THE TREES OR THE POWER LINES.

The answer is best addressed on a site specific basis, but we can make some observations based on available information. Power lines have been installed in California for over 100 years with new lines miles being added yearly as new customers, both business and residential, join the electric grid. For perspective, PG&E currently manages vegetation along 106,000 circuit miles of distribution and another 18,600 miles of transmission lines in their service territory. SCE manages vegetation along approximate 91,000 miles of distribution and another 12,635 miles of transmission lines in their service territory. Collectively these utilities, and other in the state, manage 10's of millions of trees that are growing adjacent to or under their power facilities. The overwhelming majority (probably 99%) of those trees are planted by, owned, and controlled by individuals, local governments or agencies.

While wooden power poles, for example, have a useful period ranging from 30- 80 years, trees that are planted near power lines do not. Based on a various research studies, it appears that the trees we plant, as part of our landscaping, do not live very long. According to experts, the average life expectancy of a street tree can range from only 9-28 years. While the actual age of a tree will vary considerably based on the species selection, siting, planting, and the care of the tree, it can be said that most trees that we plant do not live longer than a maximum of 28 years.

This preceding presents an interesting historical fact. It appears that we, as a society, have had about 3 or 4 opportunities to require RTRP in the past and have not done much in order to prevent the resulting fires, outages, accidents, and wasted maintenance costs that are born by California citizens.

There are other ways to figure out if the tree was there before the installation of powerlines. If the tree is located as part of landscaping connected to a building, you first need to determine if the building was constructed with electricity. If it was, the power was likely first brought in to build the structure - afterwards the landscaping was installed (and the trees planted). This is the cycle that is indicative of how new power lines are installed. Another method is to determine when the tree was planted (core sample and date the tree) and then compare that age to the date the electric facilities were installed. If you pursue these methods you will find that the majority of trees that utilities currently prune came after the installation of the power lines, either through intentional planting or natural propagation.

WHAT DO WE DO ABOUT TREE AND VEGETATION THAT GROWS NATURALLY UNDER OR ADJACENT TO EXISTING POWER LINES?

Utilities should be encouraged to remove incompatible vegetation under and adjacent to all transmission and distribution power lines. Fortunately, California utilities patrol all of their overhead lines at least once a year. During those patrols, incompatible vegetation should be removed or managed so as to minimize incompatible volunteer vegetation.

HOW DO WE MOVE TOWARDS COMPATIBLE VEGETATION NEAR POWER LINES?

Given the relatively short lifespan of existing trees, attrition can be used along with increasing targeted utility/agency driven tree removal and replacement projects. Street Tree Ordinances or state law should require RTRP concepts for all new tree plantings and landscaping associated with new building developments. Utility companies should be encouraged to expand RTRP public education efforts along with promoting more plantings for energy conservation and carbon sequestration. In order to address the environmental benefits of trees, particularly in the urban forest, the objective of this effort should be to significantly expand the California canopy while ensuring that new trees do not grow into or fall into electric power lines and equipment.

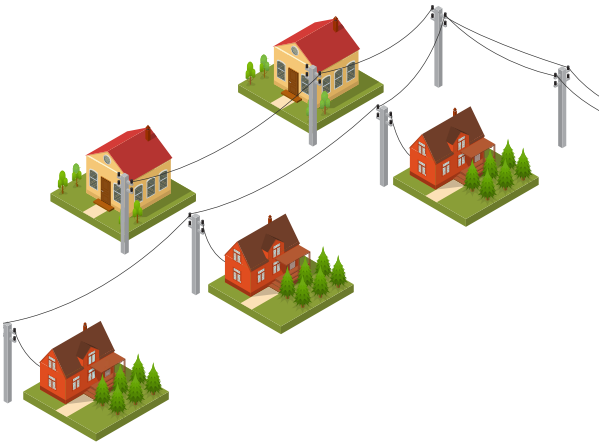
CAN UTILITY COMPANIES OR ARBORISTS PREDICT WHICH TREES WILL FALL OVER OR BREAK APART?

No. While the industry has made progress in hazard tree identification processes, there is currently no way to accurately predict which trees adjacent to power lines will fall over or break apart, particularly during high wind events.

Based on the Beaufort Scale **(https://en.wikipedia.org/wiki/Beaufort_scale)** unpredictable tree failures may occur near power lines any time winds begin to exceed 39 mph.

WHO ENDORSES RTRP?

Every major tree care group including the Arbor Day Foundation and the International Society of Arboriculture. Given the damage caused to trees through repeated utility pruning, and the public safety threats posed by incompatible vegetation near power lines, there are no valid arboricultural or practical reasons to plant big trees under or adjacent to existing powerlines.



ADDITIONAL INFORMATION ON RTRP:

- **http://arbordayblog.org/treeplanting/right-tree-right-place/**
- **https://selectree.calpoly.edu/right-tree-right-place/utility-precautions/frequently-asked-questions**
- **https://www.pge.com/en_US/safety/yard-safety/powerlines-and-trees/right-tree-right-place/right-tree-right-place.page?WT.mc_id=Vanity_righttreerightplace**
- **http://www.treesaregood.com/portals/0/docs/treecare/avoiding_conflicts.pdf**