

UTILITY AND MUNICIPAL COMPETITION FOR SPACE IN THE URBAN ENVIRONMENT¹

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Abstract. Utilities must trim trees in order to furnish reliable electric service and minimize the danger to their customers. In a perfect situation, this would include removing all trees near utility lines and replacing them with compatible tree species. Union Electric has established a corporate program, UE Greenleaf, to offer alternatives to communities that express interest in removal and replacement programs or other reforestation projects.

Competition is defined in Webster's New Collegiate Dictionary as the act or process of competing; rivalry, a contest between rivals, and an active demand by two or more for some environmental resource in short supply. In seeking a more appropriate term than competition, the Thesaurus yields: a contest, conflict, strife, tug-of-war and warfare. The definition and suggested alternatives seem to suggest a definite win-lose situation. I believe enough common ground and common interest is present that utilities and municipalities may pursue alternatives that allow both to be winners. Once the goals and objectives of each organization are understood, work can begin towards accomplishing those goals and objectives.

Discussion

Union Electric Company (UE) is an investor owned utility, headquartered in St. Louis, Missouri. UE supplies electricity throughout our service area and gas and water service to several smaller cities in our territory. Our greatest opportunity to realize cost savings from any cooperating efforts with municipalities is in the urban area in and around St. Louis where 60% of our customers are located and 50% of our tree trimming budget is allocated.

Gas and water service, as well as overhead and underground electrical lines, all actively compete for the same space that many municipalities use for their common tree planting areas.

The street median strips, areas adjacent to the street and along the sidewalk, are all areas sought for use by utilities and municipalities. Although different methods are used to install different utility services, each method may adversely affect existing trees or pose barriers or constraints on future planting. These methods should be learned by municipalities and incorporated in your requests for utility participation in projects.

Certain facts are unavoidable when working with a utility. We are a highly regulated industry that performs in a regulated manner and charges rates as approved by the state regulatory commissions. We also answer to stockholders and are a for-profit business. Many times seemingly quick answers by utilities are based on a direct knowledge that regulations require a certain type of construction and no variance will be allowed. We ask the municipalities to realize that, like yourselves, we have some items that are not negotiable and to work with us to help minimize conflict.

In recent years two major concerns have surfaced that should cause the local utility to seek municipal input and participation in many decisions and projects. The increased awareness of customers seeking better service reliability and the growing interest of utilities to become a proactive partner in issues involving the environment both should serve as a catalyst for inspiring utilities and municipalities to work together.

Competition for urban space should be viewed as an opportunity to generate synergistic results and a time to change old paradigms. The way each of us has done business in the past may no longer be acceptable to our customers: your constituents.

The location and installation of utility lines will continue to remain on public easements. New technology and increased awareness of plant

1. Presented at the annual conference of the International Society of Arboriculture in Philadelphia in August of 1991.

physiology have combined to make the new installations and required repairs to old physical plants much less intrusive and/or destructive to existing trees. Underground lines may now be installed with radio guided wet boring machines that require only a 5 foot hole at the entrance and exit points of the cable. These devices allow for boring under streets, sidewalks, and trees with no effect on the existing trees. The cost for the machine is high as well as associated higher costs for the cable installation when compared to trenching. If used only where necessary, and continuing to trench in areas where trees or established turf is not present, your cost should be acceptable.

In a recent survey of utilities (3) only 15% of survey respondents were currently using radio guided wet boring devices or radio controlled moles for cable replacement, and 1% would not use it again. If we seek to be proactive partners with the municipalities, investment in this type of equipment may not be an option in years to come. Trenching continues to be the installation method of choice for gas and water lines with boring machines used in only limited circumstances.

In most urban areas the largest competitor for space will be existing overhead utility lines and the required construction of new lines. In a perfect situation, this would include the removal of all trees near the utility lines and replacing them with compatible species. Because real life is less than perfect, alternatives must be considered.

In an informal survey of neighboring utilities, I found "required tree clearance" defined either in years of growth or specific feet clearance from the conductor. A general statement could be made that most utilities clear for 2 to 4 years of growth, use directional and natural pruning methods, avoid topping (1), and require the final cut to leave the bark branch collar intact.

My survey shows most utilities offer some type of tree removal and replacement program as a suggested answer to easing the competition for space around utility lines. Why though do we have to impose strict bounty systems and/or cost constraints? Most programs will only replace one removed tree with one new low profile tree and then plant the tree back under the lines. Why do we often insist that the municipality split the cost before they

can participate in our removal/replacement programs?

Many of our industries' current practices for tree removal and replacement are outmoded when compared to our customers' requirements to be proactive. To those companies who have not considered change, I suggest the rewards can be great.

In October of 1989, Union Electric established a Company environmental program, UE Greenleaf, as a reforestation and energy conservation program designed to address environmental issues through education, partnerships and incentive projects in communities within our company service area. It has been through this program that we have been able to channel company resources for tree planting to areas other than the utility corridors and public rights of way.

Instead of bounty systems for tree removal programs, we are able to offer grants and/or in-kind services to help restore other city properties. Many times because of location or tree density, tree replacement is not needed in the areas where trees are removed. This offers an excellent opportunity to help your municipality with off-easement planting. The planting of a large canopy tree in the town square or city park area can demonstrate to the public a positive proactive environmental posture while addressing the current emphasis on Global ReLeaf and other programs attempting to increase our urban forests.

If tree replacement in the same location is required, consider planting two trees for each one removed. Recently several companies have begun to offer 18 inch seedlings with 2 or 4 foot grow tubes included in the price. In areas of low vandalism, the opportunity is present to plant many trees, with a high likelihood for survival and for a lower cost than just one 8 or 10 foot tall tree.

Many trees trimmed by utilities are candidates for removal but because of lack of communication with the municipality remain standing. H. Sharon Ossenbruggen (2) suggests a "tree dignity ordinance" to help establish specific procedures by municipalities. A well written tree ordinance that considers the goals and objectives of each of our organizations, with alternatives considered for off-easement plantings, can help minimize the compe-

tion for space and offer synergistic solutions for the future.

Summary

No one party will be responsible for the resolution of the urban space problem, but through the efforts of all involved, acceptable solutions may be developed. There are cost savings to the utility if large canopied trees requiring repeated trimming are replaced with smaller canopied species. Municipalities may gain large canopied trees in public areas if their planting site is removed from the area under utility lines. This allows broader utility involvement in your planning process. The best ideas of both organizations will be doomed to failure if adequate resources are not allocated to these programs. As organizations that must share the same limited resource; space, I suggest a pooling our knowledge, talents and resources. Let the results to speak for themselves.

Literature Cited

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3. Tyner, J.T. 1991. *Taking a double look at underground distribution practices*. Transmission & Distribution, July, pp18-25.

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