UTILITY AND MUNICIPAL COMPETITION FOR SPACE IN THE URBAN ENVIRONMENT

by John A. Bieller

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

physiology have combined to make the new installa-
tions 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 com-
patible species. Because real life is less than per-
fected, 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 con-
straints? Most programs will only replace one re-
moved 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 pro-
grams?

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 con-
sidered 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 plant-
ing 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 ordi-
nance” 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