

methods. Numerous other conclusions of a general nature were also readily visible. For example, a long range right of way management plan is more essential than the contracting method in assuring the most successful and cost effective maintenance program. Relative to this, the bid process forces planning, whereas cost plus requires individual initiative as well as teamwork in planning and completing a successful program. However, no plan or method can be successful without "top-down" management support, which is the single most influential factor in determining the effectiveness of a maintenance program.

No program can be adequately evaluated without accurate and pertinent quantifiable data. Historical data, when accurate, are irrefutable. Data which provide complete knowledge of actual trimming requirements are essential. Number of line miles is often deceiving because it does not refer to the actual miles of trimming, therefore it should not be used when comparing quantitative values of contracting methods.

Collectively, the personal initiative of people in the field actually doing the work will have a significant impact on the success of a maintenance program. Firm price bidding provides the best vehicle for offering financial incentives to crew members.

On the other hand, the cost plus method appears to offer greater job security, therefore attracting and retaining the more qualified worker, particularly in non-unionized locations.

Summary

Firm price bidding at CP&L is in its infancy but will become an integral part of the long range right of way maintenance program. An estimated 15% of the company's system is compatible to firm price bid work. Present practices of using "cost plus" are sound, and this will most likely continue to be a major contracting method. The contracting program at CP&L is continuously evaluated and as new data become available the program, hopefully, will remain flexible enough to change and take advantage of the most effective contracting methods.

What is good for CP&L is not necessarily good for all utilities. Each Company must evaluate its individual needs and resist jumping on a bandwagon simply because it offers a "free" ride.

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Abstract

WIDIN, KATHARINE D. 1987. **Integrated pest management: A preventative maintenance approach to landscapes.** *Am. Nurseryman* 165(10): 38-40, 42-43.

You can use IPM to manage residential and commercial landscapes. IPM controls plant insects and diseases through a combination of cultural, biological and chemical control measures. These controls are properly timed to hit insects and diseases at their most vulnerable stages. Periodic monitoring, during which all plants at a site are inspected for health problems, determines which insects and diseases are present and if they constitute a hazard to the plants. The IPM approach is not anti-pesticide but uses knowledge of pest and disease life cycles to properly time all control measures. The most effective chemicals are used to treat only plants that have problems. Biological and cultural control measures are used whenever possible. This approach is preferable to the spraying approach that blankets a landscape. A good IPM program is a total tree and shrub health-care program, dealing not only with pests but also with proper site and variety selection, fertilization, pruning and other cultural practices that enhance the growth and appearance of landscape plants.