

IMPORTANCE OF SUPERVISION— UTILITY RESPONSIBILITY¹

by William B. Hamilton

With the ever increasing cost of electricity to customers of Delmarva Power and Light and other utilities, the power industry constantly finds itself under heavy scrutinization by the public, various rate-governing authorities, environmentalists, and general public advocates condemning the continual rate increases by public utilities. The cost of electricity to an average 750 kw hour customer of Delmarva in Delaware has increased to approximately \$55.00 per month in 1980. It is with these items and figures in mind that, as a supervisor with Delmarva and part of a management team, I would like to address the progress that Delmarva has made in the past three years since initiating a formal vegetation management program.

In 1976-1977, Asplundh Environmental Services was contracted by Delmarva in DP&L's Northern Division (New Castle County, Delaware), to evaluate the distribution and transmission vegetation maintenance program. Upon completion of this study, it was determined by top management that there was immediate need for a supervisor experienced in vegetation maintenance and management. In July of 1977 I was hired to begin establishing a program for Delmarva. With both public relations and economics in mind, the forestry and operations departments began addressing the most immediate needs of Delmarva for obtaining a well balanced and effective vegetation maintenance program.

Past Company practices had left little time for supervisors to fulfill their role of supervising. Delmarva was caught in a program of "hot spot trimming", (continually relocating from one problem tree condition to another). Frequently, many tree crews spent the majority of time answering tree request slips that often were false alarms; e.g., small limbs touching service wires, limbs on telephone wires, or street light clearing for lights that were not Delmarva's responsibility. Super-

visors also spent numerous hours of the week explaining to customers why the power company would not remove their trees, only trim them.

Using a combination of the vegetation report and a daily review of the tree maintenance operation, a number of policy changes that were needed became evident. Some of the more beneficial improvements were: 1) changing crew sizes to best benefit production and economics, 2) moving crews or adjusting work areas to alleviate unnecessary travel time to and from work sites, 3) change to lateral or natural trimming for better clearance and extension of the trimming cycle, and a 4) new approach to customers desiring tree or brush removal rather than trimming.

This closer customer communication and explanation pertaining to adequate clearance through trimming or clearing greatly extended the maintenance cycle. Crews all started carrying chemical for treatment of stumps on tree removal to prevent resprout.

We developed a follow-up second- and third-year spray program. We developed a policy on acceptance or rejection of tree removals; a policy that best benefits DP&L and still maintains a high degree of customer satisfaction. We established tree removal policies with state highway personnel for trees planted or growing on highway right-of-way, large company properties, and also with state and county park supervisors. We started tree removals or brush removal on all capital work and began scheduling work around future capital projects, e.g., if a large conversion was to take place in an area that was in need of trimming, that area was put off and done in conjunction with the construction job order.

Previously, almost no capital trimming work was budgeted for and was charged to the maintenance account. The dollars now spent on capital work for the Northern Division alone account for almost \$100,000 average a year.

¹ Presented at the annual conference of the International Society of Arboriculture in Hartford Connecticut in August 1980.

We incorporated mechanical clearing in conjunction with hand clearing to achieve the most economical benefit. We developed close communications and understanding with contracting supervisors to achieve desired results on both maintenance and capital work. This was and is still taking place through ongoing training and evaluation procedures. We developed a time sheet that allowed DP&L to computerize all work on a weekly basis. Cost and efficiency analysis are now being evaluated for all distribution and transmission work involving contracted crews. We developed various forms which aid in elimination of unnecessary phone calls, return trips, and poor customer satisfaction for various reasons. We eliminated dumping fees charged to DP&L for disposal of wood chips and have presently developed a pilot program with the Public Works Department of New Castle County to sell wood chips for composting sewage. This may present DP&L with a substantial monetary rate of return in the near future. These are just some of the more immediate developments that DP&L achieved with the advent of trained supervision in the vegetation maintenance program.

In 1978 an internal audit completed by an independent firm for the Public Service Commission of Delaware indicated that DP&L should expand its Forestry Department corporate wide. This recommendation was directly related to supervision techniques and procedures that were being implemented in only a portion of the Company's service territory.

Delmarva, to date, employs a staff of three foresters. Two hold degrees in forestry management, while the third has a degree in agricultural engineering with a background of extensive tree work and customer relations. Two of the foresters are each responsible directly for their respective division operations (Northern and Southern), while I, as Corporate Forester, am responsible for the development of policies and procedures within the vegetation maintenance program, as well as acquiring all governmental construction related permits.

In addition to the division forester, Delmarva also

maintains a staff of four tree foremen. The tree foremen are responsible for daily control of the overall tree maintenance program. These foremen schedule work locations, check tree condition tickets, and evaluate both contractor and in-house crews for tree trimming efficiency and clearance. Customer contact is usually performed on a daily basis with explanations of various tree trimming requirements and evaluation of tree trimming or removal requests.

Perhaps the most significant program recently completed is the incorporation of all Northern Division contract crews on the forestry efficiency and cost report. Previous results had shown costs of tree trimming in 1979 to be \$19.74 a tree while tree removals including stump spray on trees greater than 6 inches cost \$28.49 per tree. Not only do these figures provide cost justification for the aggressive tree removal program that Delmarva has pursued; they also have provided a means of comparing today's maintenance costs since additional supervision has been obtained. The most recently compared costs for the first quarter of 1980 show a reduction of \$2.10 for trees trimmed and a \$1.57 decrease for tree removal. These figures represent a cost-inflated figure over \$50,000 savings for the first quarter of work accomplished by the contract forces in New Castle County alone. Savings for the entire year could be expected to reach \$200,000 within the Northern Division. Savings for the Southern Division may be just as high or higher. This reduction is directly related to additional supervision and a more intensified monitoring of work. This was previously impossible with only one trained supervisor to work on Delmarva's tree maintenance program.

In summary, I believe that adequate supervision is the key factor in obtaining quality tree conductor clearance, while providing customers reliable electrical service at the minimal cost obtainable.

*Forestry Supervisor
Delmarva Power
Wilmington, Delaware*