

# CONTRACT VS. COMPANY TREE CREWS<sup>1</sup>

by Anton L. Higgins

I would like to acquaint you with Central Hudson Gas & Electric Corporation. We are a medium sized investor-owned New York utility serving approximately 200,000 electric customers within a 2,600 sq. mi. franchise area. Geographically we are located in the Central Hudson Valley and our service area extends from 10 miles south of Albany, to 30 miles north of New York City. We are bordered on the east by the States of Massachusetts and Connecticut and extend westward into the Catskill mountains and maintain approximately 6000 miles of overhead distribution lines.

Central Hudson has historically performed necessary distribution tree trimming with our own forces. Central Hudson employees are represented by the IBEW and our agreement states that tree trimming is a responsibility of linemen. We continue to use linemen in all aspects of vegetation control. In 1952 the position of Line Clearance Man was established and these individuals are assigned almost exclusively to distribution tree trimming. During periods of reduced line work activity the Linemen supplement the Line Clearance forces and are assigned to both transmission and distribution line clearance activities.

The assignment of contractor distribution tree trimming crews was limited to new construction projects and off-the-road trimming until November of last year when we assigned a crew, working on an hourly rate basis, to one of our operating districts. In June of 1980 we assigned another contractor crew to another one of our districts and in July we assigned still another crew to one of our operating districts. We currently have three contractor crews from two separate tree companies working on an hourly rate basis on our system.

Our distribution tree trimming specifications require a contractor to provide us with eight hours of work. Any travel of equipment or men before and after the days work is to be included in the contractors hourly rate. Central Hudson is respon-

sible only for travel that occurs during the normal course of a day's work, or if the work location is changed by our direction.

This gives the contractor a decided edge in productivity over our own forces, who report to a headquarters and travel to the work site. Needless to say the Company has explored various options for closing this productivity gap, including an offer to increase the hourly rate paid to line clearance men in exchange for job site reporting.

During the 1979 negotiations, the Union rejected the Company's offers and the Company was forced to take an in-depth look at trimming with in-house people and to explore the possible economic advantages which may be realized by utilizing contractors for this work. Firstly, we had to ascertain what it costs us to trim with our own people, and what would be the unit of measurement to compare our tree trimmers with contractors.

In early 1977, as the result of a work study program conducted by the Science Management Corporation, our trimmers were measured on the basis of their accomplishment toward attaining a target of 40 manhours per mile. The target was unattainable in most of our operating districts and the informatoin generated by the work study reporting system was too general in nature to enable management to affix hard dollar figures to trimming operations. Also, monthly distribution tree trimming reports, a product of the work study program, failed to adequately address the detailed activities of tree trimmers. Activities such as roadside ground cutting, tree removals and large limb removal were generally lumped together as tree trimming.

It was determined that to enable management to gain an accurate appraisal of what our actual costs were, it was necessary that we revamp our field auditing procedures to reflect actual work practices, costs for these practices and, also, be able to measure individual crew performance within an

<sup>1</sup> Presented at the annual conference of the International Society of Arboriculture in Hartford, Connecticut in August 1980.

operating district.

With this objective in mind, we developed our Distribution Trimming — Weekly Crew Log. This device enables us to determine: 1) mileage covered, 2) mileage trimmed, 3) work activity, 4) work location, 5) chemical and its usage, 6) personnel assigned, 7) equipment used, and 8) non-productive hours.

This data-collecting device is highly adaptable to computerization and we expect to have the following information readily available to aid us in formulating tree trimming budgets:

1. Average cost per covered mile; by crew, by District, system wide.
2. Average cost per trimmed mile; by crew, by District, system, wide.
3. Actual dollars expended to trim a circuit and/or township.
4. Inventory of circuits trimmed.
5. Immediate differentiation of maintenance and capital monies.
6. Segregation of all work activities and monies expended.
7. Record of chemical usage along distribution lines.
8. Accurate cost and production comparison between in-house contractor crews.

We began using the weekly crew log in November of 1979 with our first tree trimming contractor and two in-house crews in one district. Now our three contract crews and all in-house crews are reporting on this form. The production-costs information provided by the form, while yet premature, is very interesting. We are finding that contractor crews are trimming on our system at a consistent 30% savings over our in-house people. There appears to be little doubt as to the cost effectiveness of contractor vs. company crews, but we feel that there are definite advantages to having in-house crews.

We feel that with company forces we have a quicker response time during storm emergency situations and, when emergencies do occur, our people are familiar with the area which increases their effectiveness. Our tree trimming people have been with us for long periods of time, they provide an extremely stable work force which is cognizant of sensitive areas or customers and can often obtain trimming permissions that would not be available to contract crews. Assigning linemen to perform tree trimming activities also provides the opportunity to achieve productive work during the reduced line work periods which occur in the annual work cycle.

Central Hudson's on-the-road distribution lines are trimmed on a four-year cycle. The off-the-road distribution is on a six-year cycle. Scheduling of all distribution tree trimming is the responsibility of the five operating districts superintendents and all trimming within a district is accomplished by trimming entire townships within the district. With approximately 1500 miles of distribution lines needed to be trimmed annually to achieve the company's commitment to a four-year trimming cycle it has become increasingly important to the Company to implement the best possible techniques, supervision and cost effective methods available.

Tree trimmers, both company and contractor, are required to trim trees using the *natural trim* or *drop crotch* method. This technique, which adheres to basic arboricultural practices, is less obtrusive than *stubbing* or *roundovers* and when properly applied, allows for reduced tree trimming frequency.

Supervision of all company tree trimming crews is accomplished through the use of line foremen within the various operating districts. In most instances, one line foreman is assigned vegetation management responsibilities for a given district. In this capacity the line foreman pre-inspects, plans and audits all transmission and distribution activities within his district. Every effort is made to audit the performance of all contractor crews on a daily basis. This practice increases production, contributes to achieving consistent results and enables the Company to solve many minor problems before they become burdensome. We vigorously encourage contractors to provide supervision for their people and feel that the auditing provided by our line foreman serves to demonstrate Central Hudson's commitment to cost effective tree trimming practices.

It appears that it will be to our best interest at Central Hudson to vigorously exercise the contractor option in regards to distribution tree trimming. While a formal management plan for the increased usage of contractor crews has not been formulated, it is reasonable to expect that contractors will continue to supplement Company tree trimming forces. The mix of contractor and company crews will depend on the relative economics of company and contractor trimming costs; the

need to utilize company line crews to fill work valleys, the use of contractors to shave work peaks; and the ability of contractor and company crews to maintain standards of quality.

In effect we have found that line clearance provides an opportunity for both company and contractor crews to meet our overall objectives of cost, quality, and customer relations. The mix of company and contractor crews depends on several factors which vary with time. In order to

evaluate these factors, it is necessary to establish consistent standards of quality, a system that measures cost, and perhaps most critically, a scheduling, planning, and control system that insures proper supervision by a foreman in the field.

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## ABSTRACT

Kay, B.L. 1980. **Mulch choices for erosion control and plant establishment.** *Weeds, Trees & Turf* 19(8): 16-20, 22, 24.

Mulching nearly always shortens the time needed to establish a suitable plant cover. The conventional mulches of agricultural or industrial residues have recently encountered competition from many chemical stabilizers or mulches introduced largely as supplements to the increasingly popular hydraulic methods. Mulches can both protect soil and enhance plant establishment. The soil is protected by shielding it from raindrop impact, retarding water flow and soil movement by trapping silt on the sites, increasing water penetration, and sometimes shedding water. Properly anchored, mulches may reduce wind velocity. They enhance plant establishment by holding seed and fertilizer in place, retaining moisture, preventing crusting, and modifying temperatures. Organic mulches are often an agricultural crop residue or industrial product. The price usually reflects transport and handling cost more than any intrinsic value of the product. Most organic mulches require additional nitrogen to compensate for the tie-up of nitrogen in the decomposition process. Hydraulic mulching, or hydromulching, is a mulch applied in a water slurry. This same slurry may also contain seed, fertilizer, erosion-control compounds, growth regulators, soil amendments, etc., and is increasingly popular because of low labor requirements. The most important quality of a hydromulching material is that it must adhere to the soil even on steep slopes and hold the seed in place during heavy rainfall impact and wind. Chemicals to be used as a mulch, humectants (a substance that absorbs or helps another substance retain moisture), or soil binders are usually applied in a water carrier or as part of a hydraulic seeding slurry. They are expensive and very specialized, and must be used correctly for maximum effectiveness. Mulching practices vary considerably in cost and effectiveness. Sometimes the characteristics of the site to be stabilized determine the only practical treatment.