

**REPORT ON AN AUDIT OF THE CITY'S ANNUAL TREE  
TRIMMING PRICE AGREEMENT WITH ASPLUNDH TREE  
EXPERT COMPANY**

**AUDIT PROJECT  
#9804**

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## **I. SCOPE AND OBJECTIVES**

Our audit work plan included a review of the City of Tallahassee's 1995 annual price agreement (the Agreement) with Asplundh Tree Expert Company (Asplundh). Our audit period was from October 1995 to May 1998. Our primary objectives in the review were to determine whether:

- Electric Operations and the contractor are operating in compliance with the terms of the annual price agreement, and
- Electric Operations has established adequate controls and processes to effectively and efficiently administer the line clearance price agreement.

## II. METHODOLOGY

Our review was conducted in accordance with generally accepted government auditing standards and accordingly included such tests of the records and such other auditing procedures as we considered necessary under the circumstances.

We reviewed the Agreement to obtain an understanding of its provisions. We interviewed key staff to gain an insight into administration of the Agreement, including the processes in place to implement its requirements, and the Line Clearance Program. Periodic meetings were held with the audit liaison. These meetings serve to inform program administrators of the audit progress and as a discussion forum that enhances the effectiveness of the audit. Other procedures carried out included the:

- review of weekly invoices and time sheets for one month in the audit period,
- observation of contractor crews,
- review of Invitations to Bid (ITB) from other jurisdictions in Florida, and
- review of the recommendations of the citizen Tree Trimming Committee (TTC) appointed by the City Commission in September 1996.

### **III. BACKGROUND**

This audit was conducted under the authority of Section 33 of the Tallahassee City Charter and in accordance with our annual audit work plan.

The City operates 50.4 miles of 230kV transmission lines and 137 miles of 115kV transmission lines. All but four miles of the 115kV lines are overhead. The distribution system is comprised of approximately 1,825 miles of 12kV lines. Approximately 1,275 to 1,375 miles of the distribution system are overhead lines.

Up to the mid-1980's, tree trimming was performed for new construction and, as needed, to respond to maintenance needs for repeat customer interruptions. In 1986, customer complaints increased substantially. Customers became more sensitive to the frequency and duration of service interruptions due to the efforts required to reset electronic equipment. Electric Operations (EO) evaluated the causes of outages and determined that changes needed to be made in its tree trimming practices. In FY '87, a determination was made that a three-year trim cycle would be most economical and that this would require 10' to 12' clearance between the electric lines and tree limbs.

In FY '96, numerous complaints were received by the City about the aesthetic impact of tree trimming around electric lines. This led to the appointment by the City Commission of a Tree Trimming Committee (TTC) in September 1996. It was comprised of 10 citizens from Tallahassee. The TTC held public hearings and conducted site visits to areas trimmed under the three-year trim cycle guidelines. The TTC presented its report to the City Commission on May

14, 1997, and it was adopted by the City Commission on July 9, 1997, for a one-year test period. Some of the most significant report recommendations were as follows:

- Clearance distances should be within 4' to 6' of utility lines and trimming should be in accordance with ISA standards.
- Tree growth regulators will be applied in those areas where pruning may not provide necessary line clearance.
- When any tree 12" in dbh (diameter of the tree at breast height) must be removed, the City will offer to provide a 7-gallon replacement tree.
- The utility shall continue to monitor the operating costs of the Line Clearance Program and attempt to compare the relative costs between areas trimmed under the previous operating permit and the new recommended operating plan.
- The utility should continue to explore and propose alternatives for converting overhead lines to underground transmission.

### **Program Administration**

The Line Clearance Program is administered by the Transmission & Distribution Division (T&D) of the Electric Department. The Electric Utility Forester (EUF) is the program administrator and reports to the Superintendent of T&D. The EUF position was created in FY '95, and its primary function is to administer the Line Clearance Program. The EUF is responsible for all tree trimming around distribution and transmission electric lines as well as transmission line rights of way maintenance. The EUF is assisted by the Coordinator - Line Clearance and Vegetation Management (Line Clearance Coordinator) who monitors the tree trimming crews on a daily basis.

The City Commission approved a one-year line clearance price agreement, with four annual extensions, with Asplundh in October 1995. The estimated cost of the five-year price agreement was \$11.5 million. The price agreement was predicated on obtaining all labor and equipment necessary for line clearance of the City's overhead electrical distribution and transmission lines within a three-year period. The agreement provides for payment of personnel, equipment, and materials on an hourly basis. The RFB requires a minimum pay scale for personnel and guarantees an increase that equates to 5% per year. Equipment expenses are to increase annually in accordance with the Consumer Price Index, and materials will be billed at 10% over purchase price. Table 1 shows the expenditures under the Agreement through September 30, 1998.

**Table 1 - Funding and Expenditures under the Agreement**

<b>Fiscal Year</b>	<b>Purchase Order Amounts</b>	<b>Expenditures</b>
1996	\$2,250,000	\$2,232,668
1997	\$2,380,000	\$2,263,728
1998	<u>\$2,619,000</u>	<u>\$2,554,344</u>
Total	<u>\$7,249,000</u>	<u>\$7,050,740</u>

An additional requirement of the Agreement is that Asplundh provide the City with regular reports of the amount and type of trimming and other activities performed. To accomplish this, Asplundh provides the program administrator with an electronic data file containing information about the trimming activities. This data file is appended to a Microsoft Access database and should summarize the monthly invoices and time sheets prepared by Asplundh staff.

#### **IV. CONDITION STATEMENTS AND MANAGEMENT ACTION PLANS**

Generally, administrative controls over the development and administration of the annual tree trimming price agreement need improvement. We found the following areas of the Line Clearance Program need improvement:

- program planning
- contract development and administration
- monitoring of contractor billing and performance

The specific opportunities for improvement in these areas are addressed in the condition statements below.

<b>A. Short and long range planning for the Line Clearance Program needs improvement.</b>
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Planning for the Line Clearance Program generally needs to be improved. The RFB was based on a three-year tree trim cycle with guidelines for clearance distances between utility lines and tree limbs at 10'-12'. Upon award of the tree trimming contract to Asplundh in October 1995, the EUF established a 10-year plan. A shorter range plan (three years) identified that for each of the first three years, each substation and circuit would be trimmed. The plan had provisions to collect various data elements including: crew leaders responsible for the trimming, trimming start/end dates, and the man hours/cost associated with each substation and circuit. The 10-year plan was developed prior to the creation of the TTC in September 1996 by the City Commission. As a result of the TTC's recommendations, trimming guidelines were changed from 10'-12' to 4'-6'. In adopting the TTC's recommendations, the City Commission directed staff to

maintain detailed records on the actual costs involved, the impact on line clearance activities, and the actual impact on outages.

Despite the significant impact this decision had on the Line Clearance Program and its operations, no changes have been made to the short/long term program plans nor to the schedule for completing the trimming of the whole system. To date, line clearance efforts have not completed a trim cycle of the entire system. The data elements that were to be captured to provide a benchmark of circuit and system trim costs have not been developed as originally intended in the 10-year plan document due to the change in trim guidelines and lack of a completed trim cycle.

The EUF should also be maintaining information on the number of days, man hours, and cost required to trim each substation and circuit. Maintenance of information on planned trim times and actual trim times can be used in devising performance based contracts in the future. In the short term, this information can be used to monitor the performance of the contractor by comparing time estimated to complete trimming to the actual time needed to trim each circuit. Data can also be maintained on the time and cost of trimming for “hot spots.”

We have discussed this issue with Electric Operations management, and the following action plan has been developed to ensure that long and short range plans for the Line Clearance Program are developed and maintained:

Objective: To develop and maintain short and long range plans for the Program.

Step #	Action/Task	Responsible Employee	Target Date
1.	Maintain information on the number of days, man hours, and cost required to trim each substation and circuit.	Perry Odom	6/30/99
2.	Develop revised long and short range Line Clearance plans.	Perry Odom	7/31/99
3.	Approve short range Line Clearance plans.	Gary Oberschlake	9/30/99

**B. Control Issues**

We found that there were significant opportunities for improvement in the controls that Electric T&D has established to ensure the contractor’s compliance with the Agreement and the efficient and effective administration of the Line Clearance Program. The City’s Internal Control Policy speaks to the role that policies and procedures play in the system of internal administrative and accounting control required for all departments in the City. The fact that the Agreement prescribes that the contractor will be paid by the hour for labor and equipment increases the importance of a comprehensive set of procedures for monitoring and administering the work of the contractor. We discuss in more detail below the specific control issues identified.

**1. Monitoring practices by Electric T&D staff should be improved.**

We found that there was an opportunity to improve T&D staff's monitoring of the field activity carried out by the contractor. During our review, we observed 12 of the contractor's 27 work crews over a two-day period in a particular area of the City. We followed six of the crews from the parking lot in the mornings as they drove to the job site. We went back to the same area later in the morning and observed over the lunch period. We returned again at the end of the day as the crews left the job site. Two conditions were identified as a result of our observations.

The contract manager has indicated that the crews work at the job site for a total of 9 hours and 45 minutes per day not including a 30-minute lunch break. The 9 hours 45 minutes will actually appear on the weekly time sheets as 10 hours as a result of the methodology that the City will pay the cost of 15 minutes travel time per day. Depending on the time of year and the hours of daylight, the work day will start and end at different times. At the time of our observation, the contract manager indicated that, typically, the crews were to be at the job site at 7:00 a.m., leaving the job site at 5:15 p.m. with 30 minutes for lunch. Our observation of various contractor crews indicated that their performance was not consistent with this. We identified:

- on one day, four crews left to go to the job sites between 6:45 a.m. and 7:20 a.m., two crews stopped at a gas station for gas and ice
- on another day, seven crews left to go to the job sites between 6:40 a.m. and 7:00 a.m.

- on one day, three crews arrived at the job sites between 7:00 a.m. and 7:43 a.m.
- on one day, five crews left the job site between 4:55 p.m. and 5:05 p.m.
- on one day, all twelve crews arrived back at the overnight parking area between 5:12 p.m. and 5:25 p.m.

The Agreement states that activities such as stopping for gas and ice are to be conducted outside the times of 7:00 a.m. to 7:00 p.m. We checked the weekly time sheets of the crews working the streets that we observed. In all instances, the City was billed for 10 hours on both days when the time spent at the job site was actually only nine hours and 30 minutes. Allowing for the City's agreement to pay 15 minutes of travel time, this represents 15 minutes more per day the City was billed than was worked at the job site. We estimate that if this practice is consistent over the audit period (October 1995 through May 1998) for all 27 crews, the City has been over-billed by approximately \$115,000.

It is the responsibility of the EUF and the Line Clearance Coordinator to inspect the work of the contractor. The contractor is paid by the hour for the work completed which means that the monitoring of the contractor's work is important. A well-defined and documented set of monitoring procedures would ensure that the contractor is delivering the level of service that is expected. There is no comparable data available to indicate how long it should take for the various electric lines and circuits to be trimmed. It is clear that the two T&D employees dedicated to the Line Clearance Program are not able to observe all the crews 100% of the time. Given the above, audit staff and EO management determined that an effective way to monitor contractor activity would be to write into the Agreement meaningful penalties to be applied if instances of non-compliance are

identified and documented by City staff. The purpose would be to motivate the contractor to ensure good work practices by its staff. This also would provide a level of risk sharing with the contractor. The current contract structure and the manner in which the Agreement has been monitored does not promote risk sharing.

To accomplish the above, City staff should develop and document a set of procedures to guide the monitoring activities that should be carried out. These should address:

- the means by which City staff will identify and document potential instances of noncompliance,
- the process by which agreement from the contractor will be obtained, and
- a methodology for calculating penalties.

At the time of our observation work, the Line Clearance Coordinator maintained no documented record of his monitoring activities. As a result of our review, he has started to maintain a log that documents contractor exceptions observed during his daily work routine.

In addition to the issue of hours spent at the job site, our observation work identified that standby time and inclement weather is neither clearly addressed in the Agreement nor effectively managed from an operational perspective. The City has been billed for more than \$26,000 of standby/inclement weather time since the start of the Agreement. Standby or inclement weather time is not defined in the price agreement. Operationally, standby time has been defined by the EUF as that time crews are ordered to remain on duty to assist in service restoration and to clean up after storms. Inclement weather time is when crews are not able to work

because of inclement weather conditions. The Agreement provides that the City will not pay for show up time when the crews show up to work in the morning and it is raining, but is silent about interruptions caused by rain during the day under the Labor, Equipment, and Materials (L.E.M.) portion of the Agreement. Under the Unit Price definition, “weather lost time” is to be included in the price quoted for the unit price. This indicates that inclement weather time should not be billed to the City. On the weekly time sheets, both standby time and inclement weather time are given the same code. Therefore, it is not possible to distinguish between the two different activities.

During our observations of crews, a rain storm forced the crews to stop work for over an hour. The weekly invoices for the crews working in the areas observed reflected that the crews billed the time as work time. We pointed this out to the EUF who was unaware of this practice. He requested the contractor to adjust the weekly invoices for these hours. The EUF confirmed that non-productive time caused by inclement weather should not be billed to the City.

Procedures should be established to ensure that standby time and inclement weather time are accurately reported on the weekly time sheets. The EUF and Line Coordinator should develop procedures to document when crews are required to standby and when crews are “off the clock” because of inclement weather. Separate codes should be used to record standby time required by the City and inclement weather on the contractor’s time sheets.

**2. Electric T&D should ensure all services are included in the price agreement.**

Over the period of the price agreement, additional services have been added to the contract that have not been approved through the contract change order process. We identified two areas where change orders should have been processed.

**Crew Leader III and 2X4 Pickup Truck**

The request for bids required the contractor to attempt to notify each property owner of intent to trim on any circuit maintenance trimming. Neither the request for bids nor Asplundh's bid response specified who would carry out this responsibility. The request for bids specified six position classifications and certain types of equipment for the services outlined. Each position classification and piece of equipment has an associated hourly rate.

In September 1996, Electric Operations management indicates that in response to City Commission concerns, they identified a need to add an additional Asplundh employee as a Pre-Inspector. The annual cost of the Pre-Inspector was estimated to be \$40,000. Two classifications of labor and equipment (Crew Leader III and 2X4 Pickup Truck) were added to the price agreement for this Pre-Inspector position. If EO had used the Supervisor classification contained in the price agreement, the cost of the Pre-Inspector would have been \$44,800.

## **Training**

The scope section of the Request for Bids issued in August of 1995 indicated that:

“The intent of these specifications is to secure the services of a qualified contractor who will perform unit price tree trimming and line clearance maintenance work on the electrical system of the City of Tallahassee as required. The contractor shall furnish fully equipped, competent, and experienced crews to carry out the work covered by this contract.”

The Request for Bids also required:

“The latest rules and regulations of the following organizations shall be considered a part of these specifications, and all work done shall be done in strict accordance with applicable provisions thereof: National Electric Code; National Electric Safety Code; ANSI Z133; ANSI A-300 Pruning Standards for shade trees and local tree/landscape ordinances; OSHA: and applicable regulations of Federal, State and Local Environmental Protections/Control Agencies.”

The Request for Bids also required that trimmers and foremen should have at least six months and one to two years of line clearance experience, respectively.

The tree trimming contract does not contain any reference to training the contractor's employees in proper line clearance techniques (10'-12'). T&D staff indicate that the 10'-12' clearance is the industry standard. Thus, one would expect that if the contractor furnished competent and experienced staff training would not be necessary.

During the fall of 1995, Electric Operations management indicates that Electric Operations held training sessions with the contractor's crews on proper line clearance techniques. The City pays the employees who hold the training sessions and also is billed by the contractor for their employees to attend these sessions. It is unclear why this training was provided when the contract requires all workers employed by the contractor to "be experienced in and capable of performing assigned work." If the contractor's employees were not clearing lines properly, T&D staff should have dealt with this as a performance issue rather than expend dollars allocated for tree trimming to train the contractor's employees.

During 1996, the line clearance distance changed to 4'-6'. Additionally, more specific tree trimming requirements were adopted which were inconsistent with the industry standards. Therefore, when the City adopted the new standards, there was a need to train the contractor's employees in the new tree trimming techniques. A contract amendment should have been approved under the City Manager's authority to reflect either an increase in cost to cover the training program or a decrease in the level of service.

Training the contractor's employees in Tallahassee tree trimming practices is a valuable service for the City. However, training of the contractor's employees

is not specifically identified in the contract as an allowable charge and represents an increase in the scope of services provided under the contract. The City has paid Asplundh over \$38,655 from October 1995 to May 1998 for training time. The City Manager's Office does not agree that the addition of training to the scope of services meets the criteria of a change order. Therefore, no steps will be included in the action plan to address the training issue.

Section 8 of the Purchasing Policy and Procedures Manual requires that a contract change order shall be issued when there are changes in scope of work, quantities, and/or materials to be used. A change order should be processed to add the Crew Leader III and 2x4 Pickup Truck. We have estimated that the annual cost of these items is \$80,000. Additionally, a contract amendment should be executed to incorporate these changes into the Agreement.

<b>3. The application of the annual rate escalation clause should have been verified against the Agreement.</b>
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The Agreement specifies that an annual adjustment will be made to the rates charged for labor and equipment. In October 1996, Asplundh increased its rates for labor. Electric T&D and Administrative personnel did not review the application of the annual labor escalation rates against the provisions in the Request for Bids.

The rate that the contractor bid for each classification of labor (e.g., Supervisor, Climber/Trimmer) is referred to as the "billable" rate. The Agreement further prescribes a minimum pay scale for all of the contractor's personnel. This is defined as the "pay" rate. It further prescribes that, ". . . To this pay rate the

bidder may add any payroll expense and any overhead and profit to determine the billable rate for each classification. . .”

Section 24.0 of the Special Conditions section of the RFB provides that the billable rate for labor can be increased annually based on the annual increase in the minimum pay rates. Annual minimum pay rates are scheduled to increase by 5% each year. However, the Agreement provides that no increase is permitted to “profit margins or other overhead costs.” The lack of clarity in the definitions could lead to differences of interpretation and should be clarified through a contract amendment.

Electric T&D should review the methodology used by the contractor to escalate the billable rates and develop a procedure to verify the calculation of the annual increase in the billable rate.

<p><b>4. A process for the authorization of overtime work by the contractor should be established and implemented.</b></p>
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The contract manager should establish procedures to authorize overtime and document when overtime has been approved. Section 13.0 of the Agreement entitles the contractor to be paid for overtime work at a rate of one and one-half times the labor rate for the relevant labor classification concerned.

During our review of weekly invoices for the month of January 1998, we identified that contractor work crews had billed the City for 109 hours of overtime at a cost of \$2,471, or 1.32% of total labor charges for the month. There was no documentation maintained by the EUF that evidenced that the contractor work

crews were authorized to work and be paid for overtime. We found that a process was not in place that provided for the authorization of overtime work. Based on the percentage of overtime worked in January 1998, we estimate that the City has paid approximately \$60,000 in overtime costs for the period October 1995 to May 1998.

The EUF should establish a method by which overtime can be authorized prior to it being worked. A log that includes the date, crew information, and hours should be maintained to evidence the request and approval. This would enable administrative staff to verify overtime charges on weekly invoices submitted by Asplundh.

**5. The database from Asplundh should be reconciled on a monthly basis.**

As a part of our audit work, we compared the Microsoft Access database submitted by Asplundh on a monthly basis to the related invoices for the period from October 1995 through May 1998. We found that the database did not agree with the monthly invoices for that period. The tree trimming contract requires the contractor to furnish weekly and monthly information to allow the EUF to build a database for future reference. The database is to include the following information:

1. Work Order Number
2. Circuit Number/Substation Code
3. Construction Code: Capital, Emergency, Maintenance
4. Crew Type
5. Unit Description (i.e., trees trimmed, trees removed, stumps ground, etc.)
6. Quantity of Units - Current Month

7. Average Cost/Unit - Current Month
8. Total Cost of Units - Current Month
9. Quantity of Units - year-to-date
10. Total Cost - year-to-date
11. Average Cost - year-to-date

Asplundh provides this information on a disk that can be transferred into a Microsoft Access database. Since the database is the primary source of information for Line Clearance Program reporting, the accuracy and completeness of the data is important. A reconciliation of the invoices to the database will ensure that reports submitted to upper management and the City Commission reflect the condition of the Line Clearance Program.

We informed the EUF of differences between the database and invoices, and he has begun to reconcile the two sources. Additionally, he intends to establish a procedure to perform a reconciliation upon the receipt of the invoices each month.

<b>6. Invoice review practices need improvement.</b>
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Based on our review of all the time sheets and invoices for January 1998, we identified charges that should have been questioned by staff. We found that workers were being billed at different rates during the same work week. The EUF indicated that sometimes the tree trimmers may serve as crew leaders for part of a week. However, we identified where a ground worker also served as a crew leader during one week. Based on our understanding of the experience requirement, this does not appear to be appropriate. We also noted that equipment had been billed to the City when the crew was in standby or inclement weather mode. The

Agreement prescribes that equipment should be charged for the actual time the equipment is used. Therefore, these charges should have been challenged by City staff. While these billings were not material to the total charges, these instances reflect inadequate review of invoices. Procedures should be established to ensure that the weekly time sheets and invoices are accurate and only reflect allowable charges under the Agreement.

We have discussed all of the monitoring practices with Electric Operations management, and they have agreed to strengthen the administrative controls over the Agreement. The administrative and operational procedures developed should include, but not be limited to:

- the maintenance of logs or other documentation of any exceptions observed by T&D staff,
- a review of weekly time sheets and weekly invoices for crew members being billed at different rates,
- a reconciliation of the monthly database update to the monthly invoice,
- a reconciliation of the totals for labor, equipment, and materials to the total of the invoice,
- an annual review of new equipment billing rates (based on the September CPI),
- an annual review of new labor billing rates,
- reconciliation of time billed as standby, overtime, or inclement weather to daily logs maintained by the EUF or Line Clearance Coordinator.

EO management has developed the following action plan to ensure that City monitoring activities are improved.

Objective: To improve controls over administration of the program and the Agreement.

Step #	Action/Task	Responsible Employee	Target Date
1.	Quantify billing adjustments to contractor.	Kevin Wailes	1/31/99
2.	Negotiate settlement with contractor.	Gary Oberschlake	1/31/99
3.	Draft contract amendments to clarify billing practices and definitions where necessary. (See Action Plan D)	Perry Odom	2/28/99
4.	Obtain approval of proposed contract amendments by City Attorney's Office.	Gary Oberschlake	3/31/99
5.	Obtain Commission approval of amended contract.	Gary Oberschlake	4/30/99
6.	Execute contract amendments as necessary.	Gary Oberschlake	4/30/99
7.	Establish and document administrative and operational procedures relating to contractor billing practices under the terms of the contract.	Perry Odom	4/30/99
8.	Establish procedures to monitor the contractor's compliance with the terms and conditions of the price agreement.	Perry Odom/ Gary Oberschlake	4/30/99
9.	Establish procedures to reconcile monthly invoices to the monthly database updates.	Perry Odom	4/30/99
10.	Implement new procedures.	Perry Odom	4/30/99
11.	Establish and document a checklist of items for which the contractor can bill the City under the terms of the contract. This checklist should be used by the individual responsible for ensuring the accuracy of the invoice.	Perry Odom	7/1/99

**C. Management and Reporting Issues**

Management and administration of a Line Clearance Program requires an effective system of communication and reporting. Reporting of information is vital in the assessment of the performance in any program and includes the need to produce meaningful and accurate management reports. In the last few years, the

Line Clearance Program has been subjected to a large amount of public scrutiny leading to the creation of a Tree Trimming Committee by the City Commission. As a result, a semi-annual report of tree trimming activities must be submitted to the Commission. This report is called the Line Clearance Report. We identified two opportunities for improvement in the reporting requirements of the program.

**1. The process for evaluating and reporting contractor performance should be improved.**

The process for evaluating and reporting contractor performance needs improvement. One of the critical ingredients of a successful program is an effective process for reporting and evaluating performance. In the case of the Line Clearance Program, the most critical element of the process will be reporting on and evaluating the performance of the vendor to whom the line clearance activities have been contracted. The Agreement with Asplundh is a one-year agreement with four potential annual extensions at the option of the City. Electric T&D has not established an effective process for reporting and evaluating contractor performance.

During our review, we noted that the Agreement was extended for FY '99 without adequate contractor review. In May 1998, Procurement Services staff asked the EUF if he wanted to extend the Asplundh Agreement for FY '99. Within two hours, the EUF responded in the affirmative. A letter binding the City to another year on the contract was issued and executed by Asplundh. The decision to extend appears to have been made without any formal approval process from upper level management.

Objective criteria and monthly/quarterly benchmarks for evaluating and measuring the contractor's performance are an integral part of an evaluation process. This information would provide the support for the decision to extend the contract or bid the services. There are a variety of criteria on which the contractor should be evaluated including, but not limited to, the following:

- estimated vs. actual number of trees trimmed
- estimated vs. actual number of circuit miles trimmed
- estimated vs. actual number of stumps ground
- number of documented customer complaints
- number of instances of noncompliance with operational aspects of contract

**2. The Line Clearance Report should be enhanced.**

The Line Clearance Report to the City Commission should be improved. On July 9, 1997, the City Commission adopted the Tree Trimming Committee recommendations. As part of the recommendation, staff was to report to the Commission on a six-month basis. The recommendation was to implement the Committee's recommendation on a one-year test basis utilizing the 4' to 6' clearance distance. The agenda item stated, "This will require maintaining detailed records on the actual costs involved, the impact on line clearance activities, and the actual impact on outages. Staff will report to the City Commission on a six month basis."

The improvement areas are addressed under three categories: timeliness, accuracy of data and report content. The establishment of a process to guide the development and dissemination of the report could have improved its effectiveness.

**Timeliness.** The Line Clearance Report should be submitted more timely. The first Line Clearance Report was not issued until April 27, 1998, and included the three-month period October to December 1997. On September 24, 1998, we were given copies of the data for the quarterly line clearance reports for the months of January through March 1998 and April through June 1998. However, additional Line Clearance Reports have not been given to the City Commission. We did not review the data contained in these last two reports for accuracy.

**Accuracy of data.** Some information from the database was reportedly used to prepare the information contained in the report. We used the same criteria (selected circuits and maintenance work) in the database and obtained different results for the number of trees trimmed and removed. Another difference resulted because the data in the report is the result of averages of averages. For example, for each month of the quarter the average cost of tree trimming for each circuit was added together to get a new average for the month. This monthly average was then averaged with the averages of the other two months to determine the average quarterly cost to trim a tree. This calculation of averages of averages will produce different and incorrect results. See Table 3 below.

**Table 3 - Line Clearance Report Data and Database Information - October 1997 to December 1997**

Description	Line Clearance Report		Database		Difference	
	Number	Average Costs	Number	Average Costs	Number	Average Costs
Trees Trimmed	15,915	\$17.80	17,317	\$20.84	(1,402)	(\$3.04)
Trees Removed	2,396	\$20.18	2,518	\$25.02	(122)	(\$4.84)
Stumps Removed	84	\$17.05	15	\$21.34	69	(\$4.29)

**Report content.** The Report also provides an opportunity to highlight positive aspects of the program. It should contain comparative information to emphasize trends and patterns. Included in the Line Clearance Report is information on the number of tree-related power outages, which is an important outcome of the tree trimming program. The report adds the number of tree-caused outages and the squirrel-caused outages and indicates that the total of tree-related power outages is 277 or 30% of the total power outages. However, this information needs to be placed in perspective by illustrating comparative information from earlier periods. For example, if you look at the tree-related outages over time as shown below in Table 4, the 30% is an improvement over previous periods. In addition to a comparison against earlier periods, a comparison against the plan (referenced in Condition Statement A) would add value to the report.

**Table 4 - Tree Related Power Outages: 1989 to 1997**

Calendar Year	Total Outages	Tree Caused-Outages	Squirrel-Caused Outages	Tree-Related Outages	Percentage of Total Outages
1989	3,239	848	486	1,334	41%
1990	2,803	528	659	1,187	42%
1991	3,189	668	391	1,059	33%
1992	3,427	1,371	651	2,022	59%
1993	3,573	1,257	577	1,834	51%
1994	3,609	1,193	439	1,632	45%
1995	3,015	857	307	1,164	39%
1996	4,142	1,089	383	1,472	36%
1997	4,173	932	384	1,316	32%

The percentage of tree-related outages has been steadily declining for the past six years.

Other potentially beneficial information that could be included in the Report is as follows:

- Number of outages in areas already trimmed vs. other areas of the City - this could be an indicator of the effectiveness or ineffectiveness of the shorter trim lengths
- Number of line miles by City quadrant/substation
- Number and percent of line miles trimmed by City quadrant/substation
- Number of outages by quadrant/substation
- Number and percent of tree-related outages by quadrant/substation
- Percent of each quadrant/substation trimmed
- Total maintenance costs for the quarter vs. last quarter vs. same quarter last year
- Comparison to annual plan

Obviously, the number of severe rain or wind storms may distort the number of tree-related outages. Data collected should be segregated to the extent practical to identify the impact severe weather has on the Program.

A meaningful report serves two purposes. First, performance information will enable management to monitor tree trimming activities against the benchmarks established for the Program. Second, it serves as a communication tool to both executive management and the City Commission.

EO management has developed the following action plan to ensure that the Line Clearance Program is managed effectively and the results are communicated to the appropriate parties. EO management indicates that staffing limitations may effect the extent to which additional information can be collected and included in the Report.

Objective: To improve program management and reporting practices.

Step #	Action/Task	Responsible Employee	Target Date
1.	Design the necessary queries and reports in the Asplundh database to generate the Quarterly Line Clearance Report.	Clara Tait	6/30/99
2.	Submit second Line Clearance Report to the Commission.	Gary Oberschlake Perry Odom	3/31/99
3.	Prepare annual report on results of the impact of Tree Trimming Committee recommendations and submit to the Commission.	Perry Odom	6/30/99
4.	Develop standard periodic reports and indicators to monitor the level of work of the contractor.	Perry Odom	7/31/99
5.	Establish quarterly and yearly performance indicators for measuring the success of the Line Clearance Program.	Perry Odom	8/31/99
6.	Annually evaluate contractor performance against the plan.	Perry Odom	9/1/99

**D. Contract Issues**

The contract process involves a number of different City departments including the Department of Management and Administration (DMA), the Treasurer-Clerk’s Office, the City Attorney’s Office and the operating department - in this case Electric T&D. We found a variety of areas relating to the contract process where improvements could be made.

**1. Job site labor costs should be clearly defined in the Agreement.**

The Agreement does not provide a clear definition of job site nor the manner in which the City will be billed for labor charges. It provides that normal

hours of work are between 7:00 a.m. and 7:00 p.m., Monday through Saturday. The contractor is responsible for fueling and maintenance of all equipment outside of these hours. The lack of clarity in the area of job site labor emanates from the original RFB.

In Section 2.O. of the RFB the terms Unit, Crew Unit Prices or Unit Price are defined as “The price quoted shall include all labor, equipment, material (any material that is not furnished by COT), overhead, profit, tooling, pick up of material, material handling, weather lost time, travel time to the job site, taxes and any other incidental expenses not otherwise herein addressed.” No part of the contract specifically addresses the issue of travel time from the job site. Essentially, the question centers on whether the City should only be paying for time spent at the job site (as per Section 20.C.) or whether (as per Section 2.O.) they will pick up the cost of travel time from the job site. It should be noted, however, that the City is not billed on unit prices per Section 2.O but by each job classification and each piece of equipment under the Labor, Equipment, and Materials (L.E.M.) provision.

We have been informed by the EUF that the subject of travel time to and from the job site was raised at the mandatory pre-bid conference and that he responded to the effect that the City would pick up the cost of travel from the job site. This effectively means that the City would pay the contractor for 10 hours when the crews were only at the job site working for nine hours 45 minutes. We examined the notes of the pre-bid conference that were prepared by the Purchasing Agent responsible for the bid. They contained no reference to any discussion of travel time. The process requires that any significant points arising from the pre-

bid meeting be formally adopted in an Addendum that is sent out to all parties in attendance. Furthermore, there was no reference to the travel time in the Addendum that was sent to prospective bidders. When the contract was drawn up, it was only a two page document with the significant terms being included by means of incorporating the RFB, together with the Addendum.

We estimate that the City has incurred costs of \$115,000 (for the period October 1995 to May 1998) for the 15 minutes per day traveling from the job site. The apparent lack of completeness of the pre-bid conference notes and addendum to the RFB represents a breakdown in the contracts process. An amendment to the contract should be developed to clarify when or if travel time should be billed to the City. The contract amendments developed pursuant to the action plan steps on page 21 should clarify these issues.

<p><b>2. A process for extension of contracts and price agreements should be established by Procurement Services.</b></p>
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The Purchasing Policy and Procedures Manual, City Commission Policy 116 CP - Signature Policy, and the Electric Administrative Procedures Manual contain provisions that relate to the contracts process. However, we found little in those policies that provides operating departments with contract extension procedures. The Agreement has been extended three times using three different methods, indicating the need for clearer procedures. The Agreement includes provisions for cost increases each year. Therefore, appropriate approval procedures should be developed to ensure that contract extensions are properly executed. Each year labor costs increase by 5% and equipment costs are increased

by the Consumer Price Index, resulting in total costs annually increasing by more than \$50,000.

The FY '97 contract extension was entered into on October 30, 1996. The extension was granted and formalized by an executed amendment to the original contract. For FY '98, the Manager for Procurement Services issued a letter dated July 21, 1997, to the contractor indicating "This letter shall serve as the City's formal notice of intent to extend the above reference contract through the second optional year beginning October 12, 1997, and ending October 11, 1998." For FY '99, a contract specialist with the City issued a letter on May 20, 1998, again indicating a "...notice of intent to extend the above referenced contract through the third optional year beginning October 12, 1998 and ending October 11, 1999." There was no formal amendment to the Agreement for the last two extensions.

We were told that, by practice, the Manager for Procurement Services has issued letters extending contracts for several years. The only policy we could find was approved by the City Commission on September 9, 1998. This policy authorizes "the Manager of Procurement Services to approve price agreement extensions on a month-to-month basis at the same terms and rates/prices." The contract specialist who signed the letter of May 20, 1998, clearly did not have the authority to commit the City to an additional year of a contract that involves payments of more than \$2 million and authorizes a change in prices.

Procurement Services should incorporate the method to extend all types of contracts into the Purchasing Policy and Procedures Manual. Additionally, the

City Commission Policy 116 - Signature Policy needs to be revised to include contract amendment extension procedures.

**3. The contracts process should ensure timely execution of the contract.**

The contracts process should ensure that, from the time of approval of contract award by the City Commission, the contract is executed in a timely manner. It should also ensure that the information provided to the City Commission in seeking approval of bid award is accurate and consistent with bid documents. The standard RFB process, as used by Procurement Services, indicates that the responsibility for preparation of the Agenda Item rests with them and that the operations department for the bid should be involved in the review process.

The bid award was granted by the City Commission on October 11, 1995. Completion of the contract by all parties did not occur until February 9, 1996 - almost four months later. The contract bond was not executed until December 20, 1995, and refers to a contract dated February 19, 1996, that did not exist at that time. The effect of this is that the City paid Asplundh over \$126,000 before the contract bond was completed and over \$315,000 for tree trimming services before the contract was fully completed. Payment for services before the contract has been fully executed is in violation of the Electric Administrative Procedures Manual and good internal control practices. In general, allowing a contractor to work before the bond has been completed places the City at risk for the contractor's activities and is clearly not a good business practice. The Treasurer-Clerk's file also reflects the fact that payments were made before the contract was

finished. While the execution of a contract requires communication and cooperation of staff from several departments, Electric Operations is responsible for ensuring that a contract is in place before services are provided and payments are made. The contracts process should be improved to include procedures and controls that prevent payment for services before contract execution.

We have discussed all the above contract process issues with Electric T&D, DMA management, and the Treasurer-Clerk’s Office. The Department of Management and Administration has developed draft procurement procedures for selecting the type of contract for acquiring goods and services. The following action plan has been developed to strengthen controls over contracts to minimize the risk to the City.

Objective: To ensure adequate controls are in place over contract development, execution, and amendment.

Step #	Action/Task	Responsible Employee	Target Date
1.	Adopt adequate procedures and controls to prevent payment for services before contract execution.	Paula Cook	3/31/99
2.	Revise Commission Policy 116, signature approval authority, to include contract amendment extension procedures.	Paula Cook	6/30/99
3.	Submit revised CP 116 to the City Commission for approval.	Paula Cook	7/31/99
4.	Incorporate the method to extend all types of contracts into the Purchasing Policy and Procedures Manual.	Cathy Kilpatrick	9/30/99
5.	Develop tree trimming contract extension document.	Perry Odom	8/31/99
6.	Obtain appropriate approval for tree trimming contract extension.	Perry Odom	10/11/99

Condition Statements and Management Action Plans

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7.	Incorporate the method to extend all types of contracts into the Electric Administrative Procedures Manual.	Clara Tait	12/31/99
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**V. EXIT CONFERENCE**

An exit conference was held on January 26, 1999. Those attending were:

City Manager's Office

Ricardo Fernandez, Assistant City Manager

Electric Operations

Kevin G. Wailes, General Manager

Gary A. Oberschlake, Superintendent - Electric T&D

Perry Odom, Electric Utilities Forester

Treasurer-Clerk's Office

Robert B. Inzer, City Treasurer-Clerk

Paula G. Cook, Records Administrator

Department of Management & Administration

David C. Reid, Director

Cathy Kilpatrick, Manager for Procurement Services

Auditing

Roberta McManus, Interim City Auditor

Patrick A. Twyman, Auditor

James L. Carpenter, Auditor