

## 5. Processing and Monitoring Professional Services and Construction Contracts

- The Public Utilities Commission's contracting process is cumbersome and results in significant delays in entering into construction or professional services contracts. The processing of professional services contracts can take more than ten months from the initiation of the process to contract signing.
- The actual timeline for processing professional services contracts of 40.5 weeks exceeded the work flow timelines established by the Contracts Administration Section of 22 weeks by at least 18.5 weeks or approximately 84.1 percent.
- The Public Utilities Commission incurs high costs for change orders, or increases in the original construction contract amount. More than 30 percent of the Public Utilities Commission's construction contracts result in change orders. Of 39 closed-out construction contracts between 2001 and 2004, totaling \$17.7 million, the Public Utilities Commission negotiated change orders for twelve contracts. The Public Utilities Commission agreed to \$450,000 in change orders, or 8.3 percent of the twelve construction contracts which had original contract amounts totaling \$5.3 million. The final contract amount with change orders ranged between 2.5 percent and 74.0 percent more than the original contract award amounts.
- Reducing the frequency and amount of construction contract change orders will be critical as the Public Utilities Commission embarks upon the Water System Capital Improvement Program. The Public Utilities Commission projects approximately \$2.85 billion in local and regional water system construction costs through FY 2015-2016. If the Public Utilities Commission continues to approve change orders for 30 percent of all construction contracts, resulting in contract cost increases of 8.3 percent of the original contract amount, the Public Utilities Commission could incur estimated construction cost overruns due to change orders of \$71.0 million. If the Public Utilities Commission tightens the process for evaluating and negotiating change orders, in accordance with the Budget Analyst's recommendations, the Public Utilities Commission would save approximately \$7.1 million in Water System Capital Improvement Program expenditures.

- **The Public Utilities Commission lacks management oversight of the construction change order process, including managing change order documentation centrally. In order to review nine randomly-selected construction contract files, the Budget Analyst had to obtain the files from several different project managers. In reviewing the nine construction contract files, the Budget Analyst found that eight files did not have the Two-Page Memorandum, which contains crucial information on the justification for the change order request. In addition, some of the documentation reviewed did not include all required signatures for change order forms. Further, the Public Utilities Commission lacks a policy that lists all the required documentation and information necessary for processing change orders.**
- **The Public Utilities Commission lacks rigorous procedures and clear guidelines in managing contractor performance and in evaluating and negotiating construction contract change orders. For example, a review of nine of the 12 construction contracts with change orders found that eight contracts lacked important documentation or required signatures. Further, the construction contracts are not centrally maintained, resulting in a lack of management oversight of contracts and change orders.**
- **Further, the Public Utilities Commission does not have consistent practices for monitoring contractor performance. Although the Public Utilities Commission has a Task Order Evaluation Form to assess the quality of the contractor’s deliverables and performance, standards for evaluating contractor performance vary widely among project managers. Also, standards for reviewing and approving contractors’ invoices vary, resulting in some project managers reviewing invoices in detail for accuracy and consistency and other project managers approving invoices as long as they look reasonable.**

## **The Public Utilities Commission’s Cumbersome Contracting Procedures**

The Public Utilities Commission’s Contracts Administration Section provides a centralized service to all of the Public Utilities Commission’s divisions to ensure consistent processes and procedures for all phases of the construction, professional services, emergency and informal contracting process. The mission of the Contracts Administration Section is to provide expert services to the Public Utilities Commission’s divisions in the hiring of consultants and contractors to assist staff in fulfilling project or program objectives. During contract processing, the Contracts Administration Section is involved in assigning staff to work with project managers; managing and distributing Requests for Proposals and Commission agenda templates; monitoring and tracking forms for Requests for Proposals approval; facilitating competitive selection processes;

negotiating contracts; administering executed contracts and ensuring compliance with applicable policies, laws, and contract terms; and processing progress payments.

### **Delays in Contract Processing**

The Public Utilities Commission's process for contracting is cumbersome, contributing to an unnecessarily prolonged contracting process. The Public Utilities Commission has written policies and procedures for processing professional and personal services and construction contracts, which provide guidelines for soliciting proposals and selecting consultants for professional services and construction contracts. Based on the Contracts Administration Section's best estimates, on average, construction contracts take approximately four months (or 16 weeks) to be completely processed, while professional services contracts take approximately five and one-half months (or 22 weeks). Based on management audit interviews with some Public Utilities Commission project managers, construction contracts typically take approximately five to six months to process, and professional services contracts take approximately six to nine months. However, these timelines for processing contracts, especially professional services contracts, can take longer. Based on the management audit's analysis of available data on professional services contracts that were processed in FY 2004-2005,<sup>1</sup> the Budget Analyst found that it can take over 10 months (or over 40 weeks) to process a professional services contract, from the initial phase of the Request for Proposals (for example, work scope, Human Rights Commission goals, General Manager report for advertising, and panel selection) to the final awarding and signing of the contract, as shown in Table 5.1. below.

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<sup>1</sup> This sample of professional services data was derived from the Public Utilities Commission's Contracts Administration Section and included those professional services contracts that were processed from January of 2004 to January 27, 2005.

**Table 5.1**  
**Median Timelines to Process Professional Services Contracts in FY**  
**2004-2005**

<b>Contracting Phase</b>	<b>Work Flow Timelines Established by Contracts Administration Section</b>	<b>Actual Timelines</b>
Professional services contract work scope and initial steps	4 weeks	2 weeks
Advertisement	4 weeks	6.5 weeks
Request for Proposal Evaluation	4 weeks	8 weeks
Award and Negotiation	4 weeks	6 weeks
Contract Signing	2 weeks	18 weeks
Notice to Proceed	<u>4 weeks</u>	<u>Not available</u>
Total Process	22 weeks	40.5 + weeks

Source: Public Utilities Commission

As shown in Table 5.1 above, the actual timeline for processing professional services contracts of 40.5 weeks exceeded the work flow timelines established by the Contracts Administration Section of 22 weeks by at least 18.5 weeks or approximately 84.1 percent.

The Public Utilities Commission should evaluate why the actual professional services timelines exceed the established workflow timelines by approximately 84.1 percent. According to the Public Utilities Commission staff, delays in processing professional services contracts typically occur at various junctures, including during the drafting of the Request for Proposals, approval of the Requests for Proposals, addressing labor-related matters (for example, steps involving the Civil Service Commission, the Department of Human Resources, and the labor organizations), and bid protests. Delays can also occur during the accounting/purchasing stage and in processing the contractor’s insurance.

Based on the Budget Analyst’s analysis of available data on professional services contracts, although significant contracting delays occurred during the (a) advertising phase, (b) the Request for Proposals evaluation phase, and (c) the award and negotiation phase, the most protracted delays occurred during contract signing. As noted in Table 5.1, the available data did not provide timelines for the phase in which the Public Utilities Commission issued the “notice to proceed” to the selected contractor. According to some of the project managers interviewed, such delays have caused some very competent private companies/contractors to avoid doing business with the City altogether.

### Identifying Contract Processing Inefficiencies

More can be done to streamline the Department's internal contracting processes and procedures. The Public Utilities Commission has previously looked at ways to streamline its contracting process through formal committee meetings, contracting summits, and review by an outside consultant. In addition, the Public Utilities Commission has recently implemented some measures to address issues surrounding the department's contracting procedures, including:

- (a) Establishing department-wide as-needed contracts for Geotechnical, Corrosion Control, and Environmental services;
- (b) Creating Requests for Proposals bar charts for weekly monitoring of all Requests for Proposals;
- (c) Maintaining Access electronic databases for all professional services and construction contracts; and
- (d) Planning for a contracts web page for the Public Utilities Commission intranet.

The Public Utilities Commission should develop procedures to shorten the actual timelines for professional services contracting. As previously mentioned, based on an analysis of departmental data, the Budget Analyst found that most of the delays occur during the following phases: advertisement, Request for Proposal evaluation, award and negotiation, and contract signing. The Public Utilities Commission is in the early stage of planning the contracts web page, which will provide a workflow system for contract processing. In developing the workflow system, the Public Utilities Commission should analyze and streamline the contracting process including establishing enforceable timelines. To enforce the timelines, the Contracts Administration Section Manager should benchmark the Contracts Administration Section's performance as a whole and employee performance individually against these timelines.

To ensure that the Department is able to adhere to its contracting timelines, the Public Utilities Commission's Contracts Administration Section should develop procedures to anticipate the next steps in the contracting process by:

- (a) Identifying weaknesses and delays in its contracting procedures to determine which phases require close attention in terms of monitoring timelines and anticipating the next steps. For example, the Budget Analyst found that the contract-signing phase takes a significant amount of time to complete. According to Public Utilities Commission staff, obtaining a complete set of insurance forms from the contractors would help expedite this phase. As an example, the Department should require the contractors to provide a complete set of insurance documents and other documents necessary to comply with the City's and Public Utilities Commission's contracting procedures prior to the completion of the contract negotiating period.
- (b) Establishing procedures and standards that would enable the Department to schedule meetings or provide documents for approval with various entities (for example, unions, the Civil Service Commission, City Attorney) early in the process to avoid

delays in the processing of contracts. For example, during the advertisement phase, the Contracts Administration Section should coordinate schedules to set up meetings with the labor unions as necessary and to provide documents and schedule review before the Civil Service Commission immediately after the Department determines the need for these meetings or review.

- (c) Establishing procedures to ensure that the Division regularly follows-up with external entities regarding contract status. For example, the Contracts Administration Section should obtain updates on a regular basis from the City Attorney's Office, the Human Rights Commission, the Civil Service Commission, and other external entities to make sure that the contracts are moving along and that the Department is aware of exactly at what stage the external entities are in their review processes.

## **The Public Utilities Commission Lacks Rigorous Standards for Evaluating Contractor Performance**

The Public Utilities Commission lacks policies and procedures that provide guidelines to rigorously evaluate contractor performance. Individual project managers are responsible for evaluating contractor performance. In addition to the overall project planning, development, and execution functions, project managers are responsible for evaluating contractor performance by:

- Preparing, revising, and ensuring the proper execution of the contract and each task order;
- Monitoring the progress by the contractor on outstanding deliverables;
- Reviewing the deliverables relative to each task order's scope and intent;
- Receiving and reviewing the requests for payments (invoices) from the contractors; and
- Preparing the Task Order Performance Evaluation Forms.

### Measures to Evaluate Contractor Performance

The Department lacks rigorous guidelines to adequately evaluate contractor performance. Performance measures are supposed to be documented using the Public Utilities Commissions Task Order Evaluation Form, which includes such evaluation items as (a) the contractor's responsiveness, (b) personnel, (c) level of effort, (d) adherence to project schedule, (e) adherence to project budget, and (f) task management. The contractors are rated as either excellent, exceeds requirements, meets requirements, needs improvement, or poor against these evaluation items. Based on interviews with project managers, the Budget Analyst found that standards for evaluating contractor performance vary widely among project managers. The Public Utilities Commission should develop written procedures and standardized guidelines for evaluating contractor performance. Systematically and accurately assessing the performance of each contractor is necessary in order to ensure accountability and to ensure that reliable records on the contractors' performance exist, especially if the contractor applies for future contracts with the Public Utilities Commission.

In addition, the Public Utilities Commission lacks policies and procedures providing guidelines on how to adequately review the contractor's monthly invoices and check for the accuracy of the invoice information. These monthly invoices include a summary of overall contract amounts expended and remaining, details related to the billing period in question, summaries of all contractors' personnel that provided work, and copies of all time sheets, expenses, and sub-consultant invoices. The project manager reviews each monthly invoice for consistency with the task order and any specific work directives that may have been issued. According to interviews with some project managers, the degree of invoice review varies among project managers. These interviews suggest that although some project managers closely review invoices for accuracy and consistency, other project managers approve invoices as long as they look reasonable.

Once the project manager completes its review, the invoice is then forwarded to the Public Utilities Commission's Contracts Administration Section for further review and processing. Even though such review measures exist, the Department lacks policies and procedures that provide guidelines on how to adequately review the contractor's invoices and check for the accuracy of the invoice information provided. The Department should ensure that project managers and the Contracts Administration Section staff are provided written guidelines in systematically and meticulously reviewing the contractor's monthly invoice.

### **The Public Utilities Commission Lacks Rigorous Guidelines for Processing Change Orders**

The Public Utilities Commission lacks rigorous policies and procedures for processing and evaluating change orders for construction contracts. Contractors request change orders when the construction costs are expected to exceed the original contract amount. Change orders can result because the original contract specifications were inadequate for the scope of the project or because the contractor bid too low to complete the construction project. Because the Public Utilities Commission awards construction contracts to the lowest bidder, contractors have an incentive to bid low if increasing the contract amount through a change order at a later date is not a rigorous process.

The Public Utilities Commission Construction Project Management Section has a flowchart and procedures describing the steps involved in processing and approving change orders. If the change order amount is \$20,000 or less, the construction project resident engineer negotiates the change order with final approval by the project manager and Contract Management Section Manager. If the change order exceeds \$20,000 or 10 percent of the original contract amount, the contract is modified, with approval by the Public Utilities Commission.

However, the Public Utilities Commission lacks policies and guidelines for processing general change orders. Specifically, the Public Utilities Commission does not have a list or required documentation for processing change orders, resulting in inconsistent record keeping and tracking of change order requests and approvals.

### Extent of Construction Contracts With Change Orders

The management audit reviewed 39 construction contracts, totaling \$17.7 million, that were closed out between 2001 and 2004. Of the 39 construction contracts, 12 projects, or approximately 30.8 percent, had change orders that increased construction costs. The 12 construction contracts with change orders totaled \$5.3 million and the change order amounts totaled \$450,000, or approximately 8.5 percent more than the original contract amount. The final costs for these completed projects with change orders ranged between 2.5 percent and 74.0 percent more than the original contract award amounts.

### Change Order Documentation

According to Public Utilities Commission staff, a change order usually involves completing and processing the following documents:

- Change Order Form: This form includes information such as the scope of work, total cost, and signatures from the change order requestor, project manager, Construction Division Manager, Contractor, and Manager of the Construction Management Bureau.
- Two-Page Memorandum: This memorandum is submitted by the resident engineer to the project manager and provides answers to standard questions regarding the change order including the following information: elements of work, why the work should undergo a change order, whether this work is necessary for the completion of the project, alternatives to the issuance of the specified changes, whether the change is economical, the breakdown of the preliminary estimate, how the adjustments would be done, and whether the change involves an extension of contract time.
- Change Order Log: This log contains all the change orders for each project, including such information as the type of change order, date approved by the city, description of the change order, cost/credit proposed and approved, and the change order total. Some change order logs also contain the original contract amount and the percentage of and the total modifications, as well as the revised contract amount for the entire project.

The Public Utilities Commission does not manage construction contracts with change orders centrally nor ensure complete change order documentation. In order to review nine randomly selected contract files for construction projects with change orders that had been closed out between 2001 and 2004, the Budget Analyst had to obtain the selected file from each of the project managers.

Significant documentation was missing from the nine files. For example, eight of the nine projects did not have the Two-Page Memorandum, which contains crucial information on the justification for the change order request. In addition, some of the documentation received did not include complete signatures, particularly required signatures for some of the Change Order Forms. Further, the Department does not have a policy that lists all the

required documentation and information necessary for processing change orders. The Public Utilities Commission should ensure that it has a specified required list of documents and information (for example, required signatures) in the contract master file.

Because the nine construction contract files were obtained from several different project managers, rather than from a central location, tracking the change order documentation was difficult and time consuming. For example, according to Public Utilities Commission staff, the lack of complete signatures in the change order documentation could have resulted from project managers not having the final versions of the change order documentation. However, the Public Utilities Commission was unable to provide central construction contract files or final documentation. When the Budget Analyst initially requested the nine construction contract files, the Contracts Administration Section Manager referred the management audit staff to the Construction Management Bureau's Construction Support and Coordination Services Section for this information. The Construction Support and Coordination Services Section then requested the change order documentation from each of the respective project managers. For those construction contract files with missing documentation and signatures, the Construction Support and Coordination Services Section told the management audit staff that the Contracts Administration Section should have the complete documentation. However, the management audit staff was unable to locate the final construction contract documentation.

The Public Utilities Commission lacks management oversight of the construction change order process, including managing change order documentation centrally. The Public Utilities Commission should ensure that all contract-related documentation is maintained within one central entity to facilitate tracking and review. The Public Utilities Commission should establish a formal document retention policy for key contract-related documents and should mandate where such documents should be maintained.

#### Processing Change Orders

The Public Utilities Commission does not have written guidelines or clearly defined procedures on how to process and evaluate change orders. Nor does the Public Utilities Commission train resident engineers and project managers to negotiate with contractors regarding change orders and the associated costs. As noted above, 12 of 39 contracts, or approximately 30.8 percent, of construction projects completed between 2001 and 2004 had change orders, resulting in an increase in the original construction contract amount ranging from 2.5 percent to 74 percent. Therefore, the Public Utilities Commission needs to provide adequate guidelines, training and resources to project managers regarding effective contract negotiation and management of costs.

## Conclusions

The Public Utilities Commission's contracting process is cumbersome and needs to be streamlined. The actual timelines to process a professional service contract exceed the Public Utilities Commission's contract process workflow timelines two-fold. The Public Utilities Commission should evaluate and streamline the contracting process.

The Public Utilities Commission should better manage contractor performance. The Public Utilities Commission lacks rigorous guidelines to adequately evaluate contractor performance and does not ensure that project managers consistently evaluate contractor performance, either through the Task Order Evaluation Form or the monthly invoice approval process.

In addition, the Public Utilities Commission lacks rigorous policies and procedures for processing and evaluating change orders for construction contracts. For example, the Department does not have a policy that lists all the required documentation and information necessary for processing change orders. In addition, the Department lacks management oversight of record keeping, especially maintaining complete and accurate change order documentation. The Public Utilities Commission should establish a formal document retention policy for key contract-related documents and should mandate where such documents should be maintained.

## Recommendations

The Public Utilities Commission Contracts Administration Manager should:

- 5.1 Identify specific points of delay in the contracting process.
- 5.2 Implement specific procedures to reduce points of delay in the contracting process, including:
  - (a) Eliminating redundant steps;
  - (b) Scheduling future meetings with various entities, such as unions, the Civil Service Commission, and the City Attorney at an earlier point in the process;
  - (c) Setting up reminder notices to follow-up on steps in the contracting process with external entities, such as the City Attorney's Office and the Human Rights Commission; and
  - (d) Requiring the contractors to provide a complete set of insurance documents and other documents necessary to comply with the City's and Public Utilities Commission's contracting procedures no later than the end of the contract negotiating period.

- 5.3 Establish enforceable timelines for each step of the contracting process, as part of the Contracts Administration Section's planning for the Department's contracts web page.
- 5.4 Benchmark the performance of the Contracts Administration Section as a whole and Contracts Administration Section employees individually against these enforceable timelines.

The Construction Management Bureau Manager should:

- 5.5 Establish written guidelines for accurately and regularly completing the Department's Task Order Evaluation Form and mandate staff to adhere to these guidelines.
- 5.6 Establish written guidelines for systematically reviewing the contractor's monthly invoices to determine their accuracy and completeness and mandate staff to adhere to such guidelines.
- 5.7 Establish policies and procedures on how to process and evaluate change orders and mandate staff adherence to these guidelines.
- 5.8 Establish a standard list of required documents and forms that are needed to internally process all change orders for construction projects and enforce the utilization of such procedures.
- 5.9 Establish a formal document retention policy for key contract-related documents that should specify where such documents should be maintained and enforce such procedures.

The Deputy General Manager should:

- 5.10 Develop a training program for Contract Administration and Project Management staff regarding (a) contract negotiations, (b) evaluating contractor performance, and (c) evaluating and negotiating change orders.

## **Costs and Benefits**

The Public Utilities Commission would increase efficiency and reduce unnecessary costs by better managing contract processing and performance. The Public Utilities Commission incurs costs that are not easily quantified as a result of the cumbersome and delayed contracting process. Streamlining the process, including entering into contracts in a more timely fashion, would increase contracting efficiency.

Better managing contractor performance could reduce the cost of contracts. Reducing the frequency and amount of construction contract change orders will be critical as the Public Utilities Commission embarks upon the Water System Improvement Program. The Public Utilities Commission projects approximately \$2.85 billion in local and regional

water system construction costs. If the Public Utilities Commission continues to approve change orders for 30 percent of all construction contracts, resulting in contract cost increases of 8.3 percent of the original contract amount, the Public Utilities Commission could incur estimated construction cost overruns due to change orders of \$71.0 million. If the Public Utilities Commission tightens the process for evaluating and negotiating change orders, in accordance with the Budget Analyst's recommendations, the Public Utilities Commission would save approximately \$7.1 million in Water System Improvement Program expenditures.