



GAO

Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

January 31, 2008

Congressional Addressees

Subject: *Feasibility of Outsourcing the Management and Operation of the Capitol Power Plant*

The Capitol Power Plant (CPP), managed by the Architect of the Capitol (AOC), provides heating and cooling for the U.S. Capitol and surrounding facilities. This plant, which provides steam and chilled water year-round for about 16 million square feet of space in 24 facilities,¹ consists of 4 main components—the steam plant, the East Refrigeration Plant, the West Refrigeration Plant, and the administration building. In 2003, CPP awarded a construction contract that involved a major effort both to expand the capacity of the plant to meet the growing heating and cooling needs of the U.S. Capitol and to update plant equipment. The centerpiece of this expansion effort is the West Refrigeration Plant Expansion project, a \$100.9 million project scheduled for completion in March 2008.

For more than a decade, potential overstaffing at CPP has been a principal concern. In 1996, an AOC engineering consultant for CPP asserted that CPP was overstaffed and recommended reducing staff as a way to deliver CPP services more cost-effectively. In 2004, in response to a congressional mandate to assess CPP operations and infrastructure, we recommended that AOC update the consultant's 1996 study and examine the advantages and disadvantages of outsourcing CPP operations. Such assessments have been occurring in the federal government for some time. This approach became an emphasis for the federal government in 2001 and is seen as a way for federal agencies to improve their operational efficiency and performance by determining whether services should continue to be provided in-house or be outsourced.²

¹CPP provides chilled water to 19 of the 24 facilities and steam to all 24 facilities. Five of the buildings are not part of the Capitol Hill Complex; however, they are served by CPP and are billed for services provided. CPP will also serve the 580,000-square-foot Capitol Visitor Center upon completion.

²For most of the federal government, the process for determining whether commercial activities should be performed by the public or private sector is set forth in the Office of Management and Budget's Circular No. A-76. The circular is only applicable to executive branch agencies and not to AOC or CPP. However, according to an AOC official, if AOC were to look at guidelines for making future sourcing decisions, it would attempt to follow the spirit of the A-76 process.

More recently, in response to congressional concerns about CPP staffing levels, we reported on AOC's management of CPP and made recommendations on CPP's staffing levels.³ In 2005, we recommended that AOC develop an implementation plan for adjusting staff levels based on a 2004 study conducted by another AOC engineering consultant that found staffing levels higher at CPP than at comparable plants. Again in 2006, we reported that although AOC has long recognized that CPP is overstaffed, staffing reductions had not been implemented, and that AOC had only recently made plans to establish a new CPP staffing structure.

Because AOC has made little progress in reducing CPP staffing levels and examining sourcing options, congressional concerns about the overall management of CPP persist. Accordingly, we were directed to examine the feasibility of AOC's entering into a contract with a private entity for the management and operation of the CPP.⁴ In response, this report discusses (1) the actions that CPP has taken since 2004 to reduce operating costs and increase efficiencies and (2) the challenges that AOC will need to address before it can make future sourcing decisions about CPP operations.

To identify the actions that CPP has taken since 2004 to reduce operating costs and increase efficiencies, we interviewed AOC and CPP officials and the AOC consultant who performed the 2004 staffing study. We also contracted with a technical consultant who specializes in renovation and construction of heating and cooling plants to perform a peer review of an updated staffing study completed by the AOC consultant in 2006. We reviewed and analyzed relevant agency documents and available data on actions to reduce costs and increase efficiencies, and we reviewed applicable laws that would apply to CPP if AOC outsourced its operations. We interviewed agency officials and two utility outsourcing experts in the Washington, D.C., metropolitan area, as well as reviewed relevant studies and reports, to identify challenges that CPP could face when making future sourcing decisions. We conducted this performance audit from October 2007 through January 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

According to CPP officials, they have taken two actions to reduce costs and increase efficiencies—using more coal and advancing the West Refrigeration Plant Expansion modernization project. The West Refrigeration Plant Expansion project, for example, is expected to yield annual savings of over \$2 million, according to CPP estimates.

³GAO, *Capitol Power Plant: Actions Needed to Improve Operating Efficiency* (Washington, D.C.: Apr. 8, 2005), issued as an unnumbered correspondence. This work was mandated in the Consolidated Appropriations Act for Fiscal Year 2005, Pub. L. No. 108-447 (2004), see 2 U.S.C. § 2162 note, and GAO, *Architect of the Capitol: Addressing Staffing and Training Issues Is Important for Efficient and Safe West Refrigeration Plant Operations*, [GAO-06-321R](#) (Washington, D.C.: Feb. 10, 2006).

⁴H.R. Rep. No. 110-198, at 30 (2007).

Although CPP officials were able to provide some documentation on the degree to which these actions will reduce costs and increase operating efficiencies, they did not have documentation on the full range of benefits and costs associated with these actions or on how these actions will affect CPP's expected staffing structure and staffing levels. CPP's staffing structure and levels have not changed significantly for several years, despite recommendations that we and AOC's consultant have made to reduce staffing levels by more than one third. In response, CPP officials explained that they have developed a new staffing structure through a reorganization plan that is currently being reviewed by the Acting Architect of the Capitol and are developing a staffing reduction plan. However, we found that the reorganization plan consists of a one-page organizational chart that does not reflect how the new staffing structure was determined, and the staffing reduction plan does not reflect how staffing levels at various facilities were determined or include an action plan for implementing the reductions. AOC and CPP officials stated that even if the staffing reduction plan is eventually approved, they would not consider implementing staffing reductions until the West Refrigeration Plant Expansion modernization project is completed and all project components have been implemented. According to agency officials, the project is scheduled for completion in March 2008 and project components will be implemented sometime in 2009. Furthermore, CPP officials expressed doubts about the viability of cross-training employees, as suggested by AOC's consultant as a way to reduce staffing levels. Even though CPP has no inventory of its workers' skills, a CPP official stated that staff cannot be cross-trained to the extent the consultant reported because CPP jobs are too specific and CPP employees should not be expected to successfully transition to responsibilities outside of their primary specialization. For example, CPP officials assert that it would be difficult for personnel responsible for operating equipment to assume responsibilities involving equipment maintenance and vice versa. Finally, through our discussions with two industry experts, we determined that because CPP did not complete appropriate assessments of its equipment and workload, it is unable to accurately determine future staffing needs. According to industry experts with whom we spoke and our technical consultant, industry practice involves inventorying plant equipment and workload to inform decisions about what maintenance will be required to keep the equipment running safely and efficiently and determine what tasks are performed by various personnel. Without a complete equipment inventory and comprehensive workload analysis, CPP lacks the data necessary to accurately determine how many staff are required to operate the plant reliably.

AOC faces two formidable challenges that it will need to address before it can make future sourcing decisions about CPP operations. First, AOC will have to address existing staffing concerns that we and others have identified by developing a staffing plan that captures the appropriate staffing structure and staffing levels for CPP. In developing a staffing plan, AOC must assess their staffing needs by (1) developing a complete equipment inventory and a comprehensive workload analysis, (2) determining how the modernization effort will potentially affect future staffing levels, and (3) evaluating the abilities of its staff to operate the modernized plant. Second, even after the existing concerns are addressed, AOC faces the challenge of developing procedures and guidelines for making sourcing decisions. According to a recent study performed by the Commercial Activities Panel, a working group

composed of experts in competitive sourcing and headed by the Comptroller General of the United States, sourcing procedures and guidelines should be integrated with an agency's strategic and human capital plans. Although there are no legal restrictions that prohibit AOC from pursuing outsourcing options, AOC will have to consider a number of issues when developing procedures and guidelines that fit with existing agency plans—including identifying activities to outsource, training staff in making sourcing decisions, and addressing legal issues.

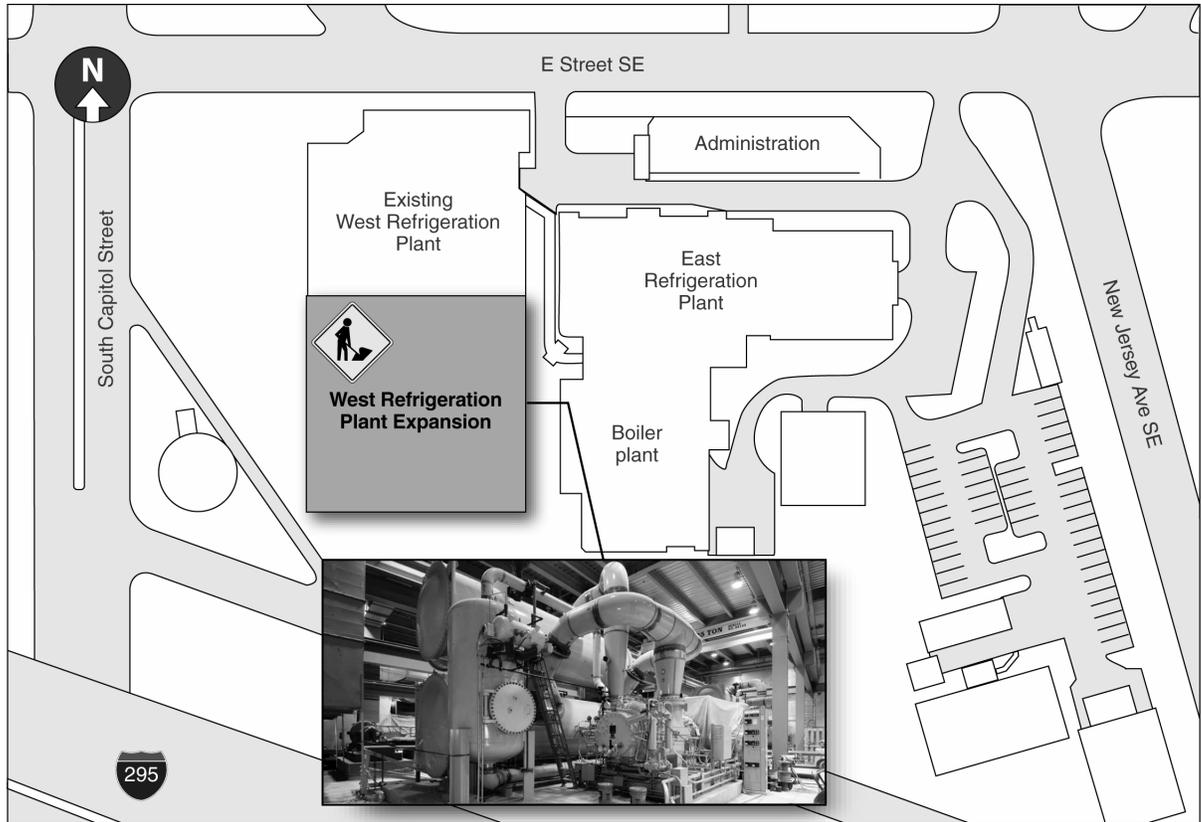
We are recommending that AOC quantify cost savings and increase efficiencies from actions taken since 2004; complete activities to support future sourcing decisions, including developing a comprehensive staffing plan and establishing procedures and guidelines to guide future decisions; and after completing necessary actions, pursue a competitive sourcing strategy. In commenting on a draft of this report, the Architect of the Capitol agreed with its contents and the recommendations.

Background

AOC manages the Capitol Hill Complex, which consists of various House, Senate, and other buildings that are among a number of facilities served by CPP. CPP currently provides year-round heating and cooling for the U.S. Capitol and 23 other buildings. (See the enclosure for a list of the buildings served.) To do this, it employs 83 full-time-equivalent staff and has a fiscal year 2007 operating budget of more than \$75 million. Chilled water is provided to 19 of its facilities; steam is provided to all 24 facilities it serves.⁵ CPP will also serve the 580,000-square-foot Capitol Visitor Center (CVC), which is under construction. Located not far from the U.S. Capitol Building in Washington, D.C., the heating and cooling plant consists of the steam plant, constructed in 1908; the East Refrigeration Plant, constructed in 1938; and the West Refrigeration Plant and administration building, constructed in 1978. (See fig. 1.)

⁵CPP does not currently produce electric power. CPP stopped producing power in 1952.

Figure 1: CPP West Refrigeration Plant Expansion Project Site and New Chiller (photo)



Sources: GAO (map); AOC (photo).

While its buildings and much of its equipment have remained basically unchanged since their initial construction, CPP is now in the process of a major renovation. In 2003, CPP began what has become a \$100.9 million effort—the West Refrigeration Plant Expansion (WRPE) project—to expand the capacity of the plant to meet the U.S. Capitol’s growing heating and cooling needs, and to update the plant’s equipment. The first phase of the project, completed in September 2007, added 25,000 square feet to the West Refrigeration Plant and is used to house new machines for generating chilled water. (See highlighted portion of fig. 1.) Also added during the first phase of the project was a Distributed Controls System (DCS) that enables CPP’s chillers to be monitored and controlled centrally. The second phase of the project will implement a DCS into CPP’s boiler plant and is slated for completion in April 2008.⁶

Given past concerns over CPP’s management dating back to the 1990s, alternative ways of managing CPP have been suggested. In 2004, we recommended that AOC examine the advantages and disadvantages of outsourcing CPP’s operations. We reported on the issue again in February 2007, and noted that AOC had not

⁶The full modernization of CPP will also require the addition of a DCS into Boilers 1 through 3 and the relocation of the East Refrigeration Plant Chillers to a designated location in the WRPE. These two projects are scheduled to be designed in 2009 and constructed in 2011.

comprehensively reviewed all of its services to determine whether any could be provided more cost-effectively through outsourcing.

Our past recommendation that CPP examine the advantages and disadvantages of outsourcing its operations coincides with governmentwide initiatives—spurred by advancements in technology, increased pressure for demonstrable results, and constrained budgets—to reexamine how government services are provided. The development of a sourcing strategy is one component of this reexamination process. Studies have shown that outsourcing commercial functions has the potential to address shortages of skilled workers, stabilize costs, improve agencies’ effectiveness and responsiveness, and refocus agencies on their core missions. Within the federal government, assessing the feasibility of outsourcing government functions has been emphasized since 2001, when the President directed executive branch agencies to implement competitive sourcing programs where possible to determine whether functions and services should be kept in-house or outsourced to achieve increased savings and improve performance. According to the Office of Management and Budget (OMB), when agencies subject in-house functions to competition, they can achieve cost savings, regardless of whether a private contractor or the government wins the competition.⁷ Although there are a number of benefits to implementing competitive sourcing programs, we have also reported in past work that agencies have had some difficulties with implementing this process.⁸ In particular, it has been shown that the impact on the morale of the federal workforce has been profound. Moreover, there have been concerns in both the public and private sectors about the timeliness and fairness of the process and the extent to which there is a level playing field for conducting public-private competitions. While competitive sourcing is expected to encourage innovation and improve efficiency and performance, it also represents a major management change for most agencies.

CPP Has Identified Two Actions to Reduce Costs and Increase Efficiencies and Made Limited Progress to Address Prior Staffing Concerns

CPP officials identified two actions they have undertaken to reduce costs and enhance operating efficiency—using more coal as a main fuel source and advancing a major modernization project.⁹ Although CPP provided some documentation on the

⁷OMB, *Competitive Sourcing: Conducting Public-Private Competition in a Reasoned and Responsible Manner* (Washington, D.C.: July 2003).

⁸GAO, *Competitive Sourcing: Greater Emphasis Needed on Increasing Efficiency and Improving Performance*, [GAO-04-367](#) (Washington, D.C.: Feb. 27, 2004); *Competitive Sourcing: Implementation Will Be Key to Success of New Circular A-76*, [GAO-03-943T](#) (Washington, D.C.: June 26, 2003); and *Competitive Sourcing: Implementation Will Be Challenging for Federal Agencies*, [GAO-03-1022T](#) (Washington, D.C.: July 24, 2003).

⁹AOC officials also identified savings through an electric contract that is managed by the General Services Administration (GSA). Several Capitol Hill buildings’ electric bills have been consolidated into a single contract. GSA assembled this contract to consolidate the electricity requirements of several governmental agencies in order to procure electricity at a reduced price. The annual savings for AOC to use this contract is approximately \$9 million. Although this action will result in savings, it falls outside of the scope of our review because we do not consider this an action that was initiated by AOC.

degree to which the actions will increase efficiencies or decrease costs, it has not fully documented the results of these actions. Without further information, AOC is limited in its ability to make informed decisions about its staffing structure and staffing levels, which remain basically unchanged from 2004 levels.

Although CPP Has Made Some Efforts to Reduce Costs and Increase Efficiencies, the Results of these Efforts Have Not Been Fully Documented

Although CPP has taken two actions to reduce costs and increase efficiencies—using more coal as a main fuel source and modernizing through the WRPE project—CPP has not fully documented the results of these actions. CPP has not examined the full range of benefits and costs associated with the measures, determined how the measures affect CPP’s staffing structure and levels, or determined what future maintenance and capital resources will be needed as a result of these measures. For example:

- *Promoting use of the most economical fuel.* Consistent with recommendations made by AOC’s consultant and by us, agency officials reported that in 2005, CPP began to focus on using the most economically priced fuel (coal) to operate its steam boilers.¹⁰ However, CPP has not documented the benefits and operational impacts of using more coal. While coal is still less expensive than other fuels to purchase, AOC could make more informed decisions about the use of different fuels by analyzing the full range of benefits and costs associated with using each fuel. The analysis would involve an evaluation not only of the costs to purchase fuels but also of the capital expenses and operating and maintenance costs associated with each fuel. Furthermore, the analysis should take into account other important trade-offs associated with each fuel, including impacts on the environment, public health, and the plant’s efficiency and reliability.
- *Advancing the WRPE modernization effort.* The WRPE project is expected to increase CPP’s chilled-water production capacity by 23 percent and yield efficiency improvements. Some of the WRPE efficiency improvements are expected to occur through the use of a DCS, which is a computer program that enables CPP chillers to be monitored and controlled centrally, thereby potentially reducing the number of staff needed to operate the facility. CPP officials said that prior to the initiation of the project, CPP conducted a cost-benefit analysis estimating projected benefits from improvements to the chillers. Through this analysis, CPP conservatively estimated annual savings of over \$2 million associated with projected efficiencies of the new chillers added during the WRPE. However, beyond their assertions that efficiencies will be gained through a reduction in energy consumption, CPP has made no

¹⁰In November 2004, AOC’s consultant conducted a technical and economical evaluation of CPP’s operation, which resulted in a recommendation to CPP to focus on using the most economically priced fuel. In April 2005, GAO made the recommendation that AOC adopt the consultant’s recommendations. See *Capitol Power Plant: Actions Needed to Improve Operating Efficiency*. This work was mandated in the Consolidated Appropriations Act for Fiscal Year 2005, Pub. L. No. 108-447 (2004), see 2 U.S.C. § 2162 note.

further assessment to determine whether performance targets or other planned benefits to be achieved through the expansion have been met. Not having these data prevents CPP from making informed operating, maintenance, and staffing decisions that could improve performance and better achieve planned benefits.

According to CPP officials, studies are under way to identify future efficiency measures and to guide the agency's future actions, including a long-term strategic plan and an evaluation of energy savings performance contracts. For example, CPP officials explained that the strategic plan, scheduled for completion in March 2008, is intended to help guide the identification and implementation of the most effective technological options for producing steam and chilled water in the future.¹¹ However, CPP officials did not provide details about the internal process for developing these studies, and, because studies are preliminary, they did not elaborate on any possible efficiency gains to be achieved from these studies.

While CPP officials say they have made efforts to reduce costs and increase efficiencies, the results of these efforts have not been fully documented and absent more comprehensive information, AOC lacks the fundamental elements of accountability and oversight that allow the Congress to reliably determine whether CPP's services are being carried out cost-effectively and whether funded projects are achieving their intended benefits. Our past work has demonstrated the importance of developing such information and performance measures for capital investments, like the WRPE project, to better ensure accountability for meeting cost, schedule, and performance goals. Sound data on cost, performance, and operations are important in making resource allocation decisions, including decisions about staffing levels and the future maintenance and capital resources needed to meet CPP's goals and objectives.

CPP Has Made Little Progress in Analyzing or Adjusting Staffing Levels

CPP has made little progress in either assessing needed staffing levels or adjusting them in accordance with recommended levels. In a November 2004 study, a consultant that AOC hired to update a 1996 technical and economic evaluation of CPP operations recommended that CPP reduce its staff from 88 to 46 positions.¹² In April 2005, we recommended that AOC develop a plan for implementing the consultant's staffing recommendations.¹³ AOC disagreed with the consultant's 2004 staffing analysis and asked the same consultant to reevaluate staffing levels in 2006. The consultant reaffirmed the earlier assessment and recommended that CPP reduce

¹¹According to CPP officials, draft submission of the study will be presented to a panel of industry experts to be convened by the National Academy of Sciences. CPP officials also noted that the final publication may be delayed based on panel comments or recommendations.

¹²CPP's staffing level as of January 2008 is 83 full-time employees.

¹³*Capitol Power Plant: Actions Needed to Improve Operating Efficiency.*

its staff to 57 full-time employees by 2011.¹⁴ In both its 2004 and 2006 studies, AOC's consultant promoted the cross-training of CPP employees—teaching operations personnel to maintain equipment and teaching maintenance personnel to operate the equipment—as a way to reduce staffing levels. However, even though CPP has no inventory of its workers' skills, CPP officials cited doubts about its consultant's recommendation about cross-training.¹⁵ According to a CPP official, staff cannot be cross-trained to the extent the consultant reported because CPP jobs are too specific and because CPP employees should not be expected to successfully transition to responsibilities or tasks outside of their primary specialization.

Notwithstanding our and others' recommendations to reduce staffing levels, AOC has taken limited action to develop a new staffing structure and a staffing reduction plan. During our work at CPP in late 2006, AOC officials told us that a plan for a new staffing structure—a staff reorganization plan—would be submitted to the Congress for approval in March 2007.¹⁶ A plan was not submitted, but AOC officials explained that they have developed a reorganization plan that is currently being reviewed by the Acting Architect of the Capitol. CPP officials shared the draft plan with us, and it consisted of a one-page organizational chart that did not reflect how the new structure was determined. In addition, AOC officials stated that they are in the preliminary stages of developing a staffing reduction plan that AOC officials also shared with us. The draft staffing reduction plan showed desired staffing levels at various facilities, but it did not demonstrate how these levels were determined. Furthermore, beyond a statement by officials that reductions would be achieved through attrition, there was no associated action plan or timetable for implementing the staff reductions. AOC officials told us that even if the staffing reduction plan is eventually approved, they have no immediate plans to reduce staffing levels at any of the CPP facilities. The officials stated they will not consider a reduction in staffing until the DCS is completely implemented, citing concerns that staffing reductions before that time may jeopardize the plant's operational reliability. In a 2005 report, however, we recommended that CPP not wait to implement prudent operational and incremental organizational changes until all WRPE components have been completed. We determined that anticipated workforce reductions, if carefully planned, could be managed so as to minimize adverse impacts. The DCS is scheduled to be completely implemented sometime in 2009, but even then, CPP officials said that staffing numbers will remain consistent with current levels.

Through our discussions with agency officials, we also determined that CPP has not performed the assessments needed to fully inform decisions about staffing structure and levels. CPP has not yet conducted a complete inventory of its equipment or a comprehensive analysis of its employees' workload. Industry practice often involves

¹⁴In December 2007, we hired an independent technical consultant who validated the 2006 recommendation made by AOC's consultant with respect to reduced staffing levels.

¹⁵AOC is administering a questionnaire to gather data on the training that its employees have received throughout their careers, but officials remain uncertain about when the results of the questionnaire will be available or how they will be used.

¹⁶GAO, *Architect of the Capitol: Committed, Sustained Leadership Needed to Continue Progress*, GAO-07-407 (Washington, D.C.: Feb. 28, 2007).

inventorying plant equipment and workload to inform decisions about what maintenance will be required to keep the equipment running safely and efficiently and to determine what tasks are performed by various personnel. Without a complete equipment inventory and a comprehensive workload analysis, CPP lacks the data necessary to accurately determine how many staff are required to operate the plant reliably. According to one CPP official, CPP conducted a partial equipment inventory in 2005, but CPP has not used data from the inventory to inform its decisions about staffing levels.¹⁷ Rather, CPP officials told us that they have an informal process by which they determine staffing levels by estimating workload based on upcoming projects, reviewing maintenance reports, and talking with supervisors about the duties of their employees. Only recently has CPP used benchmarks or metrics to determine what type of preventative maintenance the equipment requires.

AOC Will Have to Address Staffing Concerns and Develop Procedures and Guidelines for Making Future Sourcing Decisions

AOC faces two major challenges in making future sourcing decisions about CPP operations. First, AOC has to address existing staffing concerns by developing a comprehensive staffing plan that involves determining the appropriate staffing structure and staffing levels for CPP. Second, AOC has to develop procedures and guidelines for guiding future sourcing decisions.

Addressing Existing Staffing Concerns Poses a Major Challenge for CPP

Before AOC can begin making sourcing decisions, it faces a major challenge in addressing and resolving the existing concerns that we and others have identified that are associated with CPP's staffing structure, staffing levels, and training. Because CPP has not completed an inventory of equipment, tasks, and staff capabilities, or fully documented the results of completed and ongoing efforts, AOC lacks the information needed to develop a sound staffing structure or to determine the appropriate staffing levels. A number of difficult steps lie ahead to address this challenge, including the following:

- (1) CPP has not completed an inventory of equipment, tasks, and future needs to help inform sourcing decisions. Information obtained through an inventory can be used to inform decisions about staffing structure and levels. This information can also be used to determine service delivery expectations should operations be outsourced.
 - *Informing decisions about staffing structure and levels.* A complete inventory is necessary for a facility, such as CPP, to develop an accurate picture of the level of work needed to maintain the plant, the tasks required to perform the work, and the time needed to accomplish the needed tasks. One approach that CPP has used is to base all activities on past experience and activities. However, as we have previously noted, this approach is

¹⁷CPP officials expect to complete the equipment inventory by September 2008.

inconsistent with the approach other industry providers may use to determine the work needs at their plants. Assessing the age and condition of equipment through use of an equipment inventory and using this information to determine the level of effort required to accomplish plant tasks (i.e., workload analysis), as other industry providers often do, could help CPP develop a more complete assessment of the plant's work needs. While CPP has partially begun assessing workload in this manner through the use of a computerized system that helps determine preventative maintenance measures required for plant equipment, at least 20 percent of CPP's equipment still is not accounted for in the system. Comprehensive application of this approach across the entire plant can help CPP determine the level of effort required to accomplish plant tasks, and, as a result, officials can determine the number of staff needed to perform the tasks.

- *Determining service delivery expectations.* Information collected through a complete inventory can also be used to determine service delivery expectations. According to the two district-area industry experts with whom we spoke, information collected through an inventory can help an agency determine the needs of the agency and the level of reliability it wants to obtain. This information would help AOC to better define whether it might be more cost-effective and efficient to outsource its operations or maintain those operations in-house. If AOC determines that CPP operations should be outsourced, such an assessment can provide the information needed to craft the agency's request for proposal and the subsequent contract, which should set forth the goals and expectations of both parties.
- (2) AOC has not determined how the modernization effort—the recently completed WRPE and the soon-to-be-completed DCS—will potentially affect future staffing levels. A thorough understanding of this information is needed to develop a viable staffing structure and to determine optimal staffing levels for operating and maintaining the modernized facility. For example, the installation of the DCS, which enables chillers to be monitored and controlled centrally, should eliminate the need for continuous personnel monitoring the chilled-water plant, which should equate to a reduction in operator hours. Once the DCS is provided for the boiler plant, similar reductions in operator hours should be expected. A combination of installing the DCS and using an industry standard computerized system like the one previously mentioned would allow CPP to control when maintenance is performed and help decision makers determine the staffing levels needed.
- (3) AOC has not examined its existing staff capabilities—that is, the ability of its staff to assume new responsibilities and operate the modernized equipment. This type of an examination is a key step in the development of any staffing plan. According to two industry experts with whom we spoke, it is important for an agency to review and address the training needs of its staff and the changes in position duties and responsibilities that are required to respond to

changing needs. In the case of CPP's modernization effort, CPP should be reviewing not only its staffing levels, but also the capabilities of existing staff in concert with these technological improvements. Conducting a skills inventory, which CPP has not yet done, would be helpful in determining what skills are available; if they are sufficient; and, if not, what skills are needed to fill the gaps. According to AOC's consultant, more efficient staffing levels can be achieved at CPP through attrition and cross-training, which would enable staff consolidation of responsibilities and lead to staffing reductions.

After developing a staffing plan, AOC faces the challenge of establishing methods and processes for implementing the plan. For example, if the plan called for reorganizing or reducing staff, AOC would have to establish processes for reassigning or reducing staff. AOC's Workforce Planning and Human Capital offices would likely have to be involved in developing policies and procedures for a reassignment or reduction in force.

Developing Procedures and Guidelines for Making Sourcing Decisions Is a Second Challenge for CPP

Even after resolving existing concerns, AOC faces the challenge of developing procedures and guidelines for making future sourcing decisions. According to a recent study performed by the Commercial Activities Panel, a working group headed by the Comptroller General of the United States and composed of experts and academia, sourcing procedures and guidelines should be integrated with an agency's strategic and human capital plans.¹⁸ In developing procedures and guidelines that fit with existing agency plans, AOC will have to consider a number of issues, including the following:

- *Identifying activities to outsource.* According to our prior work, and OMB guidance, it would be prudent for AOC to identify those activities that can be outsourced and performed by the private sector.¹⁹ By outsourcing activities, an agency can address many concerns, including addressing shortages of skilled workers, improving the agency's effectiveness, and refocusing on core activities (i.e., activities that should be kept in-house). In the federal government, for example, executive branch agencies that have competitive sourcing programs are required to develop inventories of all activities performed by federal personnel and to identify those activities that are inherently governmental and those that are commercial activities. Through competitive sourcing, commercial activities are opened to competition between the public and private sectors.

¹⁸The Commercial Activities Panel was created as a result of legislation enacted by the Congress mandating a study of the government competitive sourcing process. In its report, the panel lays out sourcing principles and recommendations, which provide a road map for improving sourcing decisions across the federal government. See Commercial Activities Panel, *Improving the Sourcing Decisions of the Government: Final Report* (Washington, D.C.: Apr. 30, 2002).

¹⁹[GAO-04-367](#); GAO, *Competitive Sourcing: Challenges in Expanding A-76 Governmentwide*, [GAO-02-498T](#) (Washington, D.C.: Mar. 6, 2002); and OMB, *Circular A-76* (Washington, D.C.: May 29, 2003).

- *Training staff in making sourcing decisions.* AOC would have to train employees in sourcing processes and practices and incorporate this training into their strategic and human capital plans. We have said in the past that developing and maintaining a skilled acquisition workforce is a first step in managing a procurement environment.²⁰ When studying the practices of leading companies in the area of service acquisitions, we have found that a leading practice includes creating the structure, processes, and roles that will support the management and coordination of their services.
- *Addressing legal issues.* Although there are no legal restrictions prohibiting AOC from pursuing outsourcing options, AOC would have to develop procedures and guidelines to address legal issues associated with reducing staff.

Conclusions

While CPP has taken some actions since 2004 to reduce costs and enhance operating efficiencies, it has not adequately addressed prior staffing concerns, namely to produce a staffing plan for the Congress and reduce staffing levels in line with our previous recommendations and those of its own consultant. Moreover, because CPP has not fully documented the results of its efforts, it cannot adequately quantify the cost savings or efficiencies gained by the actions it has taken. The Architect of the Capitol and the Congress needs such information to oversee CPP operations and hold CPP officials accountable for their actions. In addition, AOC has not taken the steps necessary to determine whether keeping CPP operations in-house or outsourcing those operations would result in better service delivery. These challenges and the continued concerns about AOC management costs and efficiencies should provide an incentive for AOC to address lingering issues regarding its staffing levels. By quantifying the cost savings and efficiency results of its actions, CPP could better determine whether its current improvements and future plans would achieve any increased efficiencies or cost savings. Moreover, developing a more formal process for making sourcing decisions would enable AOC to assess the risks, advantages, and feasibility of outsourcing versus maintaining its operations in-house, and provide CPP with the tools it needs to better inform its future staffing decisions.

Recommendations for Executive Action

To determine the most efficient manner to operate CPP, we are recommending that the Architect of the Capitol take the following actions:

²⁰[GAO-03-1022T](#).

- Quantify for the Congress the cost savings and increased efficiencies generated from completed and ongoing actions taken since 2004.
- Complete activities to support future sourcing decisions, including
 - developing a comprehensive staffing plan by completing an equipment inventory and comprehensive workload analysis, determining how the modernization effort will affect future needs, and examining existing staffs' capabilities and
 - establishing procedures and guidelines to guide future sourcing decisions that take into account activities that can be outsourced, staff training in sourcing processes and practices, and legal issues.
- After completing necessary actions, pursue a competitive sourcing strategy.

Agency Comments

We provided a draft copy of this report to AOC for review and comment. In commenting on the draft of this report, the Architect of the Capitol agreed with its contents and recommendations.

We are sending copies of this report to the appropriate congressional committees. We are also sending this report to the Architect of the Capitol. We will make copies available to others upon request. In addition, this report will be available at no cost on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-6923 or dornt@gao.gov. Major contributors to this report include Elizabeth McNally (Assistant Director), Tonnye Conner-White, Amanda Seese, Bess Eisenstadt, Susan Michal-Smith, Crystal Wesco, Paul Wengert, Sara Ann Moessbauer, Jay Cherlow, William Woods, and Jessica Berkholtz.



Terrell Dorn
Director, Physical Infrastructure Issues

Enclosure

List of Congressional Addressees

The Honorable Nancy Pelosi
The Speaker of the House of Representatives

The Honorable Robert C. Byrd
Chairman
The Honorable Thad Cochran
Ranking Member
Committee on Appropriations
United States Senate

The Honorable Dianne Feinstein
Chairman
The Honorable Bob Bennett
Ranking Member
Committee on Rules and Administration
United States Senate

The Honorable David R. Obey
Chairman
The Honorable Jerry Lewis
Ranking Member
Committee on Appropriations
House of Representatives

The Honorable Robert A. Brady
Chairman
The Honorable Vernon Ehlers
Ranking Member
Committee on House Administration
House of Representatives

Enclosure

Facilities Supplied with Steam, Chilled Water, or Both

1. Capitol Power Plant Complex (4 buildings)
2. U.S. Capitol
3. Rayburn House Office Building
4. Longworth House Office Building
5. Cannon House Office Building
6. Hart Senate Office Building
7. Dirksen Senate Office Building
8. Russell Senate Office Building
9. Capitol Police Building
10. U.S. Supreme Court
11. Madison Building Library of Congress
12. Jefferson Building Library of Congress
13. Adams Building Library of Congress
14. House East Garage
15. House West Garage
16. Legislative Garage
17. U.S. Botanical Garden
18. 501 First St., S.E.
19. House Page Dormitory
20. Thurgood Marshall Building²¹
21. Union Station²²
22. Postal Square²²
23. Government Printing Office²²
24. Folger Library

(545068)

²¹AOC is responsible for this building, and the tenants pay rent.

²²These buildings are not part of the Capitol Hill Complex; however, they are served by CPP and are billed for the services provided.

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