

# UTILITIES PRIVATIZATION—IS THE US ARMY ON THE RIGHT CIRCUIT?

BY

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**UTILITIES PRIVATIZATION—IS THE US ARMY ON THE  
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by

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## **ABSTRACT**

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This paper discusses the Department of Defense (DoD) utilities privatization program with a focus on the United States (US) Army's utilities privatization progress including its history, current status, effectiveness, management, and issues.

In the National Defense Authorization Act for Fiscal Year 1998, Congress approved legislation authorizing DoD to privatize its 2,600 utility systems valued at \$50 billion. This legislation was followed by the Department of Defense Reform Initiative Directive (DRID) #9 on December 10, 1997, directing the Military Departments to develop a plan for privatizing all their utility systems (electrical, water, wastewater, and natural gas systems).

The road to privatizing all DoD utility systems has seen its share of setbacks. DRID #9 initially established a January 1, 2000, goal to complete the privatization of all systems (except those where security or uneconomical reasons occur). The goal has been revised many times; the most recent estimate is as late as 2017. The utilities privatization process has been more difficult and challenging than expected, especially in the areas of contract solicitation, evaluation, and administration. A number of Government Accountability Office (GAO) reports were critical of the DoD utilities privatization program and its execution. This resulted in DoD issuing new guidance and clarifications.

This paper analyzes the DoD utilities privatization program by first reviewing its early policies and directives, then tracking DoD's progress over the last twelve years trying to reach its 100 percent utilities privatization decision goal. A review of the current policies and guidance then leads to a discussion of the issues surrounding utilities privatization today. An analysis of these issues culminates with a number of recommendations to improve the DoD utilities privatization process and execution.



## TABLE OF CONTENTS

|                                                                                |     |
|--------------------------------------------------------------------------------|-----|
| ABSTRACT.....                                                                  | iii |
| TABLE OF CONTENTS.....                                                         | v   |
| ACKNOWLEDGMENTS .....                                                          | vii |
| LIST OF FIGURES .....                                                          | ix  |
| LIST OF TABLES .....                                                           | ix  |
| INTRODUCTION .....                                                             | 1   |
| Genesis of Utilities Privatization .....                                       | 1   |
| Purpose, Problem Statement, and Organization .....                             | 2   |
| DEFINITION OF UTILITIES PRIVATIZATION .....                                    | 3   |
| UTILITIES PRIVATIZATION BACKGROUND.....                                        | 4   |
| Early Mandates .....                                                           | 4   |
| Quadrennial Defense Review of 1997 .....                                       | 4   |
| Defense Reform Initiative Report.....                                          | 5   |
| National Defense Authorization Act for Fiscal Year 1998.....                   | 5   |
| Defense Reform Initiative Directive #9.....                                    | 6   |
| Defense Reform Initiative Directive #21 .....                                  | 6   |
| Defense Reform Initiative Directive #49.....                                   | 7   |
| Progress towards Utilities Privatization.....                                  | 9   |
| National Defense Authorization Acts for Fiscal Years 2000, 2001, and 2002..... | 9   |
| Revised Utilities Privatization Program Guidance .....                         | 10  |
| National Defense Authorization Act of Fiscal Year 2004.....                    | 12  |
| Utilities Privatization Exemption Certification Guidance Clarification.....    | 12  |
| Contract Pricing Guidance for Utilities Privatization.....                     | 12  |
| Report to Congress on Implementation of Commercial Business Practices.....     | 13  |
| Government Accountability Office Report 05-433 .....                           | 14  |
| 2005 DoD Supplemental Guidance .....                                           | 15  |
| National Defense Authorization Act for Fiscal Year 2006.....                   | 15  |
| 2006 DoD Supplemental Guidance .....                                           | 16  |
| DoD Report to Congress on Use of Utility System Conveyance Authority.....      | 17  |
| Government Accountability Office Report 06-914 .....                           | 17  |

|                                                                                                     |    |
|-----------------------------------------------------------------------------------------------------|----|
| CURRENT LAWS, GUIDANCE, AND STATUS .....                                                            | 18 |
| National Defense Authorization Act for Fiscal Year 2009.....                                        | 18 |
| Utilities Privatization Program Oversight.....                                                      | 19 |
| Defense Energy Support Center .....                                                                 | 19 |
| Army Initiative to Reduce Privatization Process Time .....                                          | 20 |
| Current Implementation Status .....                                                                 | 21 |
| CURRENT ISSUES AND RECOMMENDATIONS .....                                                            | 22 |
| Contribution in Aid of Construction versus Fair Market Value .....                                  | 22 |
| Issue and Discussion .....                                                                          | 22 |
| Recommendation .....                                                                                | 26 |
| Post Award Utilities Privatization Contract Administration .....                                    | 26 |
| Issue and Discussion .....                                                                          | 26 |
| Recommendation .....                                                                                | 31 |
| Utilities Privatization Contract Term.....                                                          | 32 |
| Issue and Discussion .....                                                                          | 32 |
| Recommendation .....                                                                                | 33 |
| CONCLUSION.....                                                                                     | 33 |
| APPENDIX 1 DoD Report to Congress on Use of Utility System Conveyance<br>Authority .....            | 37 |
| APPENDIX 2 Government Accountability Office Report 06-914 Recommendations<br>and DoD's Actions..... | 41 |
| BIBLIOGRAPHY .....                                                                                  | 43 |
| ENDNOTES .....                                                                                      | 49 |

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## **LIST OF FIGURES**

|                                                                                   |    |
|-----------------------------------------------------------------------------------|----|
| Figure 1. DoD utilities privatization status as of December 31, 2008.....         | 21 |
| Figure 2. Army utilities privatization status as of September 30, 2008.....       | 22 |
| Figure 3. Army utility systems privatization contract administration status. .... | 28 |

## **LIST OF TABLES**

|                                                                                                                         |    |
|-------------------------------------------------------------------------------------------------------------------------|----|
| Table I. Percentage of Systems with Privatization or Exemption Decision .....                                           | 14 |
| Table II. Percentage of Systems with Privatization or Exemption Decision and<br>Estimated Program Completion Date ..... | 17 |
| Table III. Status of the Utility Privatization Program as of March 31, 2006.....                                        | 18 |
| Table IV. Utility System Conveyance Options.....                                                                        | 24 |



# UTILITIES PRIVATIZATION—IS THE US ARMY ON THE RIGHT CIRCUIT?

## INTRODUCTION

### Genesis of Utilities Privatization

The Department of Defense (DoD) has over 2,600 utility systems valued at \$50 billion<sup>1</sup> across 460 installations in the United States (US) and overseas.<sup>2</sup> DoD spends more than \$6 billion yearly in energy costs and over one-third of these costs are spent maintaining the utility infrastructure.<sup>3</sup> DoD utility systems infrastructures have been historically underfunded. Many utility systems are aging, resulting in unsafe and unreliable systems.<sup>4</sup> Ten years ago, the cost to upgrade all utility systems was estimated at \$22 to \$25 billion.<sup>5</sup> DoD civilian manpower was also decreasing due to downsizing following the Cold War.<sup>6</sup> If these utility systems are not operating effectively, it has serious strategic implications on how DoD trains, equips, and provides a good quality of life for all personnel and their families living and working on each installation.

At the end of the 1990s, the Army was in the same situation as the rest of DoD. The Army had underfunded its Military Construction (MILCON) and Sustainment, Restoration, and Modernization (SRM) accounts needed to sustain and modernize over 350 Army utility systems. The Army needed \$3 to \$4 billion to fix their utility systems. The challenge was how to modernize the utility infrastructure in the shortest amount of time with a minimum amount of funds.<sup>7</sup>

The answer was to privatize the DoD utility systems. On October 9, 2002, the Deputy Secretary of Defense provided his comments:

Historically, military installations have been unable to upgrade and maintain reliable utility systems fully due to inadequate funding and competing installation management priorities. Utilities privatization is the preferred method for improving utility systems and services by allowing military installations to benefit from private sector financing and efficiencies.<sup>8</sup>

The private industry utility providers are more efficient and effective in operating, maintaining, and improving utility systems than DoD. These efficiencies and financing lower the overall lifecycle costs and improve the quality of life of our soldiers, airmen,

and sailors. Privatization allows installation commanders to focus their efforts on core defense missions and functions and relieves them of non-essential tasks, such as operating and maintaining utility systems.<sup>9</sup>

The genesis of utilities privatization within DoD occurred in 1997 with the Quadrennial Defense Review (QDR) and the Defense Reform Task Force.<sup>10</sup> Within the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 1998, Congress approved legislation authorizing DoD to privatize its utility systems.<sup>11</sup> This legislation was followed by the Department of Defense Reform Initiative Directive (DRID) #9 on December 10, 1997, directing the Military Departments to develop a plan for privatizing all their utility systems—electrical, water, wastewater, and natural gas systems—except in systems where privatization was a security issue or not economical.<sup>12</sup>

The road to privatizing all DoD utility systems has seen its share of potholes, turns, and roadblocks. DRID #9 initially set a January 1, 2000, goal to complete the privatization of all applicable systems.<sup>13</sup> In December 1998, DRID #49 revised the original goal to September 30, 2003.<sup>14</sup> The goal has been revised many times; the most recent estimate is now as late as 2017.<sup>15</sup> The utilities privatization process has been more difficult and challenging than expected, especially in the areas of contract solicitation, evaluation, and administration. Two Government Accountability Office (GAO) reports in 2005 and 2006 were critical of the DoD utilities privatization program and its execution. This resulted in DoD issuing new guidance and clarifications.<sup>16</sup>

## **Purpose, Problem Statement, and Organization**

The purpose of this paper is to educate the reader about the Army utilities privatization program by understanding its history, challenges, and growth over the past twelve years. The history and background will have a largely DoD flavor, since the majority of all utilities privatization policies and guidance were issued at the DoD level. The paper also identifies some current issues to the Army utilities privatization program and provides recommendations addressing these issues.

Is the Army utilities privatization program on the right circuit? This is the ultimate question this paper attempts to answer. The answer can only be found by studying the utilities privatization history and side circuits it has taken in the past.

After the introduction, this paper starts with a definition of utilities privatization. The next major section discusses the background history of utilities privatization beginning with its early mandates and continuing with its progress through the years. The fourth major section discusses recent changes, current guidance, oversight, and status. The next section identifies current issues with the Army utilities privatization program, analyzes the issues, and provides some recommendations. The conclusion then summarizes the key aspects of the program as presented in the paper.

## DEFINITION OF UTILITIES PRIVATIZATION

What exactly does *utilities privatization* mean? First, we need to understand what is considered a utility. The NDAA of FY 1998 and Title 10 United States Code (USC), Section 2688, defines the term *utility system* as either a system for the generation of or supply of electric power; a system for the treatment or supply of water; a system for the collection or treatment of wastewater; a system for the generation or supply of steam, hot water, and chilled water; a system for the supply of natural gas; or a system for the transmission of telecommunications. The utility system includes equipment, fixtures, structures, and other improvements as well as associated easements and rights-of-way.<sup>17</sup> DRID #9 only directs the privatization of electrical, water, wastewater, and natural gas utility systems. It does not specify the privatization of steam, hot water, chilled water, or telecommunications, but it does not prohibit the privatization of these systems.<sup>18</sup>

Privatization is defined as an activity characterized by a shift from public to private capital for the fundamental, long-term financial investment required to sustain an activity.<sup>19</sup> Utilities privatization within DoD is the sale of Government-owned, on-base utility distribution systems (electrical, water, wastewater, natural gas) to private entities that will then own the systems, operate the systems, and provide utility services to the bases' buildings and activities. It does not include the wiring and pipes inside buildings.<sup>20</sup> It also does not normally include the actual utility commodity—electricity, water, natural gas.<sup>21</sup> An entity may be a municipal, private, regional, district, or cooperative utility company or other entity.<sup>22</sup>

The process or mechanism to privatize a DoD utility system consists of three distinct agreements after a competitive process determines the successful company. First,

the installation awards a long-term (up to 50 years) utility services *contract* to the contractor to provide the utility service including the operation, maintenance, and upgrade of the utility system. Second, the installation grants a *right-of-way* to the contractor allowing it access to the base and to operate and maintain the system. Third, the installation creates a *bill of sale* to sell the utility system to the contractor at a specified price. The land over, under, and around the utility system infrastructure still belongs to the Government. Even though the utility privatization process consists of three separate agreements, they are dependent upon each other, and all three must be accomplished for the utility privatization to be complete.<sup>23</sup>

## **UTILITIES PRIVATIZATION BACKGROUND**

### **Early Mandates**

The foundation of utilities privatization within DoD began in 1997 with the QDR and Defense Reform Initiative. The NDAA of FY 1998 established the authority to allow utilities privatization; whereas, three DRIDs published in 1997 and 1998 mandated DoD to privatize its utility systems.

### **Quadrennial Defense Review of 1997**

The 1997 QDR does not specifically mention utilities privatization, but does lay the foundation for the fundamental shift in reasoning toward privatization. After a six-month analysis of threats, risks, and opportunities extending to the 2015 timeframe, Secretary of Defense William S. Cohen released the QDR on May 19, 1997. Secretary Cohen stated, “We need to cut our support tail in order to preserve our combat tooth and protect our people and their quality of life. Our infrastructure is still too large for our force structure today.” The QDR, in addition to requesting two more rounds of Base Realignment and Closure (BRAC), calls for broad infrastructure deregulation to permit more efficient operations.<sup>24</sup> Section VIII of the QDR proposes to “compete, outsource, or privatize military department infrastructure functions that are closely related to commercial enterprises” that will eliminate 25,000 military and 30,000 civilians between FY 1997 and FY 2003.<sup>25</sup> The QDR also established a Defense Reform Task Force for the

purpose of finding ways to consolidate functions, eliminate duplication of effort, and improve efficiency within DoD.<sup>26</sup>

### **Defense Reform Initiative Report**

The Defense Reform Task Force issued their report, which is built around four major reform pillars, in November 1997. The fourth pillar, or *reform initiative*, is designed to eliminate unneeded infrastructure.<sup>27</sup> The report states that DoD must stop the drain on resources caused by excess Cold War infrastructure. The report specifically declares:

Many of these (utility) systems are old and in need of significant repair. Here, too, the required funding exceeds the Department's current and anticipated resources. Local utilities and other entities, by contrast, do have the resources to invest in these systems and the expertise to maintain them appropriately.<sup>28</sup>

DoD proposes an ambitious plan to transfer ownership, operation, and maintenance of utility systems. The report declares a Secretary of Defense Reform Decision stating, "By January 1, 2000, the Department will privatize all utility systems (electric, water, waste water and natural gas) except those needed for unique security reasons or when privatization is uneconomical." DoD proposed broad authority to pursue utilities privatization more expeditiously without needing special approval from Congress for each privatization action. The goal is to minimize overall energy costs. DoD spends over \$2.2 billion per year on energy facilities. A lesson from industry is that businesses do not need to own or manage power infrastructure in order to manage energy.<sup>29</sup>

### **National Defense Authorization Act for Fiscal Year 1998**

The NDAA for FY 1998 was signed into law on November 18, 1997, around the same time period as the Defense Reform Initiative Report was released. Section 2812 of the FY 1998 NDAA provides the authorization to transfer ownership of DoD utility systems infrastructure to private entities. It adds the legislative authority under Section 2688 of Title 10, USC, which begins by stating:

The Secretary of a military department may convey a utility system, or part of a military system, under the jurisdiction of the Secretary to a municipal, private, regional, district, or cooperative utility company or other entity.<sup>30</sup>

If more than one utility company or entity is interested, the DoD must use competitive procedures to make the selection. DoD must receive an amount equal to the fair market value (FMV) of the utility system being conveyed, and the payment can be in the form of a lump sum or a reduction in charges to the utility service provided to that installation.<sup>31</sup>

Before a utility system is privatized, 10 USC Section 2688 states that an economic analysis, which is approved by the Secretary of Defense, must be submitted to the congressional defense committees and 21 days must pass before proceeding with the privatization. The economic analysis must demonstrate how the long-term economic benefit of conveyance exceeds the long-term economic cost and how the conveyance will reduce the long-term utility services costs for that system.<sup>32</sup>

### **Defense Reform Initiative Directive #9**

The FY 1998 NDAA provided the legal authority; however, DRID #9 issued the DoD directive for privatizing utility systems when the Deputy Secretary of Defense signed this DoD policy on December 10, 1997. DRID #9 directs the Military Departments “to develop a plan for privatizing all of their utility systems (electric, water, waste water and natural gas) by January 1, 2000, except those needed for unique security reasons or when privatization is uneconomical.” The Under Secretary of Defense for Acquisition & Technology (USD(A&T)) is tasked with developing common criteria to help the Military Departments determine if a utility system is exempt from privatization due to security or economic considerations.<sup>33</sup> DRID #9 narrows the definition of a utility system from what is found in Title 10 USC Section 2688. Steam, hot water, chilled water, and telecommunications systems are not mandated to be privatized in DRID #9, but they may be. The goal of privatizing all potential DoD utility systems in just over two years was very ambitious.

### **Defense Reform Initiative Directive #21**

The Defense Reform Initiative Report mentioned the fact that Military Departments are so busy managing power infrastructure that they give energy management inadequate attention.<sup>34</sup> DoD’s solution was to issue DRID #21 on January 16, 1998, which redesignates the Defense Fuel Supply Center as the Defense Energy

Support Center (DESC), makes DESC report under the Defense Logistics Agency (DLA), and expands DESC's duties to include the consolidation of DoD's regional energy efforts. One such duty is to assist the Military Departments with the privatization of utility infrastructure, initially associated with various demonstrations.<sup>35</sup> One example is the Texas Regional Demonstration Implementation, a regional privatization project consisting of 25 utility systems at seven installations. DESC partnered with the Air Force and Army on this project and provided \$4.3 million of their own funding.<sup>36</sup> Over the past decade, DESC has increased its involvement with utilities privatization. In addition to privatizing DLA systems, the Air Force and Army have sought DESC's assistance in privatizing their systems as well.<sup>37</sup>

#### **Defense Reform Initiative Directive #49**

DRID #9 created an urgency for the Services to move out on privatization; however, it quickly became evident that they would not meet the initial January 2000 goal.<sup>38</sup> As the Military Departments got more involved, the number of utility systems available to be privatized, as well as the number of issues surrounding the privatization process, multiplied.<sup>39</sup> Around 1,700 utility systems were initially identified as potential privatization candidates; however, only about 40 were completed by the end of 1998, and many of these were Army natural gas systems started before DRID #9. Some of the issues revealed included extensive up-front work required including researching state and local utility laws, conducting extensive feasibility and environmental studies, and not having the up-front investment funds to conduct the privatization process.<sup>40</sup>

Congress also had some initial concerns over the privatization process. Section 2815 of the NDAA for FY 1999, passed in October 1998, required the Secretary of Defense to submit a report identifying the criteria used to select utility systems for conveyance, assess the need to provide the authority to convey real property, and ensure any conveyance would not adversely affect the US national security.<sup>41</sup>

In December 1998, DoD tackled the funding issue by passing a program budget decision directing the Services to set aside an estimated \$243.6 million of start-up funds over the next five years.<sup>42</sup> Also in December 1998, DoD released DRID #49, which addressed Congress's concerns and provided additional guidance for the Military

Departments. The purpose of DRID #49 was to reset the privatization goals, establish a management and oversight approach, provide guidance on exemptions to privatization, expand the guidance on using competitive procedures, and clarify the economic analysis process.<sup>43</sup>

The new goal was to award privatization contracts for all systems by September 30, 2003. To guide the progress towards privatization, two interim milestones were also established: 30 September 2000 to complete all privatization determinations for all systems and 30 September 2001 to release all contract solicitations. Additional oversight required the Military Departments to submit quarterly reports to USD(A&T) identifying its milestone progress as well as any issues.<sup>44</sup>

DRID #49's additional guidance satisfies USD(A&T)'s requirement in DRID #9. The guidance reiterates the definition of a *utility system* and emphasized the authority to privatize must be in accordance with state and local laws or host nation laws and agreements if the utility system is overseas. The guidance states that exemptions for privatization may be necessary, but should be rare. The two exemptions are for unique security and uneconomical reasons. Unique security reasons would apply if the private ownership of the utility system would substantially impair the mission of the Military Department or would compromise classified operations or property. Uneconomical reasons include a lack of market interest by private entities, long-term costs that are greater than the long-term benefits, or if long-term utility services costs provided by the utility system will not be reduced.<sup>45</sup>

DRID #49 requires the use of competitive procedures while conducting utilities privatization. Franchised or regulated utility companies shall not be automatically considered awardees nor shall they be eliminated from competition. State laws and regulating policy should be considered on how they might affect the determination of rate structures during and beyond the end of the initial service contract.<sup>46</sup>

The economic analysis procedures are also further refined to include the use of DoD Instruction (DoDI) 7041.3 and Office of Management and Budget (OMB) Circular A-94. The economic analysis must account for all operation, maintenance, and system improvement costs as if the Military Department was operating and maintaining the utility systems in accordance with accepted industry practices and all legal and regulatory

requirements. Since the actual costs of the Military Department may reflect inadequate maintenance and condition, the economic analysis must include the *should costs* that would be incurred if the Military Department operated the systems in accordance with all legal and regulatory requirements.<sup>47</sup>

DRID #49 also listed two early obstacles needing legislative relief. They are the 10-year utility service contract limitation and the tax treatment of utility system conveyances.<sup>48</sup>

## **Progress towards Utilities Privatization**

The utilities privatization program has undergone many changes, clarifications, and updates since its inception in FY 1998. The system has been scrutinized, reviewed, and investigated by Congress and other Government agencies. This section describes these changes, updates, and reports since DRID #49 in 1998 through the GAO report in 2006.

### **National Defense Authorization Acts for Fiscal Years 2000, 2001, and 2002**

During the early years of utilities privatization, various aspects of utilities privatization were scrutinized by DoD and Congress resulting in some changes, which were addressed in the NDAAAs for FY 2000, 2001, and 2002.

Section 2812 of the FY 2000 NDAA increases the maximum length of a utility services contract “for a period not to exceed 50 years.”<sup>49</sup> This resolves one of the two obstacles mentioned in DRID #49.

The FY 2001 NDAA, Section 2813, clarifies when procedures other than competitive procedures can be used and states that the solicitation process must be consistent with state laws and regulations so as to not limit competition among regulated and unregulated utility companies. The FY 2001 NDAA also requires that the “conveyee manage and operate the utility system in a manner consistent with applicable federal and state regulations pertaining to health, safety, fire, and environment requirements.”<sup>50</sup>

Section 2806 of NDAA for FY 2002 requests the Secretary of Defense conduct an evaluation of financing costs in utilities privatization and determine if it is wise to modify the Federal Acquisition Regulation (FAR) to allow these costs. The outcome of the

evaluation led to a Class Deviation on Interest Costs being granted by the Director, Defense Procurement, on April 15, 2002.<sup>51</sup>

### **Revised Utilities Privatization Program Guidance**

As of September 2001, over 1,300 of the 1,500 available DoD utility systems were in the solicitation phase or pending a release of a Request for Proposal (RFP).<sup>52</sup> Military Departments were pushing to meet the 2003 privatization deadline instead of trying to get good contracts in place.<sup>53</sup> Industry feedback suggested the Departments were not allowing enough time for potential offerors to respond to RFPs, and the volume of RFPs were starting to saturate the market, resulting in a decrease in competition.<sup>54</sup> The solicitation process was complex and most contracts were taking over two years to award.<sup>55</sup> Based upon this scenario, industry and Service Departments recommended DoD revise its privatization goals and guidance.<sup>56</sup>

DoD complied with these wishes and published new revised guidance for the utilities privatization program on October 9, 2002. This revised guidance replaced DRID #49, set new milestones, improved guidance for conducting market research, protected the Government's intent, clarified the determination when to privatize, and established rules conforming with state laws and regulations.<sup>57</sup>

The guidance directs the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)) to oversee the utilities privatization program and develop broad policy. USD(AT&L) shall establish a Utilities Privatization Working Group, which is chaired by the Deputy Under Secretary of Defense (Installations and Environment) (DUSD(I&E)) and composed of representatives from all Military Departments and Defense Agencies with utility systems.<sup>58</sup> The new privatization goal states:

Using this guidance, by September 30, 2005 the Defense Components shall complete a privatization evaluation of each utility system at every Active, Reserve, and National Guard installation, within the United States and overseas, that is not designated for closure under a base closure law.<sup>59</sup>

A privatization evaluation is complete when the Source Selection Authority (SSA) has made a decision or an exemption is requested. The privatization process must proceed in a deliberate manner that permits industry interest and maximizes competition. New interim milestones were also set: 80 percent of all utility systems have issued RFPs or

certifications of exemption by September 30, 2003, and 65 percent reach SSA decisions or exemption by September 30, 2004. The Military Components shall submit a detailed schedule of their revised plan to USD(AT&L). The Services shall update their schedule yearly and submit quarterly status reports to DUSD(I&E).<sup>60</sup>

The revised guidance states privatization involves at least two transactions: the conveyance of the utility system and the acquisition of utility services up to 50 years. A third possible transaction might be a right-of-way or easement to allow the contractor access to the utility system. To convey a utility system in accordance with 10 USC Section 2688, two statutory requirements must be met: receipt of a FMV and an economic analysis showing the long-term benefit is greater than the long-term cost and a reduction in the long-term utility services costs. If these two statutes are not met, then the utility system may not be privatized.<sup>61</sup>

The privatization exemptions in the revised guidance are very similar to DRID #9 with additional procedure to determine a lack of market interest. Components should develop strategic RFPs that enhances the Government's potential benefit and encourages maximum participation by industry. Components should consider standardizing RFPs to encourage a broader participation in solicitations. The selection shall be a best-value determination according to the FAR that takes into account non-monetary considerations. The FMV may be determined by an actual appraisal, modified cost/income analysis, or replacement/original cost new less depreciation analysis.<sup>62</sup>

The economic analysis shall follow OMB Circular A-94, DoDI 7041.3, and this revised guidance. The Services shall also use the newly developed DoD model, called the Utilities Privatization Economic Analysis Support Tool (UPEAST) to perform benefit-cost analyses.<sup>63</sup>

The guidance mentions that interest on borrowed money is normally an unallowable FAR cost; however, a FAR deviation was approved to allow interest costs in lieu of the cost of money. Cost Accounting Standards (CAS) are normally required for all contracts over \$500K, but the Military Departments may request CAS waivers from the Director, Defense Procurement. Military Departments shall establish contract provisions and associated staffs to ensure the contractor is providing a reliable service and operating the system in accordance with federal, state, and local regulations.<sup>64</sup>

## **National Defense Authorization Act of Fiscal Year 2004**

In an effort to streamline the utilities privatization effort, Congress made a slight change to Title 10 USC Section 2688 in the NDAA for FY 2004. Section 1031(a)(32) of the FY 2004 NDAA replaced the notice-and-wait requirement with the Secretary of Defense submitting a quarterly report to the congressional defense committees no later than 30 days after each quarter listing all conveyances made during the previous quarter along with the economic analysis for each conveyance. This eliminated the up-front 21-day waiting period before finalizing each privatization action.<sup>65</sup>

## **Utilities Privatization Exemption Certification Guidance Clarification**

The revised guidance submitted on October 9, 2002, provided detailed guidance when a privatization exemption may be certified. During several Utilities Privatization Working Group meetings, the Service representatives expressed different interpretations of this guidance. This prompted DUSD(I&E) to publish a memorandum on August 5, 2004, clarifying the procedures for certifying a utility system privatization exemption.<sup>66</sup>

## **Contract Pricing Guidance for Utilities Privatization**

On October 20, 2004, the Director of Defense Procurement and Acquisition Policy (DPAP) published a memorandum providing information on contract pricing for utilities privatization. This memorandum provides instructions to Contracting Officers when pricing and negotiating utilities privatization contracts. The guidance recognizes the difficulties in the contract management of utilities privatization contracts due to their complex and long-term nature and states the importance of effectively managing contracts, controlling cost growth, and ensuring quality of performance.<sup>67</sup>

The DPAP Director granted a class deviation from FAR Part 31 on October 14, 2004, that superseded the earlier 2002 FAR Part 31 class deviation for interest costs. The class deviation grants a general deviation, allows external interest and/or directly related financial costs in lieu of cost of money, and allows federal income tax directly related to a Contribution in Aid of Construction (CIAC).<sup>68</sup> This addressed the second obstacle listed in DRID #49. On August 13, 2007, the DPAP Director issued another very similar FAR

Part 31 class deviation, which supersedes this 2004 deviation and is valid until August 31, 2010.<sup>69</sup>

On September 2, 2004, the DoD CAS Board approved a waiver from CAS for utilities privatization contracts provided certain conditions are met.<sup>70</sup> This eliminated the need to request an exemption from CAS for each contract.

### **Report to Congress on Implementation of Commercial Business Practices**

In 2003, the House Committee on Appropriations reviewed several proposed water and wastewater utilities privatization projects. Based upon their experience, projects that apply common business practices associated with long-term capital intensive projects have the greatest chance for success and greatly reduce long-term costs to the Government. The House Report 108-173 accompanying the FY 2004 Military Construction Appropriations Bill directs DoD to report to the committee regarding the water and wastewater utilities privatization program and efforts to fully implement commercial business practices.<sup>71</sup>

The Acting Undersecretary of Defense responded on February 18, 2004, stating DoD is evaluating the recommendations in House Report 108-173, and a report will be provided by May 28, 2004.<sup>72</sup> The final report was not submitted to Congress until February 25, 2005, and it included commercial business practices for the entire utilities privatization program and not just water and wastewater contracts.<sup>73</sup>

The report states DoD has worked closely with industry to ensure common business practices are incorporated when they make sense, and DoD is constantly coordinating with industry to evaluate potential improvements to the utilities privatization program.<sup>74</sup> DoD mentions it has made many other improvements to facilitate the use of common business practices. The previous waiver to CAS allows Contracting Officers to use industry-accepted cost accounting standards. The class deviation to FAR Part 31 allows interest and other financial costs as well as federal income taxes related to CIAC, which is an industry practice of the customer reimbursing utility companies for such taxes. Utility service contracts are also structured to facilitate third-party financing.<sup>75</sup>

## Government Accountability Office Report 05-433

In May 2005, the GAO published a report entitled, “Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization,” on the DoD utilities privatization program. The scope of the report was to determine the program’s status, whether the estimated savings from utilities privatization was reliable, how DoD implemented FMV, and whether other issues impacted the effectiveness of DoD’s execution of the program. The report listed a number of findings and presented eight recommendations.<sup>76</sup>

The first finding claimed DoD utilities privatization implementation has been slower than expected. Through FY 2004, DoD spent \$248 million in implementation costs, but only awarded 94 contracts out of 1,499 utility systems available for privatization. Three hundred and eleven systems have been exempted and 979 systems are in various stages of the solicitation process. As shown in Table I, DoD reached a privatization or exemption decision on 56 percent on all available utility systems by September 30, 2004. This was short of the goal of 65 percent set by the 2002 revised guidance. The Air Force was the only component to reach the goal. The Army reached a privatization or exemption decision on 51 percent of available systems. The report mentioned that it was unlikely that any service would reach the goal of 100 percent by September 30, 2005. The utilities privatization program is more complex and time consuming than was originally expected, i.e., guidance needed to be developed, and waivers needed to be obtained.<sup>77</sup>

GAO also found the Service’s savings estimates from utilities privatization questionable<sup>78</sup>—the implementation of FMV can result in higher contract costs;<sup>79</sup> Services were not performing adequate contract oversight;<sup>80</sup> and DoD’s approach to privatizing utilities differed from the typical private sector practices.<sup>81</sup>

**Table I. Percentage of Systems with Privatization or Exemption Decision<sup>82</sup>**

| Component                | Goal for Sep 30, 2004 | Actual as of Sep 30, 2004 | Sep 30, 2004 goal met? | Goal for Sep 30, 2005 | Actual as of Dec 31, 2004 |
|--------------------------|-----------------------|---------------------------|------------------------|-----------------------|---------------------------|
| Army                     | 65%                   | 51%                       | No                     | 100%                  | 52%                       |
| Navy                     | 65%                   | 47%                       | No                     | 100%                  | 49%                       |
| Air Force                | 65%                   | 70%                       | Yes                    | 100%                  | 71%                       |
| Defense Logistics Agency | 65%                   | 55%                       | No                     | 100%                  | 55%                       |
| <b>Total</b>             | <b>65%</b>            | <b>56%</b>                | <b>No</b>              | <b>100%</b>           | <b>57%</b>                |

The GAO made six recommendations for the DUSD(I&E) and two for the Secretary of Defense in regards to utilities privatization. The DUSD(I&E) non-concurred with all recommendations and stated GAO had limited knowledge of the utilities privatization program and their findings were outdated and not well founded.<sup>83</sup>

### **2005 DoD Supplemental Guidance**

After a further review of GAO Report 05-433, DoD reported to Congress that it generally agreed with GAO's recommendations and findings and decided to issue new supplemental guidance on November 2, 2005.<sup>84</sup> As a response to the GAO report, DoD outlined a plan of action. This supplemental guidance provided further details on the necessary actions, and satisfied many of GAO's recommendations.<sup>85</sup>

The first part of the supplemental guidance is aimed at the Defense Components in reference to program oversight, economic analyses, cost/benefit analysis reports, and proper procurement procedures.<sup>86</sup> The last part of the supplemental guidance is directed at contracting agencies in reference to developing pre- and post-award procurement procedures, developing a training program, establishing FMV, the concepts of asset purchase price recovery, and the transfer of contract administration.<sup>87</sup>

### **National Defense Authorization Act for Fiscal Year 2006**

The FY 2006 NDAA, signed into law on January 6, 2006, made a number of changes and clarifications to the utilities privatization legislation of Title 10 USC Section 2688. First, the economic analyses must include *margins of error* in the estimates. This helped minimize any underestimation of the utility company's costs under privatization as well as any overestimation of continued Government cost of ownership. Second, Congress reinstated the 21-day waiting period after submitting an economic analysis before being able to convey the system. This replaced the quarterly report and went back to the original 21-day waiting period guidance as before November 2003 or a 14-day waiting period if the economic analysis is submitted electronically. The third change eliminated the requirement that the Government must receive FMV for conveyance of the utility system. The word *must* was replaced with *may*. Fourth, the maximum length of a utilities service privatization contract was reduced from 50 to 10 years; however, the

Secretary or his designee may authorize a contract longer than 10 years, but not to exceed 50 years, if the contract for longer term will be more cost effective based upon the economic analysis. The last change limited the number of utility systems per year that may be conveyed in FY 2006 and FY 2007 to a maximum of 25 percent of the systems eligible for conveyance as of January 6, 2006.<sup>88</sup>

The FY 2006 NDAA also requested two reports. It directed the Secretary of Defense to submit a report not later than April 1, 2006, to the congressional defense committees describing the use of 10 USC Section 2688 to convey utility systems that must address eight stated topics. Second, it directed the Comptroller General to submit a report to the congressional defense committees no later than August 1, 2006, evaluating the changes DoD made in the utilities privatization program since May 2005, which was the date of the last GAO report.<sup>89</sup>

#### **2006 DoD Supplemental Guidance**

Due to the new changes in the FY 2006 NDAA in reference to Title 10 USC Section 2688, DoD published supplemental guidance on March 20, 2006, to assist the Service Departments in implementing these changes. The guidance reinstates the requirement to submit an economic analysis to Congress before contract award with margins of error considerations. The economic analysis and margins of error guidance is found in OMB Circular A-94, DoDI 7041.3, and DoD revised guidance of 2002. The guidance also states that Military Departments are no longer required to obtain FMV on the conveyance, so they have flexibility to seek consideration in another manner when the economic analysis demonstrates it is in the best interest of the Government. The Departments shall consider the time value of money, cost of borrowing, and the impact on CIAC taxes in making the decision. The guidance re-delegates the Military Secretaries the authority to determine the cost effectiveness of contracts longer than 10 years, but not to exceed 50 years. Since 1999, DoD has been entering into 50 year service contracts in connection with privatization of utility systems. Longer term contracts avoid certain potential cost and risks found with shorter contracts.<sup>90</sup>

## **DoD Report to Congress on Use of Utility System Conveyance Authority**

The DUSD(I&E) submitted a report in March 2006 that responded to Congress's requirement in the FY 2006 NDAA to provide a report on the use of 10 USC Section 2688 to convey utility systems.<sup>91</sup> A summary of this report is contained in Appendix 1.

## **Government Accountability Office Report 06-914**

On September 5, 2006, the GAO published a report to the congressional defense committees that satisfied the requirement listed in the FY 2006 NDAA to evaluate and report on the changes to the DoD utilities privatization program since May 2005.

In regards to the current status, GAO found the utilities privatization milestones slipping and implementation costs continuing to climb. As shown in Table II, no Department met the goal of having a privatization or exemption decision on 100 percent of the systems by September 30, 2005. The Army made decisions on 75 percent of their systems by the deadline. The privatization evaluation, solicitation, and contracting processes were more complex and time consuming than originally expected. September 2011 is now the revised estimated completion date.<sup>92</sup>

The Services have awarded contracts for a fraction of the 1,496 available utilities privatization systems. As of March 31, 2006, a total of 117 contracts have been awarded, in which 81 of them were awarded using the privatization authority as shown in Table III. Another 458 systems have exemptions, but this still leaves 921 of 1,496 systems either in or pending solicitation. The Army has awarded contracts for 80 of 320 available systems. The delays in the program have caused solicitations to be cancelled and have increased implementation costs.<sup>93</sup>

**Table II. Percentage of Systems with Privatization or Exemption Decision and Estimated Program Completion Date<sup>94</sup>**

| <b>Component</b>         | <b>Goal for September<br/>30, 2005</b> | <b>Actual as of March<br/>31, 2006</b> | <b>Estimated Completion<br/>Date</b> |
|--------------------------|----------------------------------------|----------------------------------------|--------------------------------------|
| Army                     | 100%                                   | 75%                                    | September 2011                       |
| Navy and Marine Corps    | 100%                                   | 78%                                    | October 2007                         |
| Air Force                | 100%                                   | 82%                                    | December 2008                        |
| Defense Logistics Agency | 100%                                   | 86%                                    | December 2007                        |

**Table III. Status of the Utility Privatization Program as of March 31, 2006<sup>95</sup>**

| <b>Component</b>         | <b>Systems available for privatization</b> | <b>Systems pending solicitation or under reassessment</b> | <b>Systems in solicitation</b> | <b>Systems exempted</b> | <b>Total contract awards</b> | <b>Contract awards using 10 USC 2688 authority</b> |
|--------------------------|--------------------------------------------|-----------------------------------------------------------|--------------------------------|-------------------------|------------------------------|----------------------------------------------------|
| Army                     | 320                                        | 0                                                         | 202                            | 38                      | 80                           | 70                                                 |
| Navy and Marine Corps    | 645                                        | 13                                                        | 411                            | 200                     | 21                           | 1                                                  |
| Air Force                | 502                                        | 4                                                         | 262                            | 220                     | 16                           | 10                                                 |
| Defense Logistics Agency | 29                                         | 0                                                         | 29                             | 0                       | 0                            | 0                                                  |
| <b>Total</b>             | <b>1,496</b>                               | <b>17</b>                                                 | <b>904</b>                     | <b>458</b>              | <b>117</b>                   | <b>81</b>                                          |

The report states the DoD changes to improve the utilities privatization implementation since May 2005 have addressed many areas, but have not eliminated all concerns.<sup>96</sup> There are still concerns about the reliability of economic analyses,<sup>97</sup> funding budgets,<sup>98</sup> contract administration and oversight,<sup>99</sup> utilities privatization contract cost growth,<sup>100</sup> unrealistic savings estimates,<sup>101</sup> and implementation of FMV.<sup>102</sup>

The GAO report recommended DUSD(I&E) take seven actions. DoD agreed with six of the seven recommendations and has taken action to resolve four of them. DoD is working to resolve the other three recommendations.<sup>103</sup> Appendix 2 provides a summary of these recommendations and DoD's actions.

## **CURRENT LAWS, GUIDANCE, AND STATUS**

The last GAO report in 2006 on the DoD utilities privatization program highlighted the changes and improvements to the program over the years. This section highlights recent changes or improvements to the utilities privatization program since this 2006 GAO report, lists the key organizations in the utilities privatization program, and describes the current utilities privatization status.

### **National Defense Authorization Act for Fiscal Year 2009**

The FY 2009 NDAA updated 10 USC Section 2688 on October 14, 2008, to clarify how to handle utility infrastructure constructed after the conveyance of a utility system. This new language allows Services to convey additional utility infrastructure to the current utilities privatization contractor provided the additional utility infrastructure was constructed or installed after the date of the original conveyed utility system, cannot operate without being part of the original conveyed utility system, and was planned and

coordinated with the current utilities privatization contractor. The Services must receive an amount equal to the FMV of the additional utility system as consideration.<sup>104</sup>

### **Utilities Privatization Program Oversight**

The utilities privatization program is managed by organizations at the DoD and Service Component levels. At the DoD level, the USD(AT&L) is responsible for the policy and procedures for utilities privatization. The DUSD(I&E) is responsible for the implementation and execution of the DoD utilities privatization program. The DESC is tasked with helping the Military Departments execute the utilities privatization program with expert advice and execution support. The DUSD(I&E) chairs a Utilities Privatization Working Group consisting of members from DUSD(I&E), DESC, and Service Components that meet at least one to two times per month.<sup>105</sup>

At the Army level, the utilities privatization program is managed by the Assistant Chief of Staff for Installation Management (ACSIM). The ACSIM is responsible for the implementation, execution, and budgeting for the program. The Assistant Secretary of the Army (Installations and Environment) (ASA(I&E)) is responsible for the Army policy and procedures for utilities privatization. The Installation Management Command (IMCOM) provides the technical and engineering support to the Army utilities privatization program, both at the headquarters level and at each installation. The Mission and Installation Contracting Command (MICC) within the Army Contracting Command (ACC) provides contract management and implementation support for utilities privatization. DESC has been awarding most of the initial utilities privatization contracts; however, the MICC local contracting offices at each installation are normally required to pick up the contract management and administration duties for the utilities privatization contracts affecting their installations. The ACSIM office chairs an Army utilities privatization teleconference that occurs at least one or two times a month. This teleconference is represented by members from ACSIM, ASA(I&E), DESC, IMCOM, MICC, and the Office of the Judge Adjutant General (OTJAG).

### **Defense Energy Support Center**

Since the early beginnings of DoD utilities privatization, DESC has been involved in awarding contracts and providing other expertise. Today, DESC is responsible for

awarding all utilities privatization contracts for the Army, Air Force, and Defense Logistics Agency. In addition to the utilities privatization contracting support, DESC also provides post award management support and program management support in setting and tracking milestones. DESC also provides engineering support by developing the technical section of the RFPs, evaluating on source selection evaluation boards, and conducting life-cycle cost analyses in the economic analyses.<sup>106</sup>

Some of DESC's initiatives to improve the utilities privatization program include standardizing the RFP templates and publishing the DoD Privatization Utilities Contract Administration Guide,<sup>107</sup> the DESC Utilities Privatization Price Redetermination Manual,<sup>108</sup> the Utilities Privatization Price Redetermination Step-by-Step Instructions,<sup>109</sup> and the Technical Evaluation Manual. They have also developed a web-based source selection evaluation tool and are personally involved when contracts are transferred from the Procuring Contracting Officer (PCO) to the Administration Contracting Officer (ACO).<sup>110</sup>

### **Army Initiative to Reduce Privatization Process Time**

The ASA(I&E) tackled a recurring problem in 2007 that has streamlined the privatization process. DESC's initial evaluations to privatize utility systems were taking as long as 48 to 60 months with an average of 37 months to complete. The Office of ASA(I&E) initiated a Lean Six Sigma (LSS) project to study the process, find the major delays, and make corrections. The team identified the major delay. Privatization issues remained hidden and not visible during the process. By identifying these issues as soon as they occurred, the process was shortened considerably. The implementation fix was to conduct weekly teleconferences with all stakeholders to address the issues as they arise. Originally, only 9 percent of all privatization decisions were completed within 18 months. Due to the outcome of the LSS initiative, the privatization process was reduced by 16 months. Now, at least 50 percent of all projects are completed within 18 months.<sup>111</sup> For FY 2008, ten of the expected 18 utilities privatization system decisions were made as scheduled.<sup>112</sup> In FY 2007 with the LSS streamlined process, 23 privatization projects were made with the same amount of funding that only produced 11 privatization decisions in FY 2006. By reducing the DESC support required to award the same number

of contracts, this LSS project created a cost avoidance of \$4.6 million in FY 2007 and an estimated \$16.4 million over the life of the privatization program.<sup>113</sup>

## Current Implementation Status

DoD has a total of 2,601 utility systems worth over \$50 billion, but only 1,480 of them are available for privatization. The 1,121 utility systems that are not available for privatization are either owned by others or privatized without 10 USC Section 2688 authority (most before privatization guidance was released in 1997). As of 31 December 2008, DoD had privatized 175 utility systems and exempted 624 others (Figure 1). 1,119 of the total 1,480 utility systems have reached a privatization decision (award or exempt) for a total percentage of 76 percent.<sup>114</sup> The overall DoD utilities privatization program will not be completed until 2017.<sup>115</sup>

The Army has a total of 355 utility systems available for privatization. Through the end of FY 2008, 142 of these are on contract;<sup>116</sup> 109 privatized using 10 USC Section 2688 authority and 33 that were awarded before 10 USC Section 2688 existed. Another 161 Army utility systems are exempt from privatization, either uneconomical or no interest (Figure 2).<sup>117</sup> Overall, 303 of 355 Army utility systems have reached a privatization decision for a percentage of 85 percent. Through FY 2008, the Army has a cost avoidance of \$1.655 billion.<sup>118</sup> DESC is continuing working to privatize the rest of the Army systems. The rest of these systems should be awarded by 2012; however, the

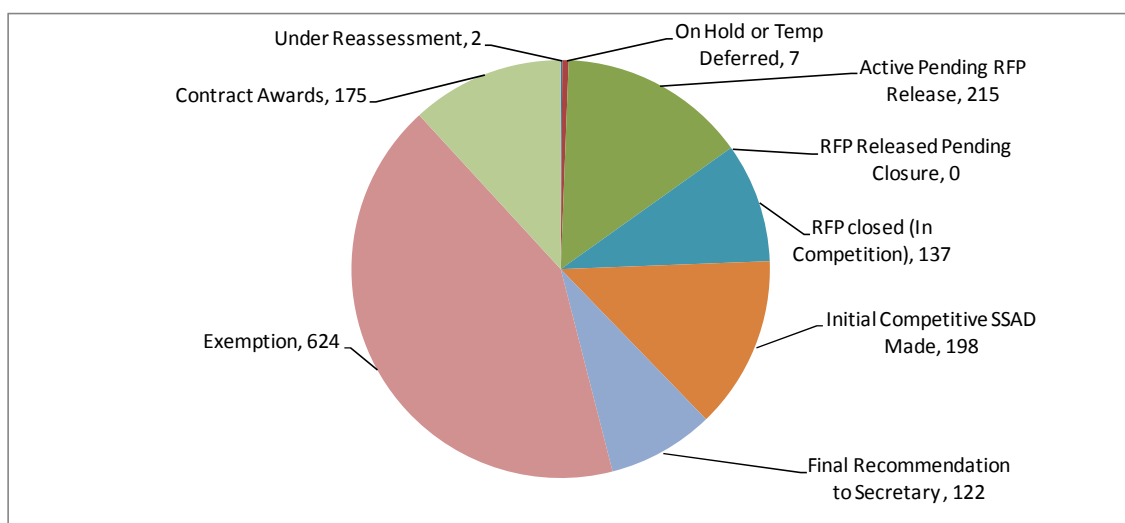
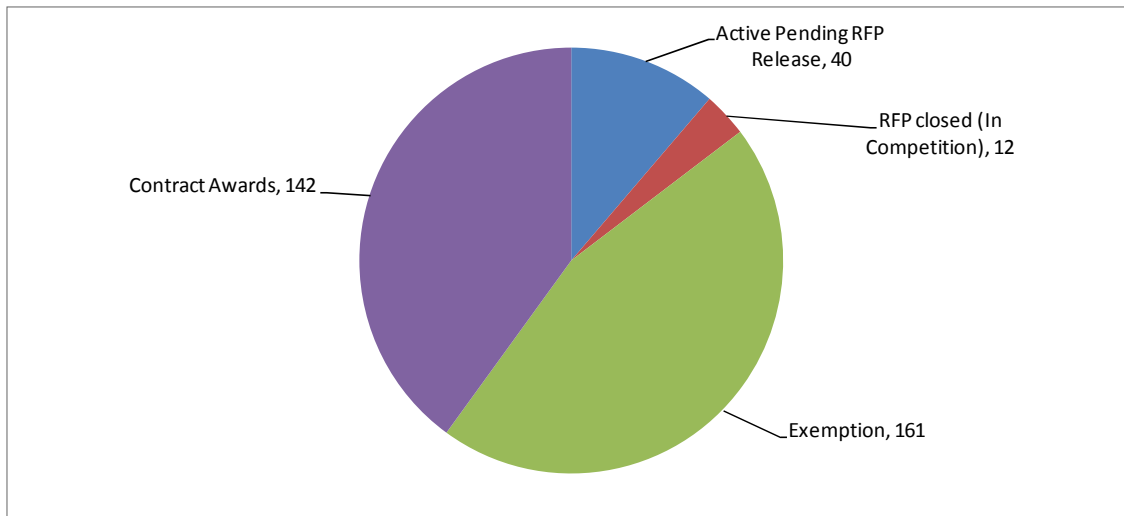


Figure 1. DoD utilities privatization status as of December 31, 2008.<sup>119</sup>



**Figure 2. Army utilities privatization status as of September 30, 2008.**<sup>120</sup>

Army is requesting 39 systems be reevaluated for privatization. The reevaluation phase will add another three years for a final Army completion date of 2015.<sup>121</sup>

## **CURRENT ISSUES AND RECOMMENDATIONS**

The DoD utilities privatization program has undergone numerous changes over the last decade, but the program is on the right circuit. It may have taken some long paths and has had to backtrack a few times, but all the directives, revised guidance, supplemental guidance, and other initiatives have kept the program down its path, even though the progress has been slower than expected. This does not mean the current program doesn't have issues. This section addresses three current Army utilities privatization issues, but most of these also apply to all Services.

### **Contribution in Aid of Construction versus Fair Market Value**

#### **Issue and Discussion**

The first utilities privatization issue existing today centers around the payment of a CIAC tax liability versus the FMV of a utility system being conveyed. The NDAA of FY 2006 eliminated the requirement that the Government must receive as consideration from the contractor an amount equal to the FMV of the conveying utility system. The word *must* was replaced by the word *may*, which now gives the Army and other Services

more flexibility in determining the best price for the initial transfer of the utility system, in order to minimize the long-term costs.<sup>122</sup>

This flexibility now causes a tradeoff with CIAC. Any purchase of a Government utility system at less than FMV may be considered as a *contribution in aid of construction* to the contractor. The difference between the price the contractor paid for the system and the FMV determined by the Internal Revenue Service (IRS) is considered taxable income and subject to federal income taxes, which is referred as the CIAC tax. The CIAC tax is applied to the same year in which the contribution was received, meaning the same year the system was conveyed to the contractor. The FAR 31 Deviation permits the contractor's CIAC tax to be treated as an allowable cost to the Government.<sup>123</sup> The normal industry practice is for the customer to reimburse the utility company of any taxes related to CIAC.<sup>124</sup> This CIAC tax liability may apply when the initial utility system is purchased and when there are additional conveyances due to new construction or expansions of the system.

Due to the contractor being allowed to recover its interest related to the purchase price of a system or other capital investment costs over the life of the utilities privatization contract, the Army would normally try to sell the system to the contractor at a price less than FMV to reduce the overall long-term cost to the Government. If the contractor has to borrow less money, then there is less interest (return of investment) that the Army must repay to the contractor. This thought is more complicated when one considers the effect of CIAC taxes. As the purchase price is reduced, the CIAC tax liability increases.

Let's explore three possible options to determine the best scenario that will minimize the costs to the Government. The first option is when the contractor pays FMV for the utility system being conveyed, and the second option is when the DoD (e.g., the Army) conveys the system to the contractor for one dollar, which is less than FMV.

In Option #1, the contractor pays the Army \$10 million for the initial sale of the utility systems, which is the FMV of the system. Let's assume a 10 percent depreciation rate of the system value so the contract length of the pay-back is 10 years. The contractor's interest rate or rate of return on his capital investment is 6 percent. The Army

pays the contractor in ten annual payments, which are calculated using a simple amortization schedule formula.<sup>125</sup>

**Table IV. Utility System Conveyance Options**

| Options                 | DoD           |                |                | Contractor      |              |              |
|-------------------------|---------------|----------------|----------------|-----------------|--------------|--------------|
|                         | Year 0        | Year 1-10      | Total          | Year 0          | Year 1-10    | Total        |
| 1) FMV (\$10M sale)     | \$ 10,000,000 | \$ (1,358,680) | \$ (3,586,796) | \$ (10,000,000) | \$ 1,358,680 | \$ 3,586,796 |
| 2) Not FMV (\$1 sale)   | \$ 1          | \$ (475,538)   | \$ (4,755,378) | \$ (3,500,001)  | \$ 475,538   | \$ 1,255,379 |
| 3) Not FMV, waived CIAC | \$ 1          | \$ (0.14)      | \$ (0.36)      | \$ (1)          | \$ 0.14      | \$ 0.36      |

| Options                 | IRS          |           |              | Govt Total    |                |                |
|-------------------------|--------------|-----------|--------------|---------------|----------------|----------------|
|                         | Year 0       | Year 1-10 | Total        | Year 0        | Year 1-10      | Total          |
| 1) FMV (\$10M sale)     | \$ -         | \$ -      | \$ -         | \$ 10,000,000 | \$ (1,358,680) | \$ (3,586,796) |
| 2) Not FMV (\$1 sale)   | \$ 3,500,000 | \$ -      | \$ 3,500,000 | \$ 3,500,001  | \$ (475,538)   | \$ (1,255,379) |
| 3) Not FMV, waived CIAC | \$ -         | \$ -      | \$ -         | \$ 1          | \$ (0.14)      | \$ (0.36)      |

Table IV shows DoD (the Army) receiving \$10,000,000 from the contractor up-front in Year 0 and then paying the contractor an annual payment of \$1,358,680 for ten years (Year 1-10). The overall long-term cost to the Army is \$3,586,796, which is the contractor's return on investment on the initial \$10,000,000. Since the system was sold at FMV, there is no CIAC tax liability, so the IRS block in the table is blank. The Government Total block is the sum of the DoD and IRS costs.

Option #2 shows the contractor purchasing the utility system for \$1, which is below the FMV of \$10 million. All of the other conditions remain the same as in Option #1, except that the contractor now incurs a CIAC tax that must be paid to the IRS. The income tax rate is assumed to be 35 percent for this example. In Table IV, the contractor must pay \$3,500,000 in taxes to the IRS in Year 0 in addition to the \$1 to the Army for the sale price. In order for the contractor to recover its investment, it will need to charge the Army \$475,538 per year over a ten year period. In this example, the long-term cost to the Army is \$4,755,378; however, the long-term cost to the Government (DoD plus IRS) is only \$1,255,379.

Determining the best long-term value between Option #1 and Option #2 depends on one's point of view. If one is looking at the best option for the Army, then the Army would choose to sell the system at FMV, since this has a long-term cost of \$3,586,798 vice \$4,755,378 if the system is sold at \$1. If one looks at the overall Government benefit, the best option is to sell the system for \$1. Here, if one takes into account the IRS

benefit from the CIAC taxes, the Government long-term cost is only \$1,255,379 as compared to \$3,586,798 if the system was sold at FMV.

Even though incurring a CIAC tax liability appears to reduce the overall cost to the Government, it is really just a revolving fund. DoD receives a specific budget amount for utilities privatization each year from Congress. Part of this money is paid to the utility contractors to pay their CIAC tax liabilities. The contractor then takes this money and pays their taxes back to the IRS, where it returns to the Government coffers. There is no net benefit here, and in reality it is a net loss to the DoD, since it has to pay the contractor's tax liability instead of using it for other requirements.

Option #3 in Table IV assumes a law is passed that waives the CIAC tax liability for any utility contractor that has a contract with the Government. The utility system is sold to the Army for \$1 as in Option #2, but now the contractor is not required to pay income tax on the CIAC. The contractor's only cost in Year 0 is \$1, and it will only need to charge the Army \$0.14 a year to recover this \$1 over a ten-year period. Here the overall cost to the Army, as well as to the Government, is only \$0.36. Option #3 is now the best long-term value for the Army and Government.

The DESC RFP template contains a paragraph in Section H that talks about the CIAC tax liability. It states that the contractor must know the IRS rules on how FMV is established for tax purposes and its CIAC tax liability. The last sentence states, "The Government will have no liability for nor will it pay any CIAC tax for which the Contractor is liable, or may become liable because of the Contractor's performance under this contract."<sup>126</sup> This statement's interpretation is different from its intent. The intent is to tell the contractor that the Government will not be responsible to repay him for any errors he may commit while calculating his CIAC tax liability. The interpretation seems to suggest that the Government will *never* repay a contractor's CIAC tax liability. This statement needs to be clarified to acknowledge that *sometimes* it is in the Government's best interest to reimburse the contractor for its CIAC tax liability.

The FY 2009 NDAA added a new subsection (j) to 10 USC Section 2688 in reference to the conveyance of any newly constructed utility infrastructure after the original system was conveyed. The last of the four conditions to allow this infrastructure conveyance to the original privatization contractor states, "the military department

receives as consideration an amount equal to the fair market value of the utility infrastructure determined in the same manner as the consideration the Secretary could require under subsection (c) for a conveyance under subsection (a).”<sup>127</sup> This implies the additional infrastructure must be conveyed at FMV and is inconsistent with the changes in FY 2006 NDAA that changed the word *must* to *may* to allow flexibility on the initial conveyance. Even though this subsection (j) refers to the consideration amount determined in the same manner as in subsection (c), which states *may* be equal to FMV, it is actually referring to *how* the consideration amount shall be determined (i.e., in the form of a lump-sum payment or a reduction in the utility service charges). To clarify this confusion, 10 USC Section 2688(j) should be clarified to state *may receive* to explicitly allow this flexibility.

### **Recommendation**

To reduce the long-term costs to the Government in utilities privatization, Congress should change the IRS tax code to exempt a company from any CIAC tax liabilities that may have occurred through a privatization contract with the US Government. The less CIAC taxes the contractor pays, the less the long-term costs are to the DoD and Government, and the greater benefit to the Government. Also, DESC should clarify its CIAC tax liability statement in Section H of the RFP, so it does not give the impression that the Government will not allow reimbursement of a contractor’s tax liability. Last, for consistency purposes, Congress needs to clarify 10 USC Section 2688(j) to state it *may* receive the FMV as consideration instead of implying it *must* when conveying additional utility system infrastructure after initial conveyance.

## **Post Award Utilities Privatization Contract Administration**

### **Issue and Discussion**

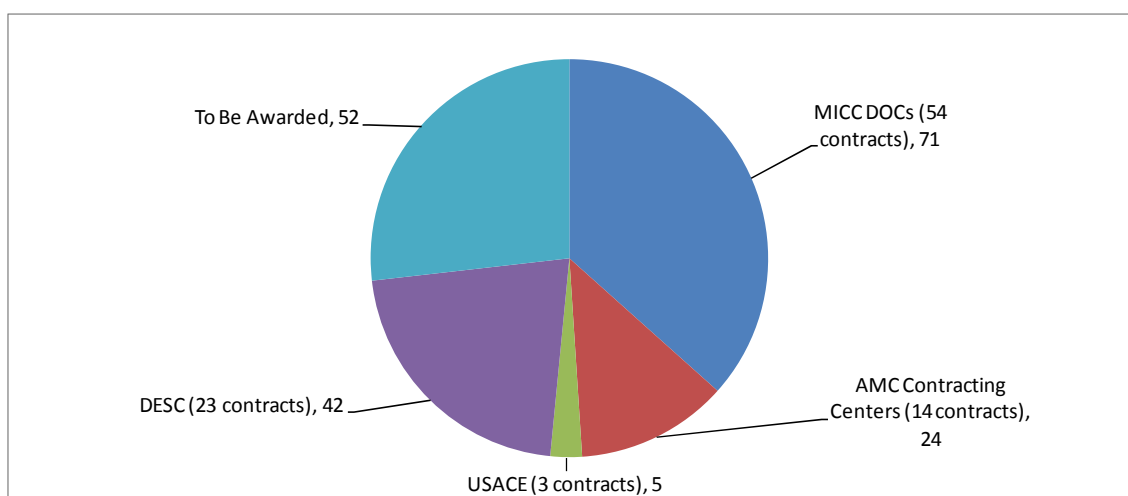
As more utility systems are privatized and contracts are awarded each year, the post-award contract administration workload continues to grow. Post-award contract administration for utilities privatization contracts is arguably the biggest utilities privatization issue for the Army today. A utilities privatization contract is very workload

intensive that closely resembles a utilities service contract, but is more complex due to the privatization and ownership features.

Back in 2004, GAO was concerned about the limited guidance on contract administration for utilities privatization contracts, but this is not a huge concern today.<sup>128</sup> DoD has published updated guidance stressing the importance of contract administration. DESC also published the DoD Privatization Utilities Contract Administration Guide, a Price Redetermination Manual, and Price Redetermination Step by Step Instructions.<sup>129</sup> DESC has also standardized the RFP, so each contract looks very similar in structure. Guidance is no longer the issue. Now, implementation and execution of contract administration is the key.

A utilities privatization contract by nature requires a substantial amount of continuous contract administration; however, the contract administration workload is usually the heaviest during the first five years of a utilities privatization contract. The initial transition period is important to get the contract off on the right foot. Also depending on the status of the utility system, there may be many renewals, replacements, and system deficiency corrections needed to bring the system up to full compliance, health, and safety.<sup>130</sup>

Currently as shown in Figure 3, the Army has 142 utility systems privatized in over 90 contracts. The administration work is currently being split among a number of organizations. The Army's MICC is currently managing 71 systems through 54 contracts. The Army Materiel Command's (AMC's) contracting centers are managing 24 systems



**Figure 3. Army utility systems privatization contract administration status.**<sup>131</sup>

through 14 contracts. These contracting centers are part of the Army Contracting Command (ACC), just like MICC. The US Army Corps of Engineers (USACE) is managing five systems with three contracts, and DESC has kept administration of 42 systems on 23 contracts. Each organization is managing these contracts differently in the area of contract management philosophy and effectiveness.<sup>132</sup>

The Army needs to establish a standardized contract administration approach for utilities privatization. The three options are to have DESC centrally administer all contracts, to have each contract be administered locally at the installation Director of Contracting (DOC) office, or to have a hybrid approach of the contract administration function be at the installation DOC office with a Center of Excellence established at the MICC headquarters that can provide expertise and assistance as needed.

The first option of having DESC centrally administer all contracts has the advantage that they are already knowledgeable with each contract, since they are the procuring contracting office for all Army contracts. They have a lot of expertise; however, it would be better to have this expertise within the Army. DESC is being reimbursed by the Army for their support, but the funding could go away or DESC could be redirected to perform other critical missions within DoD. The Army has more control over the process if the people performing contract administration are Army employees. Providing ACO duties at locations that may be thousands of miles away from where the work is being conducted can have challenges. Today, DESC has to have the local contracting offices perform some of its contract administration functions. There are also difficulties with building the relationship with the local installation customers as well as the contractor from afar.

The second option of having each contract be administered locally at each DOC also has advantages and disadvantages. The advantage is that the ACO is located on the installation where the privatization contract is working and is in close proximity to the Contracting Officer Representative (COR), technical monitors, and other installation leaders that are part of the overall contract management team. Communication is easier when everything is local; therefore, the contract administration process is more efficient. The disadvantage is that the local DOC typically does not have much expertise in

managing these complex contracts. They are also very busy with hundreds of other types of contracting actions, and may not have enough resources to perform adequate contract administration.

The third option is a hybrid approach. The ACO will be at the installation DOC with a Center of Excellence established at the MICC headquarters providing expertise and assistance as needed. This approach combines the advantages of having the ACO close to the contractor and customer, as well as being able to get expert advice and assistance as needed. This also keeps all the contract administration duties within the Army. This third option is the preferred option, but it will not be successful without the proper resources at installation, DOC, and MICC headquarters levels.

First of all, the number and complexity of contract actions have increased significantly over the last fifteen years. From 1992 to 2006, the number of DoD contract actions increased 654 percent with a 331 percent increase in obligation dollars. Service contracts also increased over 72 percent in DoD from 1996 to 2005. The contracts increased at the same time the contracting workforce shrank from 10,000 to 5,500 from 1990 to present.<sup>133</sup> In 2007, the Gansler Commission recommended the contracting workforce increase by 1,400 personnel, a 25 percent increase.<sup>134</sup> Some of this contracting personnel increase needs to be applied to managing utilities privatization contracts. The installation DOC Table of Distribution and Allowances (TDA) needs to document and authorize the personnel increases. The MICC Utilities Privatization Center of Excellence needs to develop a training program to help the inexperienced DOC personnel learn about utilities privatization. The on-line Defense Acquisition University (DAU) course is a start, but the training needs to go beyond that and be directly related to the specific utilities contracts at that location.

The MICC headquarters needs to be staffed with individuals with various expertise that can assist the DOCs in the more complicated utilities privatization tasks. Currently, the Enterprise and Installation Operations division of the MICC is staffing this Center of Excellence. It will initially consist of a senior contracting officer, two contract specialists, one cost/price analyst, two quality assurance personnel, and one engineer. This staff will provide utilities privatization contracting support by assisting and

conducting price redeterminations, audits, cost/price analyses, and technical or legal reviews.<sup>135</sup>

The MICC Center of Excellence will also be responsible for developing the Army utilities privatization policies and guidance. DESC has some good guidance that can be tailored, but the Air Force has some excellent utilities privatization policy that may be considered best practices. The Air Force has a very good and detailed Utilities Privatization Policy and Guidance Playbook that was updated in September 2008.<sup>136</sup> They also have a Utilities Privatization Post-Award Management Guide<sup>137</sup> and comprehensive transfer briefing.<sup>138</sup> The MICC Center of Excellence can use these policies and guidance and tailor them to fit the Army's approach.

Since DESC is the PCO awarding the privatization contracts, DESC will need to transfer the contract administration functions to the local DOCs at some point after award. When is the best time for this transfer? Some people believe the transfer should not occur until after the first price redetermination is completed, which is usually about three years after award, but this may be too late for the DOCs. Some of the events that happen at the beginning of a utilities privatization contract, such as transition and initial replacements and upgrades, are very helpful in understanding the details of the contract. The DOCs should assume ACO functions shortly after award, potentially at the end of the transition phase. The DOCs will need initial assistance from DESC and possibly the MICC Center of Excellence to ensure a good transfer and effective contract management. To assist in this transfer, the DOCs need to be involved in the contract pre-award process by assisting the customer in developing its requirements and system inventories or participating on the source selection evaluation team. The key is to have good communications with DESC.

To establish a standardized utilities privatization contract administration approach, all contracts should be managed under one organization, which is the MICC. In addition to the contracts DESC awards in the future, DESC needs to transfer contract administration functions to the local DOCs for the contracts that they awarded in the past and are still administering. The USACE also needs to transfer contract administration of their utilities privatization contracts to the installation DOCs. On AMC installations, the AMC contracting centers provides the local installation contracting functions; however,

organizationally they do not fall under the MICC. The AMC Commander needs to task the MICC to provide these AMC contracting centers with utilities privatization oversight and guidance, so a single Center of Excellence has responsibility to support all contracts.

Effective contract management is based on a team approach. In addition to the ACO and contract specialist, the installation must provide a COR and technical monitors that take the time to provide proper oversight and monitors the contractors performance. Many times, due to privatization, the installation Director of Public Works (DPW) has downsized their engineering staff to the bare bones and forgotten about the contract oversight responsibilities.

### **Recommendation**

The ACSIM or ASA(I&E) should appoint the Army's MICC as the contracting organization responsible for utilities privatization contract administration. The MICC shall push the ACO duties to the installation DOCs with assistance from the MICC headquarters from a Utilities Privatization Center of Excellence. The installation DOCs and installation DPWs need to be staffed to provide the proper level of contract administration. Also, the MICC Center of Excellence needs to be properly staffed with a wealth of experience and develop policy and guidance as well as a training program. The transfer of contract administration from DESC to the DOC should occur shortly after contract award at the end of the transition period. DECS and DOCs should be working together and sharing information well before contract award, so the transfer process can go smoothly.

The Army leadership agrees to standardize the utilities privatization contract administration through a single agency, but the timing of this transition plan is critical. On October 24, 2008, after a couple meetings between ACSIM, ACC, and DESC, the Deputy Director of ACSIM decided to defer the decision to a single agency to handle the administration of all utilities privatization contracts. ACC stated they do not currently have sufficient personnel and funding to carry out this utilities privatization administration mission effectively for all contracts. The ACSIM, ACC, and DESC leadership will meet again in the summer of 2010 before the next funding cycle to reassess this situation and develop a transition plan. In the meantime, the administration

of utilities privatization contracts will remain as is with new contracts being awarded staying with the PCO.<sup>139</sup> Every year that goes by without a decision, increases the likelihood that utilities privatization contract administration is not being performed well and issues are not being resolved effectively. The Army leadership needs to find a way to make this decision and execute the transition plan sooner than later.

## **Utilities Privatization Contract Term**

### **Issue and Discussion**

The last utilities privatization issue centers on the length of the contract. Before the FY 2000 NDAA extended the maximum length of a utilities services contract to fifty years, all the early utilities privatization contracts were awarded for a maximum of ten years.<sup>140</sup> The Army has almost 40 systems on at least 16 privatization contracts that were awarded with a contract term of ten years.<sup>141</sup> All these are getting ready to expire within the next couple of years. One example is the Fort Hamilton privatization contract of the electric, natural gas, water, and wastewater systems awarded in December 1999 for a period of ten years.<sup>142</sup>

To be cost effective, the length of a contract must be long enough for contractors to amortize the initial cost of the system plus have enough time needed to amortize the cost of capital upgrades to the system. Ten years is not long enough to do this, since the life span of a system can be as long as 50 to 75 years and most capital improvements are amortized over 30 years. Ten-year contracts are almost never as cost effective as 50-year contracts due to the substantial costs to purchase the system and the amortization of the FMV, recovery of replacements/renewals, and major capital upgrades.<sup>143</sup> The end of a ten-year contract can have a complicated buy-back procedure if the utility system costs have not been fully amortized, and the new follow-on contractor could have an even more complicated refinancing structure.<sup>144</sup>

In addition to the limited benefit of a ten-year utilities privatization contract, the workload and time involved to recompetete these 40 systems are great. It is taking DESC an average of two years to award a privatization contract. This work would also have to be accomplished at the same time DESC is trying to award other systems that have yet to

be privatized for the Army, Air Force, and DLA. This could push back the Army privatization schedule for at least another two years.

The FY 2006 NDAA changed the contract term of a utilities service contract back to ten years; however, it allowed the Secretary of Defense to authorize a contract up to 50 years if “a contract for a longer term will be cost effective.” The economic analysis must include the explanation of the need for a longer term contract and the comparison of costs between a ten-year and longer term contract.<sup>145</sup> For these 40 Army systems, we should be able to extend these contracts for another 40 years (to reach the maximum of 50 years), provided the economic analyses are cost effective.<sup>146</sup>

### **Recommendation**

Congress should pass legislation or at least grant a waiver to 10 USC Section 2688 that allows contracts that were awarded using privatization procedures before the change in FY 2000 NDAA to be extended up to an additional 40 years. The extensions should be allowed non-competitively if the new economic analyses show the extensions are cost effective.

## **CONCLUSION**

The original DoD utilities privatization concept of transferring non-essential military tasks to private entities that are more efficient, thus saving money or avoiding future costs, is sound; however, the process and implementation of privatizing utility systems is more complicated and time consuming than expected. DRID #9 in late 1997 directed DoD to privatize all utility systems unless there were economic or security reasons.

Early in the utilities privatization process, DoD and all the Services, including the Army, were not on the right circuit. Initially, more guidance was necessary to keep everyone on the right circuit. This guidance came in the form of DRID #49, revised program guidance in 2002, and changes to the privatization legislation (10 USC Section 2688) in the NDAAs of FY 2000, 2001, 2002, and 2004. FAR waivers and deviations were also needed to keep the program moving forward. The initial privatization goals were too optimistic. The goals were revised numerous times from January 2000 to

September 2003 to September 2005 to September 2011 to now a more deliberate tracking process.

From 2004 to 2006, GAO and Congress became more involved in the status of the privatization process. Two GAO reports were critical of the DoD utilities privatization process and provided recommendations. Congress requested a couple reports from DoD about various aspects of the program, and the NDAA of FY 2006 made some significant legislative changes. DoD responded to this assistance and their recommendations by producing supplemental guidance in 2005 and 2006.

Over the last couple of years, the utilities privatization program has gotten on the right circuit. DoD has tweaked the program slightly and is updating its guidance once more to close out the final recommendations of the 2006 GAO report. The policy and guidance at the Service level has also been improved. DESC, Air Force, Army, and others now have standardized policies and implementation guidance. Even though the DoD and Army utilities privatization program may be on the right circuit today, this does not mean it is on the straightest or quickest circuit. There are still issues to overcome to keep the program on track.

The Army's largest issue now and in the future is the contract management, oversight, and administration of utilities privatization contracts. The Army needs to make a decision to have MICC, part of the ACC, take the lead on utilities privatization contract administration. The MICC headquarters needs to develop a Utilities Privatization Center of Excellence to assist the local installation DOCs. DESC, as the PCO, and the installation DOCs need to communicate throughout the pre award process to ease the transition from pre award to post award contract administration. Management of the utilities privatization program is a team process, and everyone must do their part.

The second issue involves the complicated relationship between FMV and CIAC. The Army must understand the long-term cost effects in the conveyance of utility systems. Congress needs to streamline and create efficiencies in the utilities privatization process by exempting companies having Government contracts from incurring the revolving CIAC taxes.

The last issue also involves creating efficiencies. Congress should allow utilities privatization contracts, especially the earlier ones that were awarded with a ten year

length, to be extended up to the maximum term of 50 years if the economic analyses are cost effective to the Government.

Though the Army's 100 percent privatization decision timeline is now extended to 2012 and even further as earlier systems that were deemed uneconomical are reevaluated, the Army and DoD have a good implementation plan in place that is far more robust than five years ago. With constant improvements and efficiencies, the utilities privatization program will continue on the right circuit.



## **APPENDIX 1**

### **DoD Report to Congress on Use of Utility System Conveyance Authority**

This is a summary of DoD's report submitted to Congress in March 2006. This report responded to Congress's requirement in the FY 2006 NDAA to provide a report on the use of 10 USC Section 2688 to convey utility systems. DoD's report answered each of Congress's eight requirements.<sup>147</sup>

First, DoD discussed the methodology on how the Military Departments conduct economic analyses of the proposed utility system conveyances. All Services use UPEAST except the Air Force, which uses their own Certified Economic Analysis model, to develop the economic analyses. The Government *should costs* are developed based upon operations and maintenance (O&M), general and administration, initial upgrade, and recapitalization costs. Bidders also provide detailed technical and cost proposals identifying their costs as well. UPEAST then computes the Net Present Values that are used to compare and determine if the long-term Government costs will be reduced. The final economic analyses are certified before the final SSA decision.<sup>148</sup>

Second, DoD listed the steps taken to ensure reliability of completed economic analysis, including post-conveyance reviews of actual costs and savings. Each Department conducts independent economic analysis reviews as a collaborate effort by installation personnel, regional support officials, contracting offices, component headquarters, and independent contractor reviewers. UPEAST is used for consistency and reliability. The US Army Audit Agency and Army Headquarters have conducted more than ten utility system post conveyance reviews, which are usually conducted two to three years after contract award or one year after the first price redetermination.<sup>149</sup>

Next, DoD provided comments on the cost and savings from each utility system conveyance to date. DoD stated that historically military installations did not have adequate funding to fully upgrade and maintain reliable utility systems. Utilities privatization is not a cost savings initiative of DoD, but rather a cost avoidance, which is the difference between what the Government should be spending and what the privatized costs are.<sup>150</sup> DoD estimates over \$1 billion in total cost avoidance when all utility system privatizations are complete.<sup>151</sup>

Fourth, DoD discussed the feasibility of obtaining a FMV of the utility system being privatized as consideration. The recovery of the purchase price may exceed the actual purchase price, due to the contractor recovering their capital outlays plus interest on loans, return on investment, and CIAC taxes. Paying a high FMV may not be in the Government's best interest. With the NDAA FY 2006 changes, Military Departments now have more flexibility in finding the best interest for the Government.<sup>152</sup>

Next, DoD discussed the effects of permanent conveyance of ownership and the ability to renegotiate contracts. Permanent conveyance of a system may limit the Government's options during renegotiation; however, the contractor may also have limited options especially when the system cannot be used by any other customers besides the Government. Fixed price contracts with perspective price redeterminations are the most appropriate type of privatized utility services contract that will mitigate cost risks to both parties. Contracts may include a clause that provides an option for the Government to purchase the system back at the end of the contract period for added Government leverage.<sup>153</sup>

Sixth, DoD compared the effect of permanent conveyed ownership verses contracts that included reversion at the end of the contract period. To date, only one offeror has submitted a proposal including a provision for reversion that made an otherwise unfavorable economic analysis favorable. Reversion allows the contractor to treat the system as a capital lease, but it may lead to additional costs and risks at the end of the contract period. DoD's preferred method is permanent conveyance unless it is not economical.<sup>154</sup>

Next, DoD discussed the efforts to oversee the implementation and ensure adequacy of utility services after conveyance. DoD ensures oversight of the utilities privatization program "through a combination of written guidance, bi-weekly meetings with DoD Component privatization leads & key personnel, information sharing sessions with field implanters, training sessions, goal setting, progress tracking, and addressing issues that impede the privatization program." DESC has helped with post-award contract administration through the development of a contract administration guide and price redetermination manual.<sup>155</sup>

Last, DoD discussed the effect utility systems conveyance has on operating budgets. DoD is privatizing utility systems to reduce non-core missions and to improve the overall reliability and safety of systems. This improved reliability requires additional funding, even with increased efficiencies by contractors. The Services plan for these increased costs and adjust O&M budgets based upon anticipated requirements.<sup>156</sup>



## **APPENDIX 2**

### **Government Accountability Office Report 06-914**

### **Recommendations and DoD's Actions**

GAO Report 06-914 recommended DUSD(I&E) take seven actions. DoD agreed with six of the seven recommendations and has taken action to resolve many of them.<sup>157</sup>

GAO's first recommendation is for DoD to require independent reviewers report to decision makers the thoroughness of each economic analysis including assumptions.<sup>158</sup> DoD resolved this issue by emphasizing the importance of independent reviews at a December 2006 Utilities Privatization Working Group and stated further lessons learned would be shared with the group.<sup>159</sup>

The second recommendation requests DoD issue guidance to the Services requiring post conveyance reviews.<sup>160</sup> This action is in the process of being completed. As of March 2009, DoD is staffing a draft updated version of DoDI 4170.11, Installation Energy Management, for final review and comments. This updated instruction requires DoD Components to conduct post conveyance reviews and provides details on what needs to be included in the reviews.<sup>161</sup>

GAO's third recommendation asks DoD to address the utilities privatization program potential funding shortfall by looking at DoD's and Services' funding and priority needs.<sup>162</sup> DoD has solutions in place satisfying this recommendation. DoD reiterated to the Defense Departments in a December 2006 Utilities Privatization Working Group meeting the requirement to properly consider and plan for utilities privatization funds. Also in March 2007, DoD awarded a contract to gather and update data, including funding data, for the privatization program. This will help DoD continually monitor the progress of the program.<sup>163</sup>

For the next recommendation, GAO requests DoD ensure utilities privatization contracts awarded prior to November 2005 have adequate resources and surveillance plans.<sup>164</sup> DoD fulfilled this recommendation by stressing the importance of written contract administration and surveillance plans in performing oversight of utilities privatization contracts at the December 2006 Utilities Privatization Working Group meeting.<sup>165</sup> Also, in 2007, the Defense Acquisition University developed a new on-line

Utilities Privatization Contract Administration training module. The course takes about two hours to complete and is a very good introduction to DoD utilities privatization.<sup>166</sup>

The fifth GAO recommendation asks DoD to place additional emphasis on monitoring contract cost growth as utilities privatization contracts undergo price redeterminations and other negotiated changes.<sup>167</sup> DoD is in the process of satisfying this recommendation by including the importance of monitoring contract cost growth through post conveyance reviews in the new version of DoDI 4170.11.<sup>168</sup> The need to control cost growth risks and the importance of monitoring cost growth will also be addressed when the newly revised Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management, is released in 2009.<sup>169</sup>

For the sixth recommendation, GAO desires DoD require the economic analyses include the systems' current annual costs and actual expected annual costs if the system is not privatized in addition to the *should costs*.<sup>170</sup> DoD disagreed with GAO's recommendation of providing the actual expected annual costs. DoD stated that in most cases, installations have not projected the recapitalization costs needed to properly maintain the utility systems in the future if they are not privatized. DoD should only look at the *should costs*, which are the costs that DoD should be spending, versus the actual costs DoD is or will be spending to properly maintain the utility systems.<sup>171</sup> This author agrees with DoD's rationale and disagrees with GAO's recommendation. If the economic analyses are compared correctly, the assumptions must be the same for the contractor as well as Government. One assumption is that a utility system will be properly maintained, operated, and upgraded to ensure compliance with all federal and state environmental and safety laws. Many DoD utility systems were not being kept up to standard and had violated laws; therefore, taking the actual expected annual costs are not equivalent to the contractors' proposed costs that keep the systems up to standards. The *should costs*, which has the same assumptions, are the proper costs for comparison purposes.

The final GAO recommendation requires DoD to issue guidance explaining how the Services should incorporate margins of error in economic analyses.<sup>172</sup> DoD is in the process of implementing this recommendation. DoDI 4170.11 will provide detailed guidance on what elements need to be included in margins of error analyses.<sup>173</sup>

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- <sup>44</sup> Hamre, "Department of Defense Reform Initiative Directive #49 - Privatizing Utility Systems," 1-2.
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- <sup>56</sup> Wolfowitz, 1.

<sup>57</sup> Wolfowitz, 1.

<sup>58</sup> Wolfowitz, 1.

<sup>59</sup> Wolfowitz, 1.

<sup>60</sup> Wolfowitz, Attachment, 1-2.

<sup>61</sup> Wolfowitz, Attachment, 3-4.

The purchaser of the utility system is obligated to provide reliable utility service to the installation. Military Departments may include a reversionary clauses (meaning the title for the system reverts back to the Government) only in extreme cases of non-performance such as abandonment or bankruptcy.

<sup>62</sup> Wolfowitz, Attachment, 5-8.

<sup>63</sup> Wolfowitz, Attachment, 8-9.

The period of the economic analysis shall be at least as long as the anticipated utility services contract, which is up to 50 years.

<sup>64</sup> Wolfowitz, Attachment, 10-12.

<sup>65</sup> "National Defense Authorization Act for Fiscal Year 2004," *Public Law 108-136, Section 1031(a)(32) (codified as amended at 10 U.S.C. Section 2688(e))* (Washington, DC, November 24, 2003), Section 1031.

<sup>66</sup> Raymond F. DuBois, "Exemption Certifications under the DoD Utilities Privatization Program," *Office of the Under Secretary of Defense, Deputy Under Secretary of Defense (Installations and Environment) Memorandum* (Washington, DC, August 5, 2004), 1 and Attachment 1.

The original revised guidance states a system may be certified as uneconomical to privatize when (1) there is a demonstrated lack of market interest, or (2) the cost to the Government outweigh the benefits. In regards to lack of market interest, if no proposals are received, then the local utility provider should be contacted to provide a proposal or feedback. The feedback should be helpful to determine any existing barriers to utilities privatization. An attempt should be made to resolve these barriers before proceeding with an exemptions certification. If there is market interest and offers are received, but the economic analyses fail to show that the Government benefits outweigh the costs, then all potential offerors should be contacted to determine potential barriers preventing privatization. The Services should determine the feasibility to resolve these barriers and attempt to get an economical proposal before certifying an exemption.

<sup>67</sup> Deidre A. Lee "Utilities Privatization - Contract Pricing," *Office of the Under Secretary of Defense, Defense Procurement and Acquisition Policy Memorandum*, (Washington, DC, October 20, 2004), 1 and Enclosure 1.

The memorandum lists various types of contracts and pricing methods (firm fixed price, fixed price with economic price adjustment, fixed price with prospective price redetermination, and cost reimbursable) under FAR Part 16 and describes how the applicability of CAS and FAR Part 31, Certain Price Principles and Procedures, are affected by each type of contract. The

instructions also require Contracting Officers use a structured approach, such as the weighted guidelines method, in determining profit.

<sup>68</sup> Lee, Enclosure 2, Attachment A.

<sup>69</sup> Shay D. Assad, "Utilities Privatization - Class Deviation from FAR Part 31," *Office of the Under Secretary of Defense, Defense Procurement and Acquisition Policy Memorandum*, (Washington, DC, August 13, 2007), 1.

<sup>70</sup> Lee, Enclosure 2, Attachment B.

<sup>71</sup> Committee on Appropriations, US House of Representatives, "Report Accompanying House Resolution 2559, Military Construction Appropriations Bill for FY2004," US House of Representatives Report 108-173 (Washington, DC, June 2003), 9-10..

<sup>72</sup> Michael W. Wynne, "Letter to Duncan Hunter, Chairman of Committee on Armed Services, US House of Representatives," *The Under Secretary of Defense Letter* (Washington, DC, February 18, 2004), 1.

<sup>73</sup> Under Secretary of Defense (Acquisition, Technology, and Logistics), "Implementation of Common Commercial Business Practices in the Department of Defense Utilities Privatization Program," Report to Congress, Response to House Report 108-173 Military Construction Appropriations Bill (Washington, DC, February 2005), i.

<sup>74</sup> Under Secretary of Defense (Acquisition, Technology, and Logistics), "Implementation of Common Commercial Business Practices in the Department of Defense Utilities Privatization Program," 16.

The DoD report addressed the House concerns on amortization, depreciation based upon Internal Revenue Service (IRS) guidelines, and reversion. Amortization refers to the recovery of all capital costs over a shorter time period than depreciation. If a particular solicitation results in a business case supporting amortization, then an additional FAR Part 31 deviation and CAS waiver would be considered. Depreciation based upon IRS guidelines is allowed unless the contractor's existing depreciation practices are inconsistent with IRS guidelines. Reversion is not preferred; however, when a permanent conveyance will not benefit the Government long-term, the Department Secretary may consider the system for conveyance at a lesser state.

<sup>75</sup> Under Secretary of Defense (Acquisition, Technology, and Logistics), "Implementation of Common Commercial Business Practices in the Department of Defense Utilities Privatization Program," i-ii.

<sup>76</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 1-2.

<sup>77</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 11-14.

The latest delay in the DoD utilities privatization implementation process occurred in late 2004 when contract awards were put on hold for several months awaiting legal guidance on an issue related to contract termination liability.

<sup>78</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 17-22.

The second finding found the Services' savings estimates from utilities privatization are questionable. The economic analyses give an unrealistic impression of reduced costs. The Government costs after privatization are typically increased from historical levels to pay for the enhanced utility services, capital upgrades, contractor investment costs, and other improvements. The Army's average cost increase per system was \$1.3 million per year. The Services are concerned that other installation functions might suffer if the installation operations and maintenance (O&M) budget is not increased to cover the increased utilities privatization costs. GAO stated the "should costs" are questionable because they are made with assumptions. The Government "actual costs" are lower since many improvements would be delayed several years due to the lack of funding in the Services' budgets. Based upon the time value of money, the value of improvements made in the future is less in today's dollars. In addition, the Components do not conduct independent reviews to check for accuracy and compliance in the economic analyses.

<sup>79</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 25-26.

The third finding is that the implementation of the FMV can result in higher contract costs. Contractors normally recover their costs paid for conveyance of the system in the associated utility services contracts. These initial investment costs are paid back over time plus a reasonable return on investment. The Army stated determining FMV is subjective and determined in part by the amounts contractors are willing to pay. GAO states that in some cases, the overall Government costs are lower when the utility system is conveyed at less than FMV.

<sup>80</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 29-31.

The fourth GAO finding states Services have not issued specific contract administration guidance, so adequate contract oversight is a concern. Some installations did not have contract surveillance plans. Many contracting offices do not have sufficient people due to the increasing contract workload without an increase in employee authorizations.

<sup>81</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 32-33.

The last finding is that GAO believes the approach to privatizing utilities differ from the typical private sector practices, which privatize O&M, but retain ownership. Without ownership, the Government is at a disadvantage negotiating changes and renewals with a contractor that is a 50 year monopoly.

<sup>82</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 13.

<sup>83</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 36-37.

The six recommendations for DUSD(I&E) asked DUSD(I&E) to (1) revise the guidance for preparing economic analyses so the analyses compare the cost of a proposed privatization contract with actual planned costs versus "should costs", (2) require an independent review of economic analyses, (3) consider increased utility costs under privatization as the Services prepare their O&M

budgets, (4) place greater scrutiny on the implementation of FMV, (5) issue program guidance emphasizing the importance of contract oversight, and (6) reassess if permanent conveyance should be the preferred approach. The two recommendations for the Secretary of Defense requested the Secretary of Defense to ensure installation O&M budgets are adjusted to reflect increased costs due to privatization and issue specific utilities privatization contract administration guidance.

<sup>84</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 2.

<sup>85</sup> Kenneth J. Krieg, "Supplemental Guidance for the Utilities Privatization Program," *The Under Secretary of Defense Memorandum* (Washington, DC, November 2, 2005), 1.

<sup>86</sup> Krieg, "Supplemental Guidance for the Utilities Privatization Program," *The Under Secretary of Defense Memorandum* (Washington, DC, November 2, 2005), 2-5.

The first part of the supplemental guidance is aimed at the Defense Components. In program oversight, the guidance states DoD Components must take immediate steps to ensure the remaining utility systems are evaluated in a timely and efficient manner. DoD Components shall continue to monitor and track progress of all system evaluations and provide quarterly updates to DUSD(I&E). By February 14, 2006, DoD Components shall provide a Cost/Benefit Analysis Report on its utilities privatization program showing the total cost avoidance identified in the economic analyses. The description and justification on each exemption and the barriers to privatization shall be included in the Cost/Benefit Analysis Report. DoD Components shall consider and plan for increased cost from utility service contracts. DoD Components shall ensure independent reviews are conducted on all economic analyses, and carefully consider the impacts on the validity of economic analyses arising from delays in contract awards. The Components must also follow proper procurement procedures, as listed in 13 steps in the guidance.

<sup>87</sup> Krieg, "Supplemental Guidance for the Utilities Privatization Program," *The Under Secretary of Defense Memorandum* (Washington, DC, November 2, 2005), 5-7.

The last part of the supplemental guidance is directed at contracting agencies. It directs DESC, as DoD's contracting center of excellence for utilities privatization, to develop specific pre-award and post-award procurement procedures to effectively manage utility service contracts. DESC shall also communicate with the Defense Acquisition University (DAU) to develop a training program for all contracting officers. Additional guidance directs all contracting agencies to adequately train and prepare their personnel in administration of utilities services contracts using the guidelines for post-award contract management. Each procuring contracting agency shall publish a standard operating procedure for establishing FMV in accordance with 10 USC Section 2688. Contracting Officers shall be knowledgeable of and proficient in the use of the FAR deviations and CAS waivers. All Contracting Officers shall be trained on the concepts of asset purchase price recovery and understand how contractors recover their costs, such as interest, CIAC taxes, etc. The Procuring Contracting Officer (PCO) shall transfer contract administration to the Administration Contracting Officer (ACO) in accordance with FAR 42.202 through an on-site transfer briefing with the Government and contractor personnel. All ACOs shall coordinate with PCOs to ensure all documentation, procedures, and personnel are in place for good post-award management.

<sup>88</sup> "National Defense Authorization Act for Fiscal Year 2006," *Public Law 109-163, Section 2823 (codified as amended at 10 U.S.C. Section 2688)* (Washington, DC, January 6, 2006), Section 2823.

<sup>89</sup> "National Defense Authorization Act for Fiscal Year 2006," Section 2823.

<sup>90</sup> Kenneth J. Krieg, "Supplemental Guidance for the Utilities Privatization Program," *The Under Secretary of Defense Memorandum* (Washington, DC, March 20, 2006), 1-2.

<sup>91</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 1.

<sup>92</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 1-12.

Additional delays in the utilities privatization program implementation occurred when DoD suspended the program from October 2005 to March 2006 to review concerns in the May 2005 GAO and changes to the FY06 NDAA, and then to develop and issue supplemental guidance.

<sup>93</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 12-14.

DESC had to cancel solicitations on 42 Army systems in May 2006 since these open solicitations were one to four years old and the utility system conditions have changes. These systems will be resolicited within the next couple years. The implementation costs were originally estimated at \$285 million through 2006; however, since the program is now extended to at least 2011, an additional \$954 million will need to be programmed. The Army's piece of this increase is \$212 million.

<sup>94</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 12.

<sup>95</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 12.

<sup>96</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 14-15.

<sup>97</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 16-18.

DoD has taken steps to improve the reliability of economic analyses by requiring independent reviews and post conveyance reviews, but there are implementation issues. The GAO found questionable items not identified by the independent reviews in all ten of the economic analyses they reviewed. Also, DoD has not issued guidance to require Services to perform post conveyance reviews.

<sup>98</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 18-20.

Issues also remain on funding. In the November 2005 guidance, DoD told Components to consider the increases of utilities privatization in their budgets. In view of competing needs and budget priorities, Services may not be able to obtain the additional \$453 million more than currently programmed through 2011.

<sup>99</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 21-23.

DoD made changes to improve contract administration and oversight, but some concerns remain. DESC has issued pre and post-award procedures and began a training program. Implementation of this guidance is the key and will take time. The GAO found concerns about the quality and frequency of contractor oversight, since no additional resources were provided at four locations and two of these locations did not have a documented Quality Assurance Surveillance Plan.

<sup>100</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 23-27.

Containing utilities privatization cost growth may become a challenge as contracts go through the periodic price adjustments and installations negotiate pricing for additional capital improvements and changes. Although DoD has policies, guidance, and procedures to help control contract costs, cost growth may continue to be a significant concern. GAO reviewed only two utility system contracts that have gone through a negotiated price redetermination, since the first determination does not occur until after the third year of a contract. In these two contracts, the service costs rose 41 and 92 percent after price redetermination.

<sup>101</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 27-31.

GAO claims DoD has not made changes to provide more realistic savings estimates from utilities privatization and continues to provide an unrealistic sense of savings. DoD states the 81 contracts awarded so far shows a \$650 million cost avoidance (Note the term "cost avoidance" verses "cost savings"). The Army has awarded 70 contracts with a \$510 million cost avoidance. GAO claims the cost growth in contracts reduces or eliminates the cost avoidance. Also, DoD has only issued general, but not detailed, guidance on the use of margins of error.

<sup>102</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 31-32.

GAO stated the DoD changes to implement the modifications to Title 10 USC Section 2688 on FMV have raised some concerns. On a positive note, GAO reviewed ten contracts and found the FMV paid by the contractor matched the amount recovered, so there were no increased costs to the Government.

<sup>103</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 33-34.

<sup>104</sup> "Duncan Hunter National Defense Authorization Act for Fiscal Year 2009," *Public Law 110-417, Section 2813 (codified as amended at 10 U.S.C. Section 2688)* (Washington, DC, October 14, 2008), Section 2813.

<sup>105</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 26.

<sup>106</sup> Kevin McCulla, "Utility Privatization: Support to Department of Defense Installations, Defense Energy Support Center," *Utility Privatization Links & Downloads by GDS Associates, Inc.* August 2005, <http://www.gdsassociates.com/up/links.htm> (accessed January 21, 2009), 3.

<sup>107</sup> Defense Energy Support Center, "DoD Privatized Utilities Contract Administration Guide" (Defense Logistics Agency, April 22, 2005), 1.

<sup>108</sup> Defense Energy Support Center, "DoD Privatized Utilities Contract Administration Guide," Appendix C-1.

<sup>109</sup> Defense Energy Support Center, "Utilities Privatization Price Redetermination Step-by-Step Instructions," *Defense Energy Support Center Utility Privatization Resources and Helpful Links*, February 23, 2007, <https://www.desc.dla.mil/DCM/DCMPage.asp?pageid=601> (accessed February 21, 2009), 1.

<sup>110</sup> McCulla, 4.

<sup>111</sup> Gail Fowler, *Improve and Control Tollgates, Utilities Privatization LSS Project* (Crystal City, VA, September 28, 2007), 2-3.

<sup>112</sup> Eric Moore, interview by Frederick A. Puthoff. *Deputy Director, Energy Enterprise Office, Defense Energy Support Center* (November 19, 2008).

<sup>113</sup> Fowler, 7.

<sup>114</sup> Deputy Under Secretary of Defense (Installations & Environment), *DoD Utilities Privatization Status Chart and Spreadsheet* (Washington, DC, January 2009), 1.

<sup>115</sup> Defense Energy Support Center, *DESC Utilities Privatization Schedule: Air Force & Army & DLA* (Fort Belvoir, VA, November 2008), 2.

<sup>116</sup> Curt Wexel, *Army Utility Privatization (UP) Program Costs, Benefits, & Requirements Model*, Briefing to USMA Requirements Model for UP In-Progress Review (October 2, 2008), 4.

<sup>117</sup> Randy Shed, "Army Utility Systems Database" (Washington, DC: Assistant Secretary of the Army (Installations and Environment), February 28, 2009).

<sup>118</sup> Wexel, *Army Utility Privatization (UP) Program Costs, Benefits, & Requirements Model*, 5.

<sup>119</sup> Deputy Under Secretary of Defense (Installations & Environment), *DoD Utilities Privatization Status Chart and Spreadsheet*, 1.

<sup>120</sup> Shed, "Army Utility Systems Database."

<sup>121</sup> Craig College, "Utilities Privatization (UP) Program Schedule for FY09-15," *Office of the Assistant Chief of Staff for Installation Management Memorandum* (Washington, DC, December 3, 2008), Encl.

<sup>122</sup> "National Defense Authorization Act for Fiscal Year 2006," Section 2823.

<sup>123</sup> Lee, Enclosure 2, Attachment A.

<sup>124</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 28.

<sup>125</sup> Jon Wittwer, "Amortization Calculation Formula." *Vertex42, The Guide to Excel in Everything*, November 11, 2008, <http://www.vertex42.com/ExcelArticles/amortization-calculation.html> (accessed March 14, 2009), 1.

Formula to calculate a simple amortization annual payment schedule:

$$A = P \frac{r(1+r)^n}{(1+r)^n - 1}$$

where A = annual payment, P = initial principal, r = interest rate, and n = number of payments.

<sup>126</sup> Defense Energy Support Center, Utilities Privatization, "US Army Garrison - West Point, NY, Water and Wastewater Utility Systems," *Request for Proposal (RFP) SP0600-08-R-0802* (Fort Belvoir, VA, July 1, 2008), 43.

<sup>127</sup> "Duncan Hunter National Defense Authorization Act for Fiscal Year 2009," Section 2813.

<sup>128</sup> US Government Accountability Office, "Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization," 29.

<sup>129</sup> Defense Energy Support Center, "DoD Privatized Utilities Contract Administration Guide," 1.

<sup>130</sup> HQ AFCESA/CENU UP PMO, "Air Force Utilities Privatization Program Post-Award Management Guide," *Air Force Utilities Privatization Program on Air Force Knowledge Now Website*, October 2008, <https://www.dmy.af.mil/afknprod/DocView.asp?DocID=3798356> (accessed January 19, 2009), 2.

<sup>131</sup> Gary D. Busby, interview by Frederick A. Puthoff, *Utility Privatization and ESPC Team Lead, Mission and Installation Contracting Command, Army Contracting Command* (February 27, 2009).

<sup>132</sup> Busby, interview by Frederick A. Puthoff.

<sup>133</sup> "Urgent Reform Required: Army Expeditionary Contracting," Report of the "Commission on Army Acquisition and Program Management in Expeditionary Operations" (also known as the Gansler Commission Report) (Washington, DC, October 2007), 26-30.

<sup>134</sup> "Urgent Reform Required: Army Expeditionary Contracting," 47.

<sup>135</sup> Busby, interview by Frederick A. Puthoff.

<sup>136</sup> AFCESA/CENU UP Project Management Office, "US Air Force Utilities Privatization Policy and Guidance Playbook," *Air Force Utilities Privatization Program on Air Force Knowledge Now Website*, September 2008, <https://www.dmy.af.mil/afknprod/ASPs/docman/DOCMain.asp?Tab=0&FolderID=OO-EN-CE-33-22&Filter=OO-EN-CE-33> (accessed February 14, 2009), 1.

<sup>137</sup> HQ AFCESA/CENU UP PMO, 1.

<sup>138</sup> Headquarters, US Air Force, "Utilities Privatization Contract Transfer Briefing," *Utility Privatization Links & Downloads by GDS Associates, Inc.* April 2006, <http://www.gdsassociates.com/up/links.htm> (accessed January 24, 2009), 1.

<sup>139</sup> Curt Wexel, "EXSUM, Utility Privatization Post-Award Decision Deferred" (Washington, DC: Assistant Chief of Staff for Installation Management, October 24, 2008), 1.

- <sup>140</sup> "National Defense Authorization Act for Fiscal Year 2000," Section 2812.
- <sup>141</sup> Busby, interview by Frederick A. Puthoff.
- <sup>142</sup> "Fort Hamilton Contract Sets Model for Utility Privatization," *Army Logistician* 32, no. 2 (Mar/Apr 2000), 58.
- <sup>143</sup> Michael McGinley, "Utility Privatization Forum Report and Status Update from the DESC 2006 Worldwide Energy Conference," *GDS Associates*. April 24, 2006, <http://www.gdsassociates.com/up/reports/DESC%20Utility%20Privatization%20Status%20Update%20-%204-24-06.pdf> (accessed January 19, 2009), 2.
- <sup>144</sup> McGinley, "Utility Privatization Forum Report and Status Update from the DESC 2006 Worldwide Energy Conference," Tab B, 2.
- <sup>145</sup> "National Defense Authorization Act for Fiscal Year 2006," Section 2823.
- <sup>146</sup> Robert Kittel, interview by Frederick A. Puthoff, *US Army Office of The Judge Adjutant General* (February 23, 2009).
- <sup>147</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 1.
- <sup>148</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 6-11.
- <sup>149</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 12-15.
- <sup>150</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 16.
- <sup>151</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 3.
- <sup>152</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 19-21.
- <sup>153</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 22-23.
- <sup>154</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 24-25.
- <sup>155</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 26-31.
- <sup>156</sup> Deputy Under Secretary of Defense (Installations & Environment), "Use of Utility System Conveyance Authority and Temporary Suspension of Authority Pending Report," 32-33.
- <sup>157</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 33-34.

<sup>158</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 33.

<sup>159</sup> US Government Accountability Office, "Recommendations for GAO-06-914, Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," *GAO Website*, 2008, <http://www.gao.gov/products/GAO-06-914#recommendations> (accessed March 11, 2009), 2.

<sup>160</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 33.

<sup>161</sup> Under Secretary of Defense (Acquisition, Technology, and Logistics), "Draft Department of Defense Instruction 4170.11, Installation Energy Management," (Washington, DC, February 2009), 17.

<sup>162</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 34.

<sup>163</sup> US Government Accountability Office, "Recommendations for GAO-06-914, Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 2.

<sup>164</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 34.

<sup>165</sup> US Government Accountability Office, "Recommendations for GAO-06-914, Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 2.

<sup>166</sup> Defense Acquisition University, "CLC120 Utilities Privatization Contract Administration," *Defense Acquisition University Continuing Learning Modules*, <https://learn.dau.mil/html/clc/Clc1.jsp?cl=> (accessed January 24, 2009), 1.

<sup>167</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 34.

<sup>168</sup> Under Secretary of Defense (Acquisition, Technology, and Logistics), "Draft Department of Defense Instruction 4170.11, Installation Energy Management," 17.

<sup>169</sup> US Government Accountability Office, "Recommendations for GAO-06-914, Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 2.

<sup>170</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 34.

<sup>171</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 42-43.

<sup>172</sup> US Government Accountability Office, "Defense Infrastructure: Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain," 34.

<sup>173</sup> Under Secretary of Defense (Acquisition, Technology, and Logistics), "Draft Department of Defense Instruction 4170.11, Installation Energy Management," 17.