

## ABSTRACT

Title of Document: UTILITIES PRIVATIZATION IN THE  
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The Department of Defense (DOD) has roughly 2,600 electric, water, wastewater, and natural gas utility systems valued at an estimated \$50 billion. In 1997, DOD decided that privatization was the preferred method for attaining industry standards for utility systems. The Air Force has ownership of 502 of these utility systems. This thesis will provide a background of DOD policy, the Air Force's Utilities Privatization Program and Guidance, findings made by the Government Accountability Office (GAO) and actions taken to remedy those findings, and discuss several issues that personnel involved in utilities privatization should understand and remain vigilant of during the privatization process and throughout the life of the contracts.

UTILITIES PRIVATIZATION IN THE UNITED STATES AIR FORCE

By

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## Preface

This author approached the subject of Utilities Privatization with many preconceptions. The divestiture by the DOD of such a vast number of utility systems creates many fears for Civil Engineers. The repair, upgrade, and operation and maintenance (O&M) of utility systems has been a major part of the Civil Engineer career field since its inception. Privatizing any portion of a military career field's duties creates many fears among its personnel: the loss of control in the event of a utility disruption, the loss of manpower associated with a utility system, the loss of some funding associated with the utility system, and the underlying fear that the contract may sour, burdening taxpayers with excessive utility service costs.

Through research, evaluation, and interviews, this author became aware of a robust Air Force Utilities Privatization program. The intent of this thesis is to provide any Air Force personnel involved in the privatization of utilities, with a single document to reference for details concerning DOD policy, Air Force Utilities Privatization Program and Guidance, issues raised by the GAO, a discussion related to some of these key concerns, as well as issues to keep in mind during project preparation and after award.

## Foreword

Chapter 1 is intended to provide a brief overview of DOD guidance. For any reader that is already familiar with the policy pertaining to utilities privatization, chapter 1 may be skipped and/or only referenced when necessary.

Chapter 2 is intended to describe the Air Force's Program and Guidance concerning utilities privatization. The guidance has been reordered and abridged from the official document, however the verbiage was left largely unchanged and items were only abridged and reordered when the author felt necessary in order to aid any reader, not just Air Force or DOD personnel, in becoming familiar with the guidance of this Service. Some of the information contained in the guidance, such as key roles and responsibilities, was removed from this thesis. The interested reader may obtain more thorough details by referring to the original document.

Chapter 3 condenses and summarizes two reports performed by the GAO, one in May of 2005 and one in September of 2006. The reports highlight concerns raised by the GAO and actions either taken, or not taken, by DOD to concerning these issues.

Chapter 4 provides discussion concerning key utilities privatization issues that this author believes personnel involved in Utilities Privatization should understand concerning the program.

Chapter 5 is intended to provide a quick-reference timeline with key milestones in the utilities privatization process to date.

Many of the reference materials used for this thesis used different acronyms (e.g. DOD or DoD as the short form for Department of Defense). The author standardized the use of acronyms throughout this document in order to aid its readability.

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## Chapter 1: Utilities Privatization Background and Policy

### *1. Department of Defense (DOD) Policy*

1.1. On 10 December 1997, the Deputy Secretary of Defense issued Department of Defense Reform Initiative (DRI) Number 9, directing the Military Departments to develop a plan for privatizing all utility systems (electric, water, waste water and natural gas) by January 1, 2000. The memorandum provided for two exceptions: any utility system which should not be privatized due to unique security reasons or when privatization is uneconomical. The Under Secretary of Defense for Acquisition & Technology was directed “to develop uniform criteria for the Military Departments to apply in determining whether a facility is exempt from privatization due to economic or security considerations.”<sup>1</sup>

1.2. One year later, on 23 December 1998, the Deputy Secretary of Defense issued DRI Number 49 to “establish program management and oversight responsibilities and provide guidance for performing economic analyses for proposed projects, exempting systems from the program, and using competitive procedures to conduct the program. The memorandum also stated that the objective was for DOD to get out of the business of owning, managing, and operating utility systems by privatizing them and that exceptions from privatization should be rare.”<sup>2</sup> Additionally, though the previous DRI did not specifically direct the privatization of steam, hot and

chilled water, and telecommunications, DRI Number 49 stated that it did not prohibit such privatization.

### 1.3. Conveyance Authority

#### 1.3.1. Section 2688 of Title 10, United States Code (10 U.S.C. § 2688) states

“The Secretary of a military department may convey a utility system, or part of a utility system, under the jurisdiction of the Secretary to a municipal, private, regional, district, or cooperative utility company or other entity. The conveyance may consist of all right, title, and interest of the United States in the utility system or such lesser estate as the Secretary considers appropriate to serve the interests of the United States.”

### 1.4. Definitions and Scope as per DRI Number 49

#### 1.4.1. A “Utility system” means any system for the generation and supply of electric power, for the treatment or supply of water, for the collection or treatment of wastewater, and for the supply of natural gas. For the purpose of this definition, supply shall include distribution. A utility system includes equipment, fixtures, structures, and other improvements utilized in connection with the systems described above, as well as the easements of rights-of-way associated with those systems. A utility system does not include any projects constructed or operated by the Army Corps of Engineers under its civil works authorities nor does it

include an interest in real property other than easement of right-of-way associated with the utility system.

1.4.2. The Military Departments are authorized to convey a utility system to any municipal, private, regional, district, or cooperative utility company or to any other entity under this authority in accordance with applicable state and local laws. In the case of overseas utility systems, privatization will comply with appropriate agreements and applicable host nation laws.

1.4.3. The privatization of utilities and utility systems is to be conducted at all installations, both in the United States and overseas, that have utility systems available to convey. All Active Duty, Reserve, and Guard installations, both major and minor, not currently designated for closure under the Base Realignment and Closure (BRAC) Act will be considered candidates for utility system privatization. BRAC closure constitutes privatization of the entire installation to include utility systems. All BRAC designated installation closures will be transferred/privatized in accordance with appropriate closure laws and agreements.

1.5. Exemptions from privatization as per DRI Number 49

1.5.1. A utility system is exempt when either the Secretary concerned or the Principal Staff Assistant for a Defense Agency certifies to the Under Secretary of Defense Acquisitions and Technology (USD (A&T)) that unique security reasons require that the United States own the system or it is deemed uneconomical.

1.5.2. “Unique security reasons” are situations in which:

1.5.2.1.Ownership of the utility system by a private utility or other entity would substantially impair the mission of the Department concerned; or

1.5.2.2.Ownership of the utility system by a private utility or other entity would compromise classified operations or property.

1.5.3. Privatization may be considered “uneconomical” only when:

1.5.3.1.There is a demonstrated lack of market interest, as indicated by a lack of response from any utility company or other responsive and responsible entity to an announcement of the intention to privatize; or

1.5.3.2.The long-term cost to the Department as a result of privatization would be greater than the long-term benefits; or

1.5.3.3.The long-term cost to the Department for utility services provided by the utility system concerned will not be reduced.

1.6. Competitive Procedures as per DRI Number 49

1.6.1. Competitive procedures will be used in conducting the privatization of utility systems. In advance of issuance of the solicitation, the Military Departments must determine whether there is market interest in acquiring the utility system. The Departments should synopsise in the

Federal Business Opportunities (FedBizOpps) and other available media. The synopsis shall indicate the Department is considering privatizing its utilities, state the type and location of those utilities, and request that interested parties communicate their intent to a specified point of contact (POC) within the Department concerned. The synopses' results will form the basis of the competition analysis necessary for the Department to determine the proper competition strategy.

1.6.2. If the installation resided in an area served by a franchised and regulated utility, that franchise holder shall not be considered the presumptive conveyee, nor shall another responsible and responsive utility or entity that expresses interest be excluded from competition. State law and regulatory policy should be considered when determining the form of competition for franchised and regulated utilities. Where state law and regulatory policy specifically prohibits competition, a sole-source negotiation may be pursued after evaluation of the response to the synopses. The Military Department, however, may not rely on the assertions of the franchised or regulated utility in this regard. Rather, it must make an independent legal finding that the franchised or regulated utility is the only entity authorized to own and operate the utility system to be privatized.

1.6.3. The competitive procedures must ensure that the utility services resulting from privatization are sufficient to support installation missions in a reliable and resource efficient manner.



1.6.4. Military Departments should consider how different regulatory environments might affect the determination of rate structures for any utility service contracts entered into beyond the end of the initial utility service contract. Special consideration should be given when contracting with a utility or other entity that is not subject to price regulation or that is price self-regulated. The non- or self-regulated environment may present considerable barriers to ensuring the strength of the Department's negotiation position for the follow-on service contract. The Department shall contract in a manner that will mitigate the risk it bears in subsequent contracts. Some risk mitigation methods to consider include: contractually establishing a regulatory scheme in the initial conveyance/service contract, retaining actual land ownership, and conveying a lesser estate as considered appropriate by the Secretary and as authorized by Section 2688.

1.6.5. The solicitation shall require that if the utility system under consideration for privatization will continue in operation after conveyance, the recipient shall take all actions necessary to ensure that the system complies with all applicable legal and regulatory requirements. If the utility system under consideration for privatization will instead be replaced, the new system must also comply with the above requirements.

1.6.6. The solicitation shall contain a provision plainly stating that the Department cannot guarantee that it will enter into a contract at the end

of the solicitation process. The provision must express that the success of the solicitation is contingent upon the ability to certify to Congress that the long-term economic benefit of the conveyance exceeds the long-term economic costs, and that the conveyance will reduce the long-term costs to the Department concerned for utility services provided.

1.6.7. The Military Departments shall conduct all utility privatizations consistent with all other applicable legal and regulatory requirements, including any environmental analysis requirements.

1.6.8. After determining that privatization is uneconomical or is precluded by security considerations, efforts should be made to award an Energy Savings Performance Contract (ESPC), to competitively source the operation of those systems, or pursue other cost savings measures.

## 1.7. Congressional Notification Requirements

1.7.1. Section 2688 of Title 10 requires that the Secretary concerned submit to the Defense Committees of Congress an analysis that demonstrates that the long-term economic benefit of the conveyance exceeds the long-term economic cost, and that the conveyance will reduce the long-term costs to the Department concerned for utility services provide by the subject utility system. The Secretary concerned shall not proceed with conveyance of the utility system until 21 days have elapsed after the committees receive the economic analysis.

1.7.1.1. The economic analysis must take into account the costs for operation, maintenance, and system improvements that

would be incurred by the Department if the systems were operated and maintained in accordance with accepted industry practice and all applicable legal and regulatory requirements. The direct proceeds (if any) from a conveyance and the future cost of utility services to be obtained if the conveyance is made must also be considered.

1.7.1.2. Methodological Assumptions and Parameters:

1.7.1.3. The basic parameters involved in the economic analysis, such as economic life and period of analysis, are those specified in DOD Instruction 7041.3. Other parameters shall also be included in the analysis, if necessary. All parameters should be clearly explained and justified.

1.7.1.4. For the purpose of the economic analysis, “long-term” refers to the economic life of the utility system under consideration for privatization. (Note: Economic life of the utility system under consideration for conveyance need not be the same as the life of the contract for utility service.)

1.7.1.5. Life-cycle cost analysis shall be treated / conducted as specified in OMB Circular A-94. Should a general inflation assumption be necessary, the inflation rate specified in section 7 of Circular A-94 is recommended.

This shall be the rate used in converting costs and benefits from real to nominal values, and vice versa. The discount factor utilized in the economic analysis shall be as described in section 8 of Circular A-94 and as specified in Appendix C of the circular. While the real discount rate is usually preferable, if future benefits and costs are given in nominal terms, then the nominal rate shall be used. Real and nominal values may not be combined in the same analysis.

1.7.1.6. Since the actual costs that the Department concerned incurs in operating and maintaining its utility systems may reflect inadequate maintenance and conditions, the economic analysis must include the costs that should be incurred if the systems were operated and maintained in accordance with all applicable legal and regulatory requirements. The object of this approach is to bring a degree of parity to the costs reflected in the proposals and the economic baseline survey developed by the Department.

## 1.8. Financial Management

1.8.1. Section 2688 of Title 10 requires the recipient utility or entity to pay fair market value, as determined by the Secretary concerned, for the utility system. This consideration for the conveyance may be accepted in

the form of a lump sum payment of a reduction in charges for utility services provided by the utility being conveyed to the military installation at which the system is located. The treatment of a lump sum payment received in consideration for the sale of a utility system should be handled in accordance with procedures described in the Financial Management Regulations (FMR).

1.8.2. If the Secretary concerned elects to receive consideration through a reduction in charge for utility services provide to the military installation, the time period for reduction in charges for services provided by the privatized utility shall not be longer than the life of the contract for utility services.

1.8.3. When structuring an arrangement for privatization of a utility system, the Secretary concerned may require additional terms and considerations as part of the sale of the utility system as he or she considers appropriate to protect the interest of the United States.

## Chapter 2: United States Air Force Policy and Guidance<sup>5</sup>

### 2. Overview

- 2.1. The Air Force Utilities Privatization Policy and Guidance, July 2005 revision familiarizes the reader with a brief overview of privatization. It states, privatization is the process by which the Air Force will transfer to a qualified entity, which may include companies that are not considered typical utility companies, ownership of the utility system, while at the same time contracting for the provision of quality utility services to all installation facilities. Once the Air Staff identifies utility systems eligible for privatization, the Installation / Wing Commander is responsible for executing appropriate privatization projects. The Major Command (MAJCOM) will assist and facilitate the privatization process and interact with the Air Force Energy Management Branch, Asset Management and Operations Division (AF/A7CAE) on policy issues and the Deputy General Counsel for Installations and Environment (SAF/GCN) on legal issues. Headquarters, Air Force Civil Engineer Support Agency (HQ AFCESA) will provide technical and contract support for performing the required analysis.

## 2.2. **Preliminary Screening Followed by a Three-Phase Process**

### 2.2.1. The Preliminary Screening Process

2.2.1.1. This process is performed for all programmed utility systems to determine which systems are exempt from privatization for readiness or unique security reasons. The Secretary of the Air Force (SECAF) makes exemption decisions.

### 2.2.2. The Project Plan and Feasibility Analysis Phase

2.2.2.1. This phase results in the Project Plan and Feasibility Analysis Report. This Feasibility Analysis Report includes a Preliminary Economic Analysis (EA) and determines whether responsive proposals for the purchase of the system are likely to be received.

### 2.2.3. The Comprehensive Analysis Phase

2.2.3.1. This phase results in a Draft Comprehensive Analysis Report and Draft Request for Proposal (RFP). The Comprehensive Analysis Report includes analyses on real estate, environmental, transition, and planning issues affecting privatization. This phase also determines appropriate terms and conditions to be factored into preparing the Draft RFP.

#### 2.2.4. The Final Feasibility, Approval, and Implementation Phase

2.2.4.1. This phase results in either a Privatization Approval Package or Privatization Non-Economic Package submitted for SECAF approval. The Privatization Approval Package is composed of various Comprehensive Analysis Report elements. The entire Comprehensive Analysis Report with the supporting analysis will not be submitted but must be available as back up and as the departure point for follow-on analyses if the recommended course of action is not approved or is modified during the review. Systems not selected for privatization because of lack of market interest or where costs exceed benefits will be documented in a Privatization Non-Economic Package.

### 2.3. **Goals**

2.3.1. The objective is to reduce long-term financial requirements to support utility systems, thereby making scarce funds available for mission-critical requirements, such as force modernization, and to permit Air Force leadership to focus on core competencies and the global mission to achieve air, space, and cyberspace superiority.

2.3.2. Several Air Force goals must be achieved and maintained throughout the privatization process. The Air Force's basic goal is to transfer ownership of utility systems to obtain better economies. The transfer of



utility system ownership and the responsibility to provide utility services must make good business sense and result in the Air Force purchase of utility services at a lower long-term cost. The privatized utility service must also be as reliable as the current Air Force system. The Air Force will not privatize under 10 U.S.C. § 2688 utilities systems that, in the view of the SECAF, are required for mission readiness.

2.3.3. The Air Force Utilities Privatization Policy and Guidance Manual does not address leasing or concessions, competitive sourcing (contracting out system operations and maintenance, or energy savings performance contracts (ESPCs) (projects executed under 42 U.S.C. § 8287, Shared Energy Savings, involving private sector capital for energy savings projects).

## 2.4. Divestiture Strategy

2.4.1. The utilities privatization process may result in different acquisition strategies. Approval of the divestiture strategy ultimately resides with the Source Selection Authority (SSA).

2.4.2. **Full and Open Competition:** 10 U.S.C. § 2688 provides that if more than one utility or entity expresses interest in a conveyance, the conveyance of the system shall be carried out through the use of competitive procedures. The sale of a utility system under 10 U.S.C. § 2688 is a disposal of personal property since normally, only the equipment making up the utility system is being disposed of. In specific instances where one is required, a right-of-way for the owner to gain

access to the system may accompany the bill of sale. It is not a sale of real estate. The Air Force will have to contract with the new owner to distribute the utility commodity. The resulting contract may address supplying the wholesale commodity itself, although this is not necessarily a requirement in every sale. It may be beneficial and necessary to combine the supplying of the commodity with the distribution service as in the case of water and wastewater systems. It may be beneficial to separate the two, as in the case of electric and gas systems, in order to take advantage of future deregulated markets. In either situation, there will be a sale of the utility system under 10 U.S.C. § 2688--a property disposal--and an acquisition of utility services under the Federal Acquisition Regulation (FAR). These are two distinct actions, but they are necessarily connected since they must be done at the same time and, presumably, in the same direction. Title 10 U.S.C. § 2302 and 2304 provides the rules governing when and how competitive procedures are to be used. If disposal action and acquisition are handled as a single transaction, the FAR applies and the solicitation will contain FAR terms and conditions governing the entire process and the resulting services contract, but not the resulting disposal. In other words, use FAR provisions to conduct the entire action, but only apply the substantive FAR provisions to the resulting services contract, not to the resulting sale. If the divestiture portion of the transaction is reflected in a different

document than the utility contract, that portion is not regulated to have FAR terms and conditions, although they can be included.

2.4.3. **Sole Source:** If an installation resided in an area served by a franchised and regulated utility, that franchised holder shall not be considered the presumptive conveyee, nor shall another responsible and responsive utility or entity that expresses interest be excluded from competition. Installations may not rely on the assertions of franchised or regulated utilities in this regard. Rather, an independent legal finding, based on State law and regulatory policy, must be made by the installation legal office determining that the franchised or regulated utility is the only entity authorized to own and operate the utility system to be privatized. In most cases, only when a franchise is exclusive, (meaning both a franchise is required and that only one entity may hold the franchise at any one time), will sole source be an alternative. In either case, DRID #49 requires an independent finding to determine that the franchised or regulated utility is the only entity authorized to own and operate the utility system being privatized. Mere convenience is not sufficient reason to find a sole-source situation.

2.4.4. **Total Privatization versus Partial Privatization:** Privatizing a portion of a specific system, (i.e., only the plant), does not fit the OSD definition of privatization/total divestiture of that specific system. Systems shall not be partially privatized. The entire system must be conveyed in order to be defined “privatized.”

2.4.5. **Ownership:** Government-owned utility systems may be identified by reviewing appropriate DD Forms 1354, Transfer and Acceptance of Military Real Property. Additionally, if a system is on the AF real property records, then the AF is the likely owner. Systems with uncertain ownership must be identified and ownership resolved at the earliest opportunity. Government ownership of the land over, on, or in which the systems are placed must be decisively determined. For example, is the system being considered owned by others but the land is owned by the Air Force or is the system owned by the Air Force on land owned by others, or is any part of the land containing a system an addition to the original base property and owned by whom or does a lease exist that would prohibit a right of access.

2.4.6. **Housing Privatization Conflict:** Many initiatives are underway to privatize housing at Air Force installations. On-going housing privatization efforts differ in their conceptual approaches with regards to utility systems. Consult your MAJCOM housing privatization staff for information regarding the disposition of utility systems for these on-going initiatives. Future housing privatization efforts which seek to convey units and underlying real estate should include the underlying utilities. Future housing privatization efforts which seek to convey units, but lease the underlying real estate, should not include the underlying utilities. Rather, under the utilities privatization program, transition of

these utility systems should occur at the meter, meter socket, weather-head, main panel shut off, shut-off valve or clean-outs.

2.4.6.1. For installations with privatized military family housing (MFH) or where an announced MFH privatization initiative is underway, modifications to the points of demarcation, and billing/metering strategies may have to be made. In these cases, de-confliction of the housing privatization Statement of Need (SON), and the utilities privatization Statement of Work (SOW) scopes will be necessary. The identification of costs associated with the systems is spelled out in the RFP. The costs identified are to be paid, as stated in the RFP.

2.4.6.2. Where there is both MFH and Utilities Privatization, the base and MAJCOM Integrated Process Team (IPT) need to coordinate with AFCEE for MFH Privatization issues and AFCESA for Utilities Privatization issues. The Point of Contact (POC) for the program initiated first shall contact the other program POC to ensure the language in both RFP's is consistent, compatible, and contribute to achieving favorable economics for both programs.

2.4.7. **Exemptions:** When applying the exemption for unique security concerns, consider the following: If privatization is found to impact the unique security of an installation as determined by un-mitigatable

findings in and operational risk management assessment, such as adversely impacting the readiness core and thereby jeopardizing the Prime BEEF mission for the installation, then the exemption should be applied to the specific utility system. Decreased opportunity for training of Prime BEEF team members is not a reason for exemption as this is a mitigatable circumstance. Insufficient manpower to fulfill the wartime requirement is reason for exempting a utility system. All efforts to provide sufficient manpower, through reassessing the Military/Civilian mixture and/or offering positions with Air Force Specialty Codes (AFSC) which are excess to the wartime requirement at an installation, should be exhausted prior to seeking this exemption.

## 2.5. **Utilities Privatization Process**

- 2.5.1. In its overview, the Air Force Utilizes Privatization Policy and Guidance Manual stresses the importance of communication. Communicating and coordinating with other federal agencies, state, tribal, and local governments, regulators, and local community, installation officials, unions, affected employees, HQ USAF, the MAJCOM staff, HQ AFCESA, and HQ AFCEE. Because many resources are required to privatize a utility system, it is of utmost importance to establish a dedicated team of installation experts with command support.
- 2.5.2. Communication should be established early and maintained throughout the process. Contact should be maintained on-installation

within the project team and with affected unions and installation employees; off-installation communication should also be maintained with HQ USAF, the MAJCOM, HQ AFCESA, HQ AFCEE, and with the local community. The success of the initiative depends on active leadership and strong support at all levels.

2.6. **Preliminary Screening of Programmed Utility Systems**

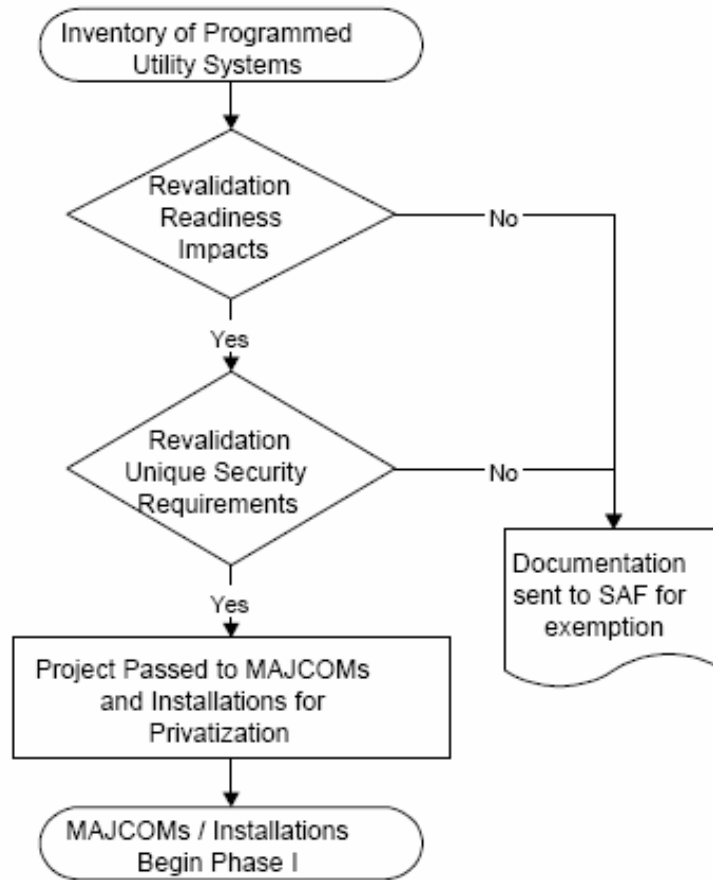
2.6.1. The privatization process begins with a preliminary screening of programmed utility systems to identify privatization candidates. This preliminary screening includes the following:

2.6.1.1.Revalidating that no adverse effects on mission readiness

would exempt a utility system from privatization. HQ USAF performs this evaluation which includes verifying that privatizing the utility system will have no adverse effect on staffing for contingency operations.

2.6.1.2.Revalidating that no unique security requirements would

exempt a utility system from privatization. HQ USAF also performs this evaluation, which ensures that ownership of the utility system by a private entity would not impair the installation's mission or ownership of the utility system by a private entity would not compromise classified operations or property.



**Figure 1 Preliminary Screening of Programmed Utility Systems**

**2.7. Phase 1: Project Plan and Feasibility Analysis**

2.7.1. Once candidate utility systems are revalidated, the first phase of the privatization process begins. This phase is typically executed at the installation level by the Installation Civil Engineer under the guidance of the Installation/Wing Commander. Phase I validates the project and includes the following:

2.7.1.1. Developing a project plan



2.7.1.1.1. This describes the following: project scope, installation utilities privatization team members and responsibilities, communication plan with a list of points of contact, project schedule, and additional resources.

2.7.1.1.2. As part of the project planning, it is essential to establish 360-degree communications. The installation privatization team is comprised of representatives from real estate, cost and finance, community planning, legal, environmental, engineering, contracting, public affairs, and manpower. Contacts at the MAJCOM, AF/ILEXO, HQ AFCESA, and HQ AFCEE are also established to coordinate project development and gain technical and resource assistance.

#### 2.7.1.2. Conducting a Utility Requirements Assessment

2.7.1.2.1. The basis for the utilities privatization requirement is the installation's existing utility requirement. Requirements are also assessed by quantifying the impact of planned construction and mission changes and adjusting the utility requirement appropriately. Once the utility requirement is known, it is used to determine whether adequate system capacity exists (including room for marginal growth and contingencies), excess capacity that may have value to the competitors, or whether portions of the system can be abandoned.

### 2.7.1.3. Conducting an Operational Impact and Risk Management Analysis

2.7.1.3.1. The Air Force Council Privatization IPT specifies the operational risk management procedures to conduct a tabletop utilities privatization vulnerability assessment. The IPT focuses on five major vulnerability categories: readiness, security, quality and availability, installation population, and government liability.

2.7.1.3.2. Integrating the proper risk assessment during the planning stages allows for potential hazards to be identified, the risk assessed, and control measures analyzed. Decision makers at the appropriate level choose the appropriate controls based on the analysis of overall costs and benefits. When the costs outweigh the benefits, some risk may be accepted. Ultimately, the control measures implemented in the real estate instruments and utility service contract will be reflected in the contract costs and the determination of the privatization project's economic viability.

### 2.7.1.4. Determining the impact of any applicable state and local regulations on the process, potential owner, and transfer

2.7.1.4.1. The review determines whether the state's Public Utility Commission (PUC), State Corporation Commission, or similar regulatory body has jurisdiction over operating the utility

system to be privatized. The DOD has determined that, as a matter of law, there are few if any circumstances where the state will have regulatory authority over the selection of a utility system owner or service provider. If the installation believes it has such a unique situation, it should contact SAF/GCN, through AFA7CAE, to discuss the matter.

## 2.7.2. Conducting an Industry Market Analysis

2.7.2.1.1. To determine whether privatizing a particular utility system is feasible, it is necessary to determine if there are potential purchasers in the marketplace. The Industry Market Analysis determines whether there is likely to be competition for the purchase of the utility system. The Industry Market Analysis proceeds as follows:

2.7.2.1.1.1. Contact all local utilities in writing, describing the privatization project and asking for a letter response expressing whether they have any interest in proposing.

2.7.2.1.1.2. Contact other nationally known companies actively engaged in the provision of the utility commodity, describing the privatization project and asking for a letter response expressing whether they had any interest in proposing.

2.7.2.1.1.3. Publish a description of the project and formal Request for Interest (RFI) in the *FedBizOpps Synopsis*. It should

be noted that *FedBizOpps* stands for Federal Business Opportunities. *FedBizOpps.gov* is the single government point-of-entry for Federal Government Procurement opportunities over \$25,000. Government buyers are able to publicize their business opportunities by posting information directly to *FedBizOpps* via the Internet. Commercial vendors seeking Federal markets for their products and services can search, monitor and retrieve opportunities solicited by the entire Federal contracting community.<sup>10</sup>

#### 2.7.2.1.1.4. Letters of interest alone do not constitute competition.

Requests for non-binding business concept proposals from entities demonstrating interest are warranted if they are deemed to be beneficial. Informational requests in the non-binding proposal should include the proposed purchase price, proposed service rates, suggested approaches to renovating the system if required, the estimated cost of the renovation, and the cost to operate, maintain, and renew the existing or renovated system over time.

#### 2.7.2.2. Conducting a detailed inventory of the systems

2.7.2.2.1. The inventory establishes a list of system assets and determines the cost to replace each asset. If a different

configuration or technology is to be used in the replacement, its cost, rather than that for exact replacement of existing facilities, is estimated. The cost of replacing assets is determined by using Historical Air Force Construction Cost Handbook supplemented by RS Means® cost-estimating publications. Life expectancy is taken from manufacturers' literature or other life-cycle cost publications.

#### 2.7.2.3. Conducting a Preliminary EA

2.7.2.3.1. The preliminary EA compared government should cost of owning and operating the system versus the privatization alternative. This requires developing cash-flow projections for government should cost and privatization and performing a life-cycle cost analysis on both alternatives. The components of the government should cost cash flow are as follows:

2.7.2.3.2. Establishing 50-year government should cost cash flow

2.7.2.3.2.1. Renewal and replacement costs. This is accomplished by performing the following:

2.7.2.3.2.1.1. Establish an inventory of the system as described above

2.7.2.3.2.1.2. Perform a facility condition assessment on the inventoried system to include a physical inventory review and spot check to confirm the system and its condition and maintenance and repair backlog.

Information is developed so that a facility condition index can be ascribed to each system

2.7.2.3.2.1.3. Establish renewal and replacement costs based on the assessment making sure deficiency corrections are not double counted. Government Should Cost Renewal and Replacement costs are to be shown in the year required.

2.7.2.3.2.2.New construction costs. Based on the results of the Utility Requirements Assessment and the regulator review, the system's functional deficiencies that require expansion for future loads or process enhancements to meet expected changes in regulatory permitting requirements were identified. New construction costs to meet these requirements are estimated based on the cost of similar construction, to include debt service or loan interest charges, and factored into the cash flow when the requirements have to be in place. Only construction or demolition projects that are currently funded are included in the analysis.

2.7.2.3.2.3.Training cost due to privatization

2.7.2.3.2.4.Adjusted operating costs. Operating costs include operations, maintenance, and general and administrative costs. In order to obtain this data, a detailed review of

financial records is performed. Additionally, key personnel are interviewed to verify costs data and to be sure that all costs are included in the overall estimated cost of service. Government costs are then adjusted to account for under-funded or inadequate O&M procedures.

#### 2.7.2.3.3. Establishing 50-year privatization cash flow

2.7.2.3.3.1. Estimated purchase price. Ultimately the fair market value of the utility system will be determined by the SECAF during Phase III. However, to perform the Preliminary EA, an estimated value of the utility system is established and assumed to be the purchase price of the system. Using a similar methodology as that used for developing the renewal and replacement costs provides an estimated purchase price. This similar method uses the replacement cost new (RCN) for the inventoried components and applies a factor for depreciation based on the age of each component. This method, commonly referred to as replacement cost new less depreciation (RCNLD), provides a basis for an estimated purchase price.

2.7.2.3.3.2. Estimated utility service rates. Information collected via the state and local regulatory reviews and the

Industry Market Analysis is used to help develop estimated service rates. These estimated service rates are used to project a cash-flow for the privatization alternative. The estimated service rate includes only the costs associated with operating and maintaining the utility systems and not the utility commodity itself.

#### 2.7.2.3.4. Performing a life-cycle cost analysis

2.7.2.3.4.1. Net Present Value (NPV) analysis on 50-year cash flows. The life-cycle cost analysis compares projected 50-year cash flows for the government should cost and privatization alternatives using the following steps:

2.7.2.3.4.1.1. Establish a cash-flow projection for maintaining the government should cost alternative. This cash-flow projection incorporates costs associated with current operations, adjusted for under-funded or inadequate O&M, and renewal and replacement costs.

2.7.2.3.4.1.2. Establish a cash-flow projection for the assumed privatization alternative. This cash-flow projection incorporates costs associated with the sale of the utility system (estimated purchase price) and the purchase of utility service from the new owner (estimated service rates).



2.7.2.3.4.1.3. Conducting NPV analysis of the government should cost and privatization alternatives to determine the lease cost alternative.

2.7.2.4. The preliminary EA is considered to have at least an 80 percent confidence rate as it uses best available industry information and engineering judgment. However, it cannot reflect the strategic business value of these systems. That can only be determined through the solicitation of binding proposals. Unless the preliminary EA indicates that estimated privatization costs are greater than the government should cost by 20 percent or more, MAJCOMs proceed on to Phase II obtaining binding proposals from industry for development of a certified EA. The “20% rule” applies only to the preliminary economic analysis—actual privatization costs indicated by the proposal can not exceed the government should cost to be determined economically feasible.

2.7.2.5. Preparing a Feasibility Analysis Report, which contains the analyses performed under Phase I and justifies continuing on to Phase II or eliminating the utility from further consideration.

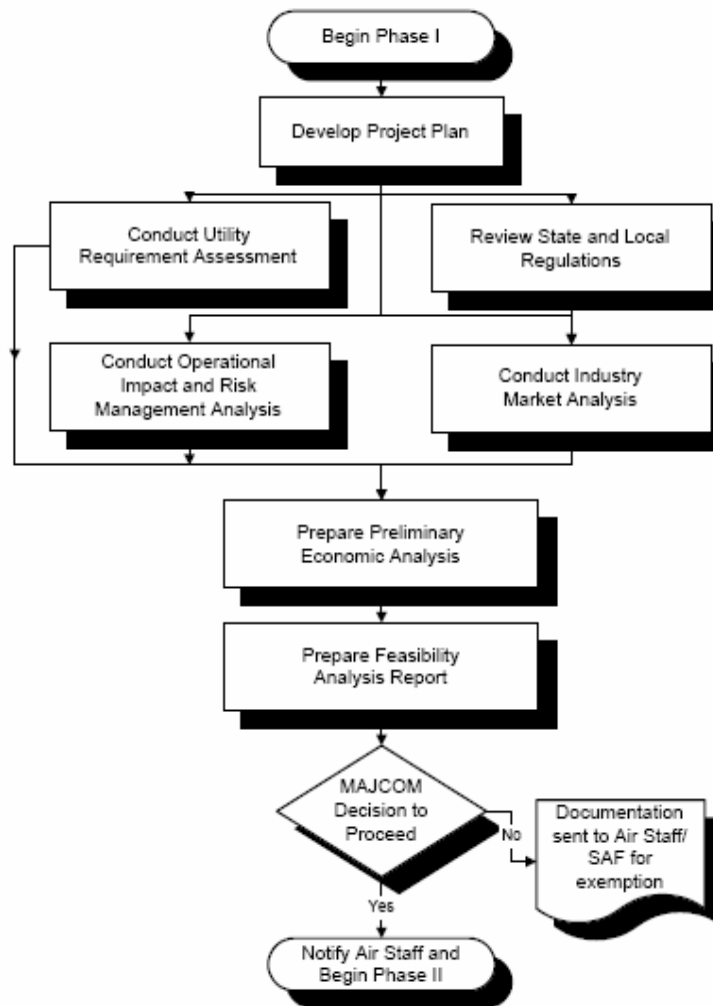
2.7.2.6. Once all Phase I analyses and the Preliminary EA are complete, the Feasibility Analysis Report is assembled

and submitted to the MAJCOM and HQ USAF. This report includes all analyses performed to demonstrate the economic viability of the project and recommends continuing on with Phase II of the project or eliminating the utility from further privatization considerations.

#### 2.7.2.7. Conducting reviews and implementing a “go/no-go”

decision. The final decision point in Phase I is whether to commit additional resources to further define the project and develop the RFP. In order to proceed to Phase II, MAJCOM review of the project is obtained, and a “go/no-go” decision is made by the appropriate base authority.

Following the decision, HQ USAF is notified that the project is proceeding to Phase II or that privatization is not feasible.



**Figure 2 Phase I of the Utilities Privatization Process**

2.8. **Phase II: Comprehensive Analysis**

2.8.1. Once Phase I is approved by the MAJCOM, Phase II is initiated.

Phase II includes the steps necessary to perform the Comprehensive Analysis, which defines the terms and conditions of the proposed privatization. Phase II also includes developing the Draft RFP. This phase includes the following:

#### 2.8.1.1.Reviewing the Project Plan and Feasibility Analysis

Report from Phase I. Based on the findings during the Feasibility Analysis, the Project Plan should be reviewed to ensure budget, schedule, personnel, and points of contact are updated and appropriate.

#### 2.8.1.2.Complying with the Environmental Impact Analysis

Process (EIAP). Environmental analysis is required to comply with the National Environmental Policy Act (NEPA) and is performed in accordance with AFI-32-7061. Privatizing utility systems should generally qualify for a categorical exclusion (CATEX). There will also be instances where a CATEX will not apply, in which case an environmental assessment or environmental impact statement (EIS) may be necessary.

#### 2.8.1.3.Determining if an Environmental Baseline Survey will be required

#### 2.8.1.4.Developing draft real estate instruments, using templates provided by HQ USAF. There will typically be two and sometimes three documents that define the relationship with the new utility provider:

2.8.1.4.1. Utility service contract resulting from solicitation

2.8.1.4.2. A Bill of Sale describing the property being conveyed, including an inventory of the equipment and structures

2.8.1.4.3. Access to systems on government property is normally gained through terms and conditions of the service contract. However, in certain instances where required, a Right-of-Way detailing the new owner's rights relating to access to its utility system and describing the extent of the lands covered by the access rights may be executed. In these instances, the Right-of-Way is an attachment to the RFP. The provisions of the Bill of Sale and the Right-of-Way, if there is one, supersede the provisions of the contract if there is a conflict. This is to help mitigate risk by ensuring that access to the installation, and the operational security it protects, are not inadvertently lost during routine changes in the contract. Additionally, the Bill of Sale is permanent and the term of the Right-of-Way will always be at least as long as the contract and may be longer (and is subject to renewal).

2.8.1.5. Developing draft transition plans. The following are three key transition plans that should be developed during Phase II:

2.8.1.5.1. Employee Transition Plan. Planning to mitigate the impact of privatization on the lives of Air Force employees is Air Force policy, and it will significantly increase the prospects for project success. The manpower representative on the project team should determine the potential impact on

employees and provide detailed guidance on reduction-in-force procedures if necessary. This information will provide the basis for an Employee Transition Plan. The plan should include the following:

2.8.1.5.1.1.Coordinating with the unions representing affected employees as soon as any significant prospect of privatization is identified

2.8.1.5.1.2.Communicating the schedule and conditions for the potential transfer and transition assistance available to affected employees as early as possible in the process and continuously thereafter

2.8.1.5.1.3.Submitting requests for separation incentive and early retirement authorizations

2.8.1.5.1.4.Setting up out-placement and job transition assistance

2.8.1.5.1.5.Explaining the OBM Circular A-76 does not apply to utilities privatization

2.8.1.5.1.6.Addressing employee rights with regard to employment with the new owner

2.8.1.5.2. Operational Transition Plan. Once the Air Force has determined which elements are essential, the RFP should require a contractor-developed Operational Transition Plan that addresses each element of operational transfer as part of the technical proposal. It is important that a cooperative spirit

be demonstrated between the system's current and future owners and operators. A plan with well-communicated procedures and expectations will help ensure a smooth operational transition. The Operational Transition Plan should include the following activities:

2.8.1.5.2.1.Scheduling transfer of system O&M, including a period of joint operation or on-site training for new employees and supervisors

2.8.1.5.2.2.Scheduling construction or installation of any connection requirements, such as meters, pipelines, feeders, switch gear, and transformers, and any associated outages

2.8.1.5.2.3.Transferring or modifying environmental permits, if appropriate

2.8.1.5.2.4.Conducting joint inventories of personal property to be transferred, such as special tools, equipment, and spare parts

2.8.1.5.2.5.Providing operations manuals and maintenance records

2.8.1.5.2.6.Recording initial meter reading for billing purposes

2.8.1.5.3. Post-Award Project Management Plan. Most of this work will fall under the authority of the Contracting Officer as part of the acquisition strategy, but it should include establishing a

Post-Award Project Management Team, which will be responsible for the following:

2.8.1.5.3.1. Providing quality assurance/quality control (QA/QC)

2.8.1.5.3.2. Serving as a customer relations liaison

2.8.1.5.3.3. Assessing contractor performance annually or more frequently if required by the contract

2.8.1.5.3.4. Verifying services received

2.8.1.5.3.5. Processing payments

2.8.1.5.3.6. Determining when the contract requirements are met for the purpose of financial close-out

2.8.1.6. Preparing an Acquisition Plan. Using the uniform template provided by HQ USAF, the Installation Contracting Officer is responsible for completing development of the contract vehicle, which will procure utility services after privatization, and establish the long-term relationship of the utility provider so that potential privatization concerns are mitigated.

2.8.1.7. The privatization acquisition strategy should be a best-value source selection made in accordance with Air Force Federal Acquisition Regulation Supplement (AFFARS), Part 15, from proposals that first demonstrate economic cost avoidance to the Air Force should cost in their respective proposals. This meets the requirements of 10



U.S.C. § 2688 for lower long-term costs. Since 10 U.S.C. § 2688 requires the privatization be economical in accordance with the terms of the statute, no award may be made that will not meet the requirements of the EA required to be sent to Congress. Once the SSET identifies those offerors that appear to meet that economic test, an award may then be based on best value. There is no requirement to award to the best price. The Contracting Officer must prepare an Acquisition Plan that describes the acquisition strategy.

2.8.1.8. The Acquisition Plan should be developed in accordance with FAR Part 7.105, Acquisition Planning. Considering all aspects of the planning and acquisition process, the Acquisition Plan should address the following (not all inclusive):

2.8.1.8.1. Statement of Need. Present a statement of need that summarizes the purpose for the acquisition and feasible alternatives to the acquisition.

2.8.1.8.2. Applicable Conditions. State the requirements for compatibility with existing and future programs, including the Housing Privatization Program, discuss method of conveyance of property, and discuss applicable installation specific

requirements that should be reflected in the property transfer instrument.

2.8.1.8.3. Cost. State the cost goals of the acquisition, discuss how life-cycle cost will be considered, and discuss how should-cost figures into the acquisition.

2.8.1.8.4. Performance. State the performance objectives of the acquisition, and discuss how privatization will affect utility service performance to the end users.

2.8.1.8.5. Contract Type. State the contracting type and method that will be used and how goals and objectives of privatization will be achieved.

2.8.1.8.6. Risks. Discuss technical, cost, and schedule risks that are involved with privatization, and describe what efforts will mitigate the risk.

2.8.1.8.7. Competition. Discuss how competition will be sought, promoted, and sustained throughout the acquisition process, and discuss incentives and disincentives that should be considered for the RFP.

2.8.1.8.8. Logistics Considerations. Discuss the reliability, maintainability, and QA issues that will be required by the RFP. A Post-Award Management Plan should be required to address these issues as part of the RFP.

2.8.1.8.9. Milestones. Present the acquisition strategy and steps to achieving contract award. Special considerations should be given to providing offerors sufficient time to develop quality offers even if that means longer than usual proposal periods. Because of the length of the contract period and the extreme complexity of the action, it is highly desirable to receive the best offers we can, even if that requires more investment of time at the start.

2.8.1.9. The Final Acquisition Plan will be a comprehensive plan that fulfills the Air Force needs in a timely and cost-effective manner and contains the overall strategy for managing the acquisition process. The overall strategy presented in the Acquisition Plan will precipitate the individual requirements in the RFP. If an issue is important, identify it in the Acquisition Plan and RFP and require that it be specifically addressed in the technical proposal prepared by the Offeror.

2.8.1.10. Preparing a Source Selection Plan (SSP) and establishing the Source Selection Evaluation Team (SSET). A SSP is required. The SSP, a key document in conducting source selection, should be jointly developed by contracting personnel and personnel responsible for the requirement. For privatization projects, the Divestiture

Authority has been delegated to SAF/IEI, but the SSA for the utility services contract has been delegated in accordance with FAR contract value standards. Because of this, the Divestiture Authority and the SSA will almost certainly not be the same person. Since the acquisition of the utility services contract cannot take place without the sale of the system, the decision by the SSA to award or not must be supported by the Divestiture Authority's decision to sign the real estate documents. Nevertheless, the SSA should proceed as though this is a typical acquisition with the understanding that contract award cannot occur without concurrence by SAF/IEI. The SSP should contain the following:

- 2.8.1.10.1.1. Introduction. This briefly describes what is being acquired and the goals and objectives of the acquisition.
- 2.8.1.10.1.2. Source Selection Organization. This section describes the SSA and SSET organizations (including Government and non-Government advisors). Key members must be identified by name, organization, and position title. Use of non-Government advisors shall conform to AFFARS 5315.303-90 (g).

- 2.8.1.10.1.3. Proposed Pre-Solicitation Activities. This section describes the Utilities Market Survey and how it was used to develop competition. It describes the steps that will be used to qualify offerors.
- 2.8.1.10.1.4. Evaluation Procedures. This section describes the process that will be used by the SSET to evaluate offerors proposals. This discussion should center on developing government should costs and the EA process.
- 2.8.1.10.1.5. Evaluation Criteria. This section should describe the cost criterion and specific criteria, including factors and, when appropriate, sub-factors, and elements. This information should be exactly duplicated in (section M of) the RFP. This section should also describe the assessment criteria and how they apply to the evaluation. The evaluation will be based upon four factors: Cost or price, Past Performance, Mission Capability, and Proposal Risk. The RFP shall describe the evaluation factors and their relative order of importance. Of paramount importance is the financial capability of the Offeror. Evaluation should be of the Offeror itself, not of affiliated companies that cannot be held legally responsible for the Offeror's obligations. Be particularly cautious of an Offeror that has created a "shell" company

to make its offer in order to avoid liability to the parent entity. Any assurances from an Offeror that its parent or affiliated company will financially support the Offeror should be carefully examined to ensure there is an unbreakable legal commitment that the Air Force can enforce should the Offeror fail to perform. The unsupported and unanalyzed assurances of the Offeror should never be accepted without independent confirmation. Finally, this section describes general considerations and how they relate to the evaluation of the Offeror's proposal.

2.8.1.10.1.6. Acquisition Strategy. The SSP summarizes the Acquisition Plan, including the contract type proposed, incentives, disincentives, special contract clauses, and other elements reflective of the Acquisition Plan.

2.8.1.10.1.7. Schedule of events. This schedule identifies and establishes the schedule for significant source selection activities in sufficient detail to allow the reviewing authorities to assess the practicality of the schedule. The AFFARS Part 5315 provides guidance on source selection events. The Phase III schedule will be used to develop the source selection schedule. The source selection schedule will support the OSD milestone dates.

2.8.1.10.2. Draft Request for Proposal. USAF is using a standard template for utilities privatization. Use the appropriate standard RFP template with its attachments provided by HQ USAF. HQ USAF has prepared two standard templates: competitive and sole source. For Reserve Components located on leased property, there are special provisions provided, particularly in the property transfer instruments, dealing with circumstances peculiar to them. For standard template changes, the installation must request a deviation from HQ USAF. Request for deviations are forwarded through the MAJCOM to HQ AFCESA/CENU. AFCESA will forward request to AF/A7CAE who will serve as the focal point for Air Staff coordination. Each deviation request must include a detailed statement of the deviation requested and an explanation of the need for the deviation.

2.8.1.10.2.1. Where the DESC is providing contracting support, the DESC version of the Air Force templates will be used. Preparing the Draft RFP is the responsibility of the Contracting Officer.

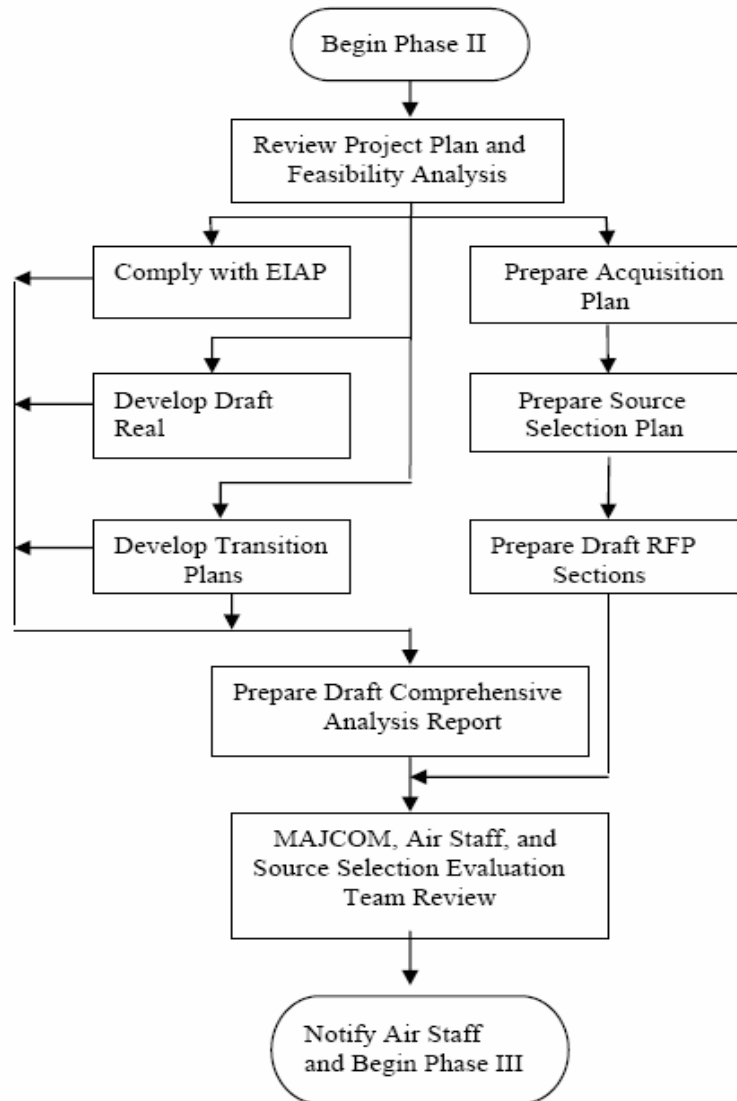
2.8.1.11. Preparing the Draft RFP, using the templates provided by HQ USAF

2.8.1.12. Preparing a Draft Comprehensive Analysis Report. At this point, the Draft Comprehensive Analysis Report

should be prepared. The Draft Comprehensive Analysis Report should contain all data and analyses performed during the Phase II process and summarized the Phase I process.

2.8.1.13. Conducting reviews and gaining approvals. The Draft RFP and Draft Comprehensive Analysis Report are approved by the installation. The SSA will approve the RFP before it can be issued.





**Figure 3 Phase II of the Utilities Privatization Process**

2.9. **Phase III: Final Feasibility, Approval, and Implementation**

2.9.1. The last phase is focused on completing the acquisition, assessing the value of the contractor proposals, gaining HQ USAF approval, notifying Congress, awarding the project, and implementing the transition.

2.9.2. Following review and approval of Phase II plans, Phase III of the utilities privatization process completes the process. This final phase includes the following:

2.9.2.1. Reviewing the Project Plan, Feasibility Analysis, and Comprehensive Analysis. Based on the findings of the Comprehensive Analysis, a cursory review of the Project Plan should be conducted to ensure budget, schedule, personnel, and points of contact are updated and appropriate.

2.9.2.2. For systems of little or no market value due to age and/or physical condition, and are ready for near future replacement and are partially owned by the utility provider, the CO may consider other contracting methods to divest the utility such as the use of the GSA Area-wide contract or sole source.

2.9.2.3. Finalizing the RFP. After the Draft RFP is prepared, approved changes are incorporated into the appropriate sections of the RFP, and all sections to be included in the Final RFP are completed.

2.9.2.3.1. It will be beneficial to provide site tours and open a technical library related to the utility system so that available information is provided to all interested parties as early in the privatization process as possible. If a technical library is not

established before the RFP is issued, it should be immediately afterward. This will allow Offerors the maximum time possible to develop their proposals. Sufficient time should be permitted in the RFP for the Offerors to conduct the level of due diligence both parties would want before entering into a permanent relationship. Advanced RFIs in the privatization process along with access to technical information in a central library can help accelerate the time from RFP to proposal.

2.9.2.3.2. The Air Force Contracting Officer is responsible for the final assembly of the RFP, which will include all sections of the RFP.

2.9.2.4. Preparing and issuing the *FedBizOpps Synopsis* for the project. A principle goal of this activity is generating the maximum competition among qualified entities. This is accomplished by announcing the solicitation in the *FedBizOpps Synopsis*, national newspapers, and trade journals to get as broad a dissemination as possible. The *FedBizOpps Synopsis* should describe the project and qualification process that will be implemented. The *Synopsis* should provide logistic information regarding when, where, and how to request the RFP.

2.9.2.5. Updating government should cost developed during Phase I

2.9.2.6. Issuing the RFP and conducting the site tour. The SOW will include A-E deliverables of the updated “Cost Analysis” using the AF CEA Model, Government Should Cost Estimate (GSCE) Model, and GSCE supporting data template. The initial delivery will occur prior to RFP release. The entire RFP is issued to all entities responding to the *FedBizOpps Synopsis*. Additional RFPs will also be issued subsequent to the initial issuance upon request to the CO. Approximately two weeks after issuing the RFP, the CO should conduct a site tour beginning with a pre-proposal conference for potential offerors. This site tour is a critical step in preparing the Offerors’ proposals. The site tour should provide insight into the physical conditions of the system, O&M practices, and overall effectiveness of the system to provide quality service to the Air Force. The Installation Civil Engineer should attend the site tour to provide technical information about the system and answer questions related to its operation and condition. Following the site tour, a timeframe is established in which prospective offerors are allowed to submit questions in writing. Air Force responses to the questions must be provided to all participants involved in the procurement. If warranted, the CO will prepare and

issue responses as amendments to the RFP. The process of responding to Offeror questions cannot be used to circumvent the requirement to obtain HQ USAF approval for deviations to the RFP and its attachments. The CO should be extremely cautious in answering questions from Offerors in order not to create conflicts with provisions in the uniform Air Force RFP and the property transfer instruments. If uncertain, seek assistance from experts at HQ USAF.

2.9.2.7. Requesting technical and cost proposals from qualified firms

2.9.2.8. Conducting a Technical Evaluation Process. The Technical Evaluation Process begins with a request for, and acceptance of, separate technical and cost proposals from qualified offerors. The Government will accept proposals up to the stipulated time and date, evaluating the technical proposals, hold discussions with offerors, secure final revised proposals, and select the proposal that meets the economic criteria for 10 U.S.C. § 2688 and offers the best value to the Air Force.

2.9.2.8.1. Due diligence visits are funded and conducted by the MAJCOM. The visits should be conducted following

negotiations with the offerors and during preparation of their final offers.

2.9.2.8.2. The Integrated Data System (IDS) automated source selection tool is available as an option for use in the source selection process. IDS training to the SSET should occur prior to receipt of the proposals.

2.9.2.8.3. Receiving and evaluating technical and cost proposals.

Proposals will only be accepted up to the time indicated by the instructions to offerors or subsequent change through an amendment issued by the CO. Once the CO receives the proposals and has determined they meet the submission requirements, the SSET is provided the technical and cost portions of the proposals to evaluate against the evaluation criteria.

2.9.2.8.4. The SSET evaluates the proposals to qualify the offerors in terms of providing quality service to the Air Force. This evaluation must be objective and solely based on the evaluation criteria. Subjective evaluation could lead to protest following the award of the project. AFFARS, Part 15 provides guidance on performing technical evaluations of proposals and determining the competitive range. The SSET will use the life-cycle cost analysis model provided by HQ AFCEA for each proposal. Life-cycle cost analysis will be

based on the offerors' proposal and updated government should costs discussed below. This model analysis will identify proposals offering cost avoidance and support holding discussions with offerors.

2.9.2.8.5. Holding discussions with offerors. Once the SSET had determined, based on evaluation criteria, a list of qualified offerors in the competitive range, the CO will initiate discussion with those entities in accordance with AFFARS, Part 15 to resolve any questions or deficiencies. These discussions should lead to preparing and submitting final revised proposals. MAJCOMs will provide guidance to the Base and ensure that offerors are allowed access to those utility systems for which they are preparing revised proposals.

2.9.2.8.6. Preparing final revised proposals by offerors

2.9.2.8.7. Reviewing final revised proposals. After receiving the final revised proposals by the offerors, the SSET evaluates the proposals to determine which proposals offer the "best value" (quality and cost trade-off).

2.9.2.8.8. The terms of these final revised proposals will be input into the economic model used in the EA to compare the Air Force's should costs. This information will be used in the overall source selection process to select a provider.

AFFARS, Part 15 describes the process for documenting the evaluation process of the final revised proposals.

#### 2.9.2.9.Updating Government Should Costs (Including Major

ANG Installations). The government should cost shall be updated based on the following process:

- 2.9.2.9.1. All cost will be escalated to a common Fiscal Year using the Gross Domestic Product (GDP) deflator (Chained Price Index) available from <http://www.gpoaccess.gov/usbudget/index.html>. Go to the “FY XXXX budget” then “Historical Tables”, then “Section 10”. The GDP deflator for years beyond those already calculated shall be assumed to increase at the same rate as the last year in the table.
- 2.9.2.9.2. The costs of privatization do not start until the final source selection has been made and the service contract is signed. All costs before that date are sunk costs and not part of the analysis.
- 2.9.2.9.3. Gather updated data from the base on the current inventory and adjustments to the government should costs.
- 2.9.2.9.4. Perform a facility condition assessment on the inventoried system to include a physical inventory review and spot check to confirm the system and its condition and maintenance and



repair backlog; information should be developed so that a facility condition index can be ascribed to each system

2.9.2.9.5. Replacement Cost New. Determine RCN based on the updated inventory using the HQ AFCESA component cost database, Area Cost Factors, and government markups (5% for contingencies; 5.7% Continental US and 6.5% everywhere else for SIOH; and 10% for Design). Replacement Cost New will be estimated based on what it would cost to install the component today using current materials (e.g. polyethylene pipe versus black steel pipe) assuming a green field site (no roads, sidewalks, etc.).

2.9.2.9.6. Replacement Cost New Less Depreciation. Determine RCNLD based on remaining useful life. Useful life based on HQ AFCESA component life database on HQ AFCESA component life database adjusted by the facility condition assessment.

2.9.2.9.7. Book Value. Determine Original Cost New Less Depreciation (OCNLD) or Book Value (BV) by deescalating RCN back to the installation date of each component using current GDP deflator and depreciating the components based on remaining useful life. Useful life will be based on HQ AFCESA component life database adjusted by the facility condition assessment.

2.9.2.9.8. Deficiencies. Identify and cost Physical and Functional deficiencies.

2.9.2.9.8.1.Physical Deficiencies. The facility condition assessment will identify the system's current physical deficiencies that must be corrected to bring the utility system to industry standards or correct physical deterioration. The timeline for amortizing the deficiency corrections which will be determined for each specific utility, deficiency, and funding constrains could range from two to seven years or more Overdue renewals and replacements will be covered under Renewal and Replacement costs and not as deficiencies. Specific Industry standards not met or physical deterioration being corrected will be cited in the documentation for each deficiency. Area Cost Factors, and government markups (10% for contingencies; 5.7% Continental US and 6.5% everywhere else for SIOH; and 10% for Design) apply.

2.9.2.9.8.2.Functional Deficiencies. The system's functional deficiencies that will require expansion for future loads or process enhancements to meet expected changes in regulatory permitting requirements will be identified. New construction costs to meet these requirements

should be estimated based on the HQ AFCESA component cost database and factored into the cash flow when the requirement must be in place. Specific justification for each functional deficiency will be cited in the documentation. Future load requirements will only cover funded projects. Area Cost Factors and government markups apply.

2.9.2.9.9. Renewal and Replacements (R&R). Identify and cost R&R. If a different configuration or technology would be used in the replacement, its cost, rather than that for exact replacement of existing facilities, should be estimated. Additionally, R&R shall include costs for cuts and patches to other facilities (roads, sidewalks, etc.) and costs for connections to components not being replaced that may be required to replace the components. Use the HQ AFCESA component cost and life expectancy database along with the facility condition assessment to determine costs and replacement cycles. Coordinate R&R projects with deficiencies so not to double count replacements. Area Cost Factors and government markups apply.

2.9.2.9.10. Government should costs. Determine the Government should O&M costs. The government insurance portion of the Government Should Costs is calculated as shown below.

2.9.2.9.11. Government Insurance Costs. The Government insurance cost will be calculated using the procedures in OMB Circular A-76 Revised Supplemental Handbook, Part II, Chapter 2, paragraph D.7. The Net Book Value of the utility system, vehicles, equipment, and facilities is calculated by taking 50% of the Replacement Cost New. Add the average monthly value of materials and supplies to the net book value of the system, vehicles, equipment, and facilities and then multiply this total by 0.5% to determine the casualty portion of insurance. The liability portion of insurance will be calculated by multiplying the labor costs times 0.7%. Insurance is calculated for both the Unadjusted Government Costs as well as for the Adjustments to the Government Costs.

2.9.2.9.12. Determine Government Privatized Costs. Government Privatized Costs include Contract Administration, Price Re-determination Negotiations, Transition costs, Training Costs, Reduction in Bids for Taxes, and any other costs incurred by the Government due to the privatization effort after the contract is signed.

2.9.2.9.13. Contract Administration. 5% of the privatized total cost up to \$100,000 is the total installation costs for contract administration including all G&A cost. Since contract oversight includes oversight of the R&R and Capital Upgrade

work in addition to the O&M work, the Air Force calculates contract oversight as 5% of the total privatized contract amount up to \$100,000. The Air Force applies the percentage to the privatized contract amount rather than the government should cost O&M cost because the contract oversight is work performed on the privatized contract and the privatized cost is a better measure of the amount of work required.

2.9.2.9.14. Price Re-determination Negotiations. For systems with a Privatized O&M cost of less than \$100,000 per year, add \$2500 (FY2004 dollars) every three years. For systems with a Privatized O&M cost greater than \$100,000 per year, add 5.4% of the Privatized O&M every three years.

2.9.2.9.15. Transition Costs consist of Operations Transfer and Personnel Costs. Operational Transfer and Personnel Displacement costs shall be calculated as 10% of the Government Should O&M cost without G&A up to \$50,000. The current OSD guidance calculation of 10% of the Unadjusted Status Quo Labor cost does not adequately cover the transition cost for contract operated bases with no in-house labor nor does it adequately cover other transition costs from vehicles, materials, etc.

2.9.2.9.16. Training Costs. Include any additional costs for training required because of privatization such as the construction of

training mock-ups. Personnel manpower costs are not part of this cost because they are excluded from the Government Should Costs. Only extra costs such as TDY cost to a different location to get training will be included.

Privatization contractor costs will be included in their bids.

2.9.2.9.17. Taxes. If the bidder pays Federal Taxes, including Contribution in Aid of Construction, they will be subtracted from the Privatized cost in the economic analysis. The Federal Taxes paid are calculated by multiplying the annual privatized cost times the applicable utility rate from OMB Circular No. A-76, Revised Supplemental handbook, Performance of Commercial Activities, Appendix 4, or AFI 38-203, Commercial Activities Program, Attachment 9. All Federal taxes (including Contribution in Aid of Construction) contained in an offer are credited back to the Offeror by entering them as a negative value in the analysis on the privatized side. In cases where the Offeror has identified the Federal Taxes included in their costs, these may be used in lieu of the method above if they have shown how the taxes were calculated and they appear correct.

2.9.2.9.18. Other Government Costs. Document and certify any other costs of privatization not included in the above categories.

The updated Government Should Costs will be prepared using

the AF CEA Model, GSCE Model, and GSCE Supporting Data Template.

2.9.2.10. Cost Analysis for SSET Information.

2.9.2.10.1. Quantify and Forecast the Full Cost of Service for the Government Should Cost Alternative.

2.9.2.10.1.1. The updated government should cost, established earlier in Phase III, are used to develop a cash-flow projection for keeping the service in-house. This government should cost cash-flow projection should account for all O&M costs (adjusted as appropriate), R&R costs, known deficiency construction required for increased utility requirements, and known deficiency upgrades required to maintain compliance with state and/or local regulations. The cash-flow projection should be developed using the AF CEA Model. Interim A-E analyses deliverables to support the SSA decision and award will also be identified.

2.9.2.10.2. Quality and Cost of Service from Received Proposals for the Privatization Alternative.

2.9.2.10.2.1. Proposals will be evaluated in terms of purchase price and service fees. Projected cash flows will be prepared based on the proposed acquisition price and service fees. Cash-flow projection for the privatization

alternative is determined from data contained in Section B and Section L Schedules of the Offeror's proposal.

This data is entered in the AF CEA model in order to determine if the proposal is lower than the government should cost. Best and Final proposals that do not meet the requirement to be lower than the government should cost will not be considered.

2.9.2.10.2.2. The cost analysis will consist of cash flow equal to the number of years in the service contract of both the government should cost and privatization alternative and comparison of the present value of each. Government should costs will include capital costs and annual operating costs such as O&M, G&A, and insurance costs. Capital costs cover deficiency corrections costs and R&R. Privatized costs will include the rate charged to the Air Force for utility service by the new owner plus the Air Force's own management costs (contract administration) to oversee the new owner's operation.

2.9.2.11. Selecting the successful Offeror

2.9.2.12. Preparing a Draft EA

2.9.2.12.1. Once the SSET has recommended a decision, a Draft EA must be prepared to:



- 2.9.2.12.1.1.       Assure that the privatization alternative does or does not meet title 10 U.S.C. § 2688 and DOD guidance.
- 2.9.2.12.1.2.       Conform to guidance specified in OBM Circular A-94.
- 2.9.2.12.1.3.       Conform to guidelines specified by DOD Guidance.
- 2.9.2.12.1.4.       Document the life-cycle cost and the benefits associated with the government should cost and with privatization. A qualitative analysis of benefits should be documented by the SSET.
- 2.9.2.12.1.5.       Show estimates of the OCNLD and the RCNLD of the utility system as well as the Fair Market Value of the proposal(s).
- 2.9.2.12.1.6.       If there is a recommendation to award to a proposal that meets all requirements, then the economic analysis should be limited to comparison of the recommended proposal with the government should costs. If the SSET is not making a recommendation for award, but one or more proposals are economic and technically qualified, then an economic analysis will be prepared for all economic and technically qualified proposals. If no proposal meets the economic criteria, then an economic analysis will be made for each

proposal not meeting the economic criteria but are technically acceptable.

2.9.2.12.1.7. An economic analysis is not required for proposals that are not technically acceptable.

2.9.2.12.1.8. The projected cash flows should be prepared according to the following:

2.9.2.12.1.8.1. Quantify and forecast the full cost of service for the government should cost.

2.9.2.12.1.8.2. Quantify the cost of service from the recommended proposal or all uneconomic proposals if none are recommended.

2.9.2.12.1.8.3. Conduct life-cycle cost analysis using the AF CEA Model.

2.9.2.12.1.8.4. The Draft EA(s) must be reviewed following the DOD Guidance for certification and coordination by base and MAJCOM civil engineer, FM, and HQ AFCESA personnel. Certification by comptroller personnel means that an EA has been prepared according to DOD and AF guidance. Certification does not mean that the comptroller organization endorses the recommendation contained in the EA. Only responsible functional officials can judge whether the recommendation is appropriate.

Certification by comptroller personnel attests to the proper use of economic principles in the analysis and to the adequacy of documentation such that the EA is a stand-alone document. Certification by functional personnel indicates that the assumptions, reasoning and cost-benefit assessments in the EA are consistent with their area of technical expertise. Functional managers and reviewers at each stage of the review process must sign the Certificate of Satisfactory Economic Analysis. EAs forwarded to Air Staff or Secretariat must give evidence of MAJCOM certification.

2.9.2.12.1.8.5. HQ AFCESA sends the Draft EA(s) to Air Force Audit Agency (AFAA) for review. The AFAA review will be included as an appendix to the EA.

2.9.2.12.1.8.6. The Base Civil Engineer signature is required on the CEA. Therefore, the BCE should be involved in the early development of the Draft EA.

2.9.2.12.2. Quantify and Forecast the Full Cost of Services for the Government Should Cost Alternative

2.9.2.12.2.1. The updated government should cost, established earlier in Phase III, is used to develop a cash-

flow projection for keeping the service in-house to the Air Force. This government should cost cash-flow projection should account for all O&M costs (adjusted as appropriate to meet industry standards), R&R costs, known MILCON construction required for increased utility requirements, known upgrades required to maintain compliance with state and/or local regulations, and all work required to bring and keep the system at industry standards.

2.9.2.12.3. Quantify the Cost of Service from Received Proposals for the Privatization Alternative

2.9.2.12.3.1. Proposals will be evaluated in terms of purchased price and service fees. Those proposals that contain terms that are obviously not competitive will be eliminated from further consideration. For those proposals that remain, projected cash flows will be prepared based on the proposed acquisition price and service fees. This projection should be based on the utility requirements identified in Phase I and refined in Phase II.

2.9.2.12.3.2. Cash-flow projection for the privatization alternative is determined from data contained in Section B of the Offerors' proposal.

2.9.2.12.4. SAF/IEI Establish Fair Market Value. The fair market value of the utility system will be recommended by the SSA and approved by SAF/IEI.

2.9.2.12.5. Conduct Life-Cycle Cost Analysis.

2.9.2.12.5.1. Life cycle cost analysis associated with the government should cost and privatization alternatives for which detailed cash flows were developed must be performed in a manner consistent with DOD guidelines.

2.9.2.12.5.2. As described above, the Draft EA should be prepared according to DOD guidelines. This report will document the life-cycle cost and the benefits associated with the government should cost and with privatization.

2.9.2.12.5.3. The draft(s) will be submitted to the base FM and the MAJCOM for review. They should also be submitted to the SSA tasked with contractor selection and contract negotiations.

2.9.2.13. Preparing the Certified Economic Analysis

2.9.2.13.1. Review comments on the Draft EA(s) should be provided within three weeks once the draft is submitted. The Final EA(s) will be prepared based on the review comments and the final terms and conditions in the contract. The Life Cycle cost analysis comparing the final alternatives will be prepared

using the AF CEA Model. The Final EA(s) shall be certified according to DOD Guidance before the final SSA decision.

2.9.2.13.2. Organization responsibilities including the following:

Utilities privatization study contractors will prepare the final EA(s) consistent with guidance. Bases will certify the final EA(s) and MAJCOM, HQ AFCESA will review and coordinate on the final EA(s), and the AFAA will review the EA(s) which then becomes the CEA(s).

2.9.2.14. SAF/IEI Establish Fair Market Value. The fair market

value of the utility system will be recommended by the SSA selection of the best value proposal that meets appropriate DOD directives and legislative requirements.

The CEA will report on the OCNLD and RCNLD benchmark values and will report on the SSA's recommended fair market value of the system. Final determination of the Fair Market Value will be by SECAF.

2.9.2.15. Finalizing transition plans. Based on the final revised

proposals, the transition plans can be updated to reflect the selected offerors approach to transition. The final transition plans will be the tool used to control and guide the transition of operations smoothly.

2.9.2.16. Finalizing draft real estate instrument(s). There will be a separate Bill of Sale and possibly a Right-of-Way instrument, for each utility system without regard to whether the systems have been ‘bundled’. This will prevent confusion later by avoiding the need to separate real property interests contained in a single document should the owner transfer a system to another entity. Additionally, it will prevent potential confusion in the inventories attached to the Bills of Sale and the property descriptions attached to the Rights-of-Way by ensuring that each instrument has only one inventory or property description, as the case may be. Property transfer instruments will be finalized by filling in the appropriate spaces and attaching the appropriate attachments. The real estate documents are signed by the contractor and submitted with the bid proposal.

2.9.2.17. Preparing the Final Comprehensive Analysis Report.

Once the selection is made, real estate documents signed, and the contract is awarded, the Final Comprehensive Analysis Report (FCAR) will be prepared and submitted. The FCAR should summarize the Feasibility Analysis Report from Phase I with updates from Phase II and Phase III.

2.9.2.18. Preparing and submitting the project Approval Package  
for SAF/IEI approval and Congressional notification

2.9.2.18.1. The Comprehensive Analysis Report will be summarized in  
a Project Summary Report to be included in an Approval  
Package. The Project Summary Report and CEA are included  
in an Approval Package for formal submission to SAF/IEI.

The Approval Package will also contain the basic contract and  
property transfer instruments signed by the contractor.

2.9.2.18.2. Proper procedures will be followed when submitting source  
selection sensitive information to the Air Staff.

2.9.2.18.3. To avoid the Source Selection Sensitivity issue, address the  
approval package memorandum as follows:

MEMORANDUM TO HQ USAF/A7CAE

2.9.2.18.4. The requirements for the congressional notification  
package are Staff Summary Sheet (SSS) and four tabs and  
indicate the progress that packages go through from receipt at  
Air Staff to signed memo back to the SSA / MAJCOM / Base  
for award of contract. The tabs are: 1) The congressional  
authorizers notification of intended award, 2) the  
congressional notification of intended award, 3) the CEA for  
each system involved, and 4) a copy of title 10 U.S.C. §2688.

2.9.2.19. Awarding the contract and implementing transition.

Following SAF/IEI approval of the project, SAF/IEI will



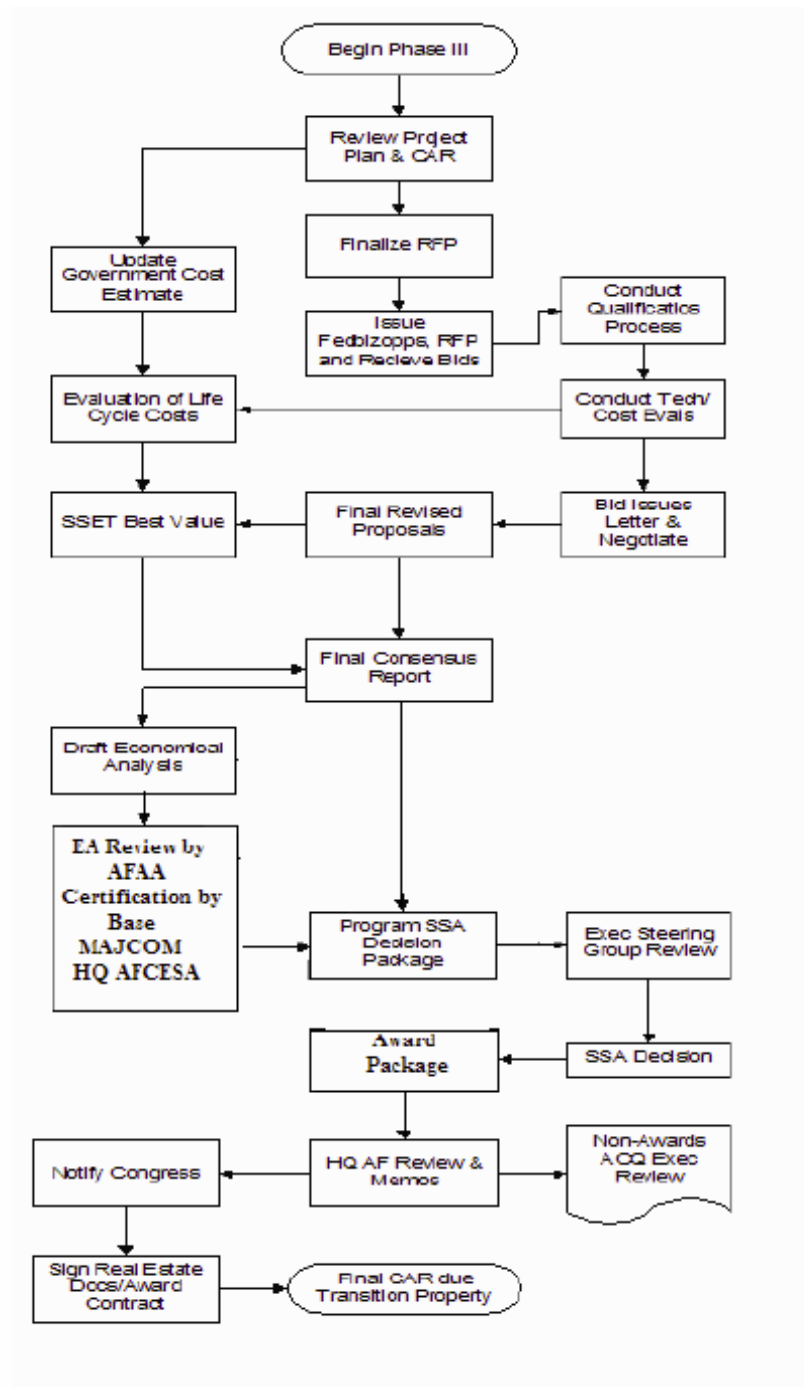
coordinate Congressional notification. The service contract and the property transfer instruments (the Bill of Sale and the Right-of-Way, if required) are signed at the same time, although the property transfer instruments do not actually take effect until the contract start date.

Signature authority of the property transfer instruments may or may not be delegated at the discretion of SAF/IEI.

2.9.2.20. Implementing Transaction. Having planned the operational transfer of the system and the transition of the affected civil service employees, and having included these requirements in the contract, close coordination with the new owner will be necessary for the project to be successfully implemented. The Post-Award Project Management Team and QA/QC organizations will be put in place to evaluate performance, confirm compliance with property transfer conditions, and assure that services are delivered in accordance with the contract. When transition is complete, the installation will be left with a long-term utility service contract to administer. This contract, which is the vehicle for obtaining quality service, will be monitored by the Post-Award Contract Management Team, just as utility contracts are administered around the Air Force today.

2.9.2.21. Conducting an EBS, if determined necessary in Phase II or III, to assess the condition of the property. An EBS may be necessary in the case of some utility system sales. The level of analysis will be determined on a case-by-case basis depending on the specific circumstances of the privatization action. Generally, a privatization action that only results in the sale of the system (i.e., no land is sold) will not require an EBS. Nevertheless, in some circumstances it may still be desirable to conduct an EBS to establish the condition of the land surrounding the utility system, especially if the right-of-way instrument is executed. This is most likely to occur in the case of the sale of a wastewater system that includes a treatment plant. If the Grantor (AF) determines that an EBS is required, the Grantee (owner) will prepare the EBS in accordance with the Grantor's standards and requirements. Costs for this EBS will be born by the Grantor. The EBS will be performed with the successful Offeror after the award. If such an EBS is required and prepared, upon expiration, termination, or abandonment of the Right-of-Way, Grantee will prepare another EBS, in accordance with Grantor's standards and requirements, which will document the environmental condition of the property at

the end of Grantee's use of the premises. The Parties will share equally the cost of the EBS.



**Figure 4** Phase III of the Utilities Privatization Process

## Chapter 3: Government Accountability Office Findings and Recommendations<sup>2, 4</sup>

### 3. Government Accountability Office Reports

3.1. Overview. The Government Accountability Office (GAO) performed two evaluations of DOD's Utilities Privatization Program. The first report titled *Defense Infrastructure; Management Issues Requiring Attention in Utility Privatization* was issued in May of 2005. A follow-up report titled *Defense Infrastructure; Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain* was published in September of 2006. Highlights and recommendations of the reports are presented below.

### 3.2. May 2005 Report<sup>4</sup>

3.2.1. GAO reviewed the program to determine:

3.2.1.1. The program's status

3.2.1.2. Whether the services' estimate of long-term savings from utility privatization projects are reliable

3.2.1.3. How DOD implements the fair market value requirement for conveyed utility systems, and

3.2.1.4. Whether other issues impact the effectiveness of DOD's execution of the program

3.2.2. In its letter to the Ranking Member, Subcommittee on Readiness, Committee on Armed Services, House of Representatives, the GAO summarized "DOD decided in 1997 that utility privatization was the

preferred method for improving utility systems and services because privatization would allow installations to benefit from private sector financing and efficiencies. With private sector financing, installations could immediately obtain major upgrades to their utility systems and pay for these improvements over time. Thus, utility improvements could be achieved without going through the traditional military construction budget justification and funding process.”

### 3.2.3. Timeliness

3.2.3.1.The report noted that after spending about \$248 million on program implementation, the services had privatized only 94 systems and exempted 311 systems of the 1,499 utility systems determined to be available for privatization as of December 31, 2004.

3.2.3.2.Primary causes for slow implementation were because the privatization evaluation, solicitation, and contracting processes were more complex and time consuming than originally expected.

3.2.3.3.Additionally, in October of 2004, the US Navy inquired as to whether the services were required at the time of contract signing to obligate sufficient funds to pay a privatization contractor for costs that had not been recovered under a contract to date in the event of a future contract termination. The DOD Office of General

Counsel evaluated the issue and concluded in February 2005 that the services were not required to obligate sufficient funds to cover contract termination liability under the utility privatization program. The GAO agreed with this determination, but nevertheless, all contracts had been placed on hold from October 2004 until February 2005.

#### 3.2.4. Impact on O&M Funding

3.2.4.1. Air Force officials estimated that the Air Force's costs alone could increase between \$100 million and \$200 million annually for the first 5 to 10 years of privatization

3.2.4.2. Various service officials expressed concern that unless funding for O&M accounts are adjusted to reflect this increase, other support functions on military bases could suffer as funds are shifted to cover "must pay" privatized utility costs

#### 3.2.5. Use of "Should Cost"

3.2.5.1. Each service followed DOD guidance and compared the long-term estimated costs of the contract with the estimated long-term "should costs" of continued government ownership assuming that the services would

upgrade, operate, and maintain the system in accordance with accepted industry standards

3.2.5.2. The GAO stated that this estimating method would be appropriate if, in the event the system is not privatized, the service proceeded to upgrade, operate, and maintain the system as called for in the estimate. However, this generally is not the case. According to DOD and service officials, if a system is not privatized, then the anticipated system improvements would probably be delayed because of DOD's budget allocation decisions, which have limited funds for utility systems not privatized.

3.2.5.3. The GAO report also recognized that delays in system improvements could increase government costs due to increased maintenance and possible changes in system reliability in the long term. Thus, if reduced costs to the government are expected to be a key factor in utility privatization decision making, then it would appear more appropriate for the services to compare the cost of a proposed privatization contract with the cost of continued government ownership on the basis of the actual planned expenditures and timing of these expenditures, with appropriate consideration to the impact of delayed improvements.

3.2.5.4. The report also highlighted DOD's lack of requirement for the services' economic analyses to be subject to an independent review.

### 3.2.6. Independent Review

3.2.6.1. DOD initially did not require the services' economic analyses be subjected to an independent review for accuracy and compliance with guidance.

3.2.6.2. GAO stated that the reliability of the analyses is not reviewed by DOD headquarters officials by an independent party, such as the services' audit agencies.

3.2.6.3. GAO compared the Utilities Privatization process with the services' housing privatization process and noted: under the housing privation process, the service that proposes a project must provide the responsible DOD headquarters officials with a detailed briefing that describes the project, its justification, and whether it meets specific financial criteria. These top-level review steps provide additional assurance that supporting analyses are reliable and that each project is adequately justified before approval



### 3.2.7. Fair Market Value

3.2.7.1. The report stated that in some instances, the requirement for the services to receive fair market value for systems conveyed resulted in higher contract costs

3.2.7.2. Army guidance at the time, stated that fair market value could range from zero to full replacement cost of the system, however guidance and practices for determining fair market value varied among the services

3.2.7.3. The report noted that although it is a reasonable concept that the government should receive consideration if an asset is conveyed to a contractor, the receipt of consideration for conveyances in the utility privatization program does not typically result in a net financial payment to the government. To recover their costs, privatization contractors normally include the full amount they paid for conveyances in the associated utility services contracts and, therefore, the government will pay back the amounts received for the conveyances in the utility service bills over time. In some cases, contractors include additional amounts in the utility services bills to cover the contractor's costs associated with the fair market value payments. GAO concluded that implementing the fair market value requirement in such cases will result in

increased costs because the government will pay back more than it will receive for the conveyances

3.2.7.3.1. An example of the above scenario occurred for the electrical distribution privatization at Dobbins Air Reserve Base. The contractor will pay \$741,000 as the fair market value and recover this cost, plus associated costs, by charging the Air Force \$1,322,000 in the utility services over time. Thus, implementing the fair market value requirement will result in the Air Force paying \$581,000, or 78 percent, more than it will receive for the conveyance.

3.2.7.3.2. An additional example provided by GAO was for privatizing Fort Lee's electric distribution system. The contractor was to pay \$9.7 million for the conveyance (\$6.6 million as a cash down payment and the remaining balance financed over 27 years). The contract was then to recover its costs, including added amounts for taxes and other associated costs, through annual charges added to the installation's utility service bills over the first 28 years of the contract. This resulted in the Army being charged \$16.7 million in FY 2005 dollars, resulting in the Army paying about \$7 million, or 72 percent, more than it received for the conveyance.

3.2.7.4. GAO identified two other areas of concern in its May 2005 report:

3.2.7.4.1. First, the adequacy of privatization contract oversight.

GAO stated that although they intended to do so, the services have not issued specific contract administration guidance for the program.

3.2.7.4.2. Second, DOD's approach to utility privatization differs from typical private sector practices in that private sector companies may outsource system O&M but normally retain system ownership. As a result, this permanent conveyance may give the contractor an advantage when negotiating service contract charges or renewals.

3.2.7.5. Table 1 below depicts the privatization or exemption decisions as of September 30, 2004.

Component	Goal for Sept. 30, 2004 (percent)	Actual as of Sept. 30, 2004 (percent)	Sept. 30, 2004 goal met?	Goal for Sept. 30, 2005 (percent)	Actual as of Dec. 31, 2004 (percent)
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
Total	65	56	No	100	57

**Table 1 Percent of Systems with Privatization or Exemption Decisions**

(Sources: DOD via GAO May 2005 report)

3.2.7.6. As of the May 2005 report, the GAO noted that of the services, only the Air Force met the September 30, 2004, goal by making a privatization or exemption decision on at least 65 percent of its utility systems available for privatization.

### 3.3. GAO May 2005 Report Conclusion

3.3.1. GAO stated that utility privatization has helped installations achieve major system improvements that according to DOD would not have been otherwise possible given competing appropriations priorities. Nevertheless, the utility privatization program generally increases military utility costs well above historical levels because the program leverages private sector capital to achieve utility system improvements. To pay for these improvements over time, DOD's funding obligations will likely increase, not decrease, by hundreds of millions of dollars and O&M budgets will need to be adjusted, as necessary.

### 3.4. GAO May 2005 Report Recommendations

- 3.4.1. As long as savings are expected to be a key factor in utility privatization decision making, revise the guidance for preparing economic analyses so that the analyses compare the cost of a proposed privatization contract with the cost of continued government ownership on the basis of the actual planned expenditures and the timing of these expenditures.
- 3.4.2. Require an independent review, perhaps by DOD headquarters or the services' audit agencies, of the economic analyses supporting proposed privatization projects
- 3.4.3. Provide general program guidance emphasizing the need to consider increased utility costs under privatization as the military services prepare their O&M budget requests

- 3.4.4. Place greater scrutiny on the implementation of the fair market value requirement in proposed contracts to minimize cases where contractors recover more than the amounts they paid for system conveyances
- 3.4.5. Issue program guidance, specific to utility privatization, emphasizing the importance of contract oversight
- 3.4.6. Reassess whether permanent conveyance of utility systems should be DOD's preferred approach to obtaining improved utility services
- 3.4.7. Ensure that installation O&M budgets are adjusted as necessary to reflect increased costs from utility privatization projects
- 3.4.8. Issue specific utility privatization contract administration guidance including the clear assignment of responsibilities and ensure that resources are provided to perform adequate contract oversight

3.5. September 2006 GAO Report <sup>2</sup>

- 3.5.1. The GAO began its second report with a brief update stating: Since GAO's May 2005 report, DOD has issued new guidance and required changes in procedures. If fully implemented, these changes should result in more reliable economic analyses, improved budgetary consideration of increased utility costs, enhanced oversight of privatization contracts, and reduced instances where contractors recover more than the fair market value paid for system conveyances. However, a number of concerns remain:

- 3.5.1.1. Although DOD made changes to improve the reliability of project economic analyses by requiring independent

reviews, GAO reviewed 10 economic analyses and found reliability issues that had not been identified during the independent reviews

3.5.1.2.DOD directed the services to adequately consider in their budgets the increased costs resulting from utility privatization. However, questions remain over the availability of the funds needed to complete the program because the services estimate that they will need \$453 million more than is currently programmed to pay costs associated with remaining utility systems that might be privatized

3.5.1.3.Although DOD made changes to improve contract administration and oversight, it may take some time to fully implement the changes as new privatization contracts are awarded. GAO's review of the five projects awarded prior to DOD's changes found continuing questions about the adequacy of resources provided to perform oversight and the lack of required plans for overseeing contractor performance

3.5.1.4.It is too early in the program's implementation to know to what extent DOD's efforts will be successful in ensuring equitable periodic contract price adjustments and limiting long-term cost growth in the utility privatization program.

However, GOA found indications that cost growth may become a challenge

3.5.1.5.DOD did not change its guidance to require that project economic analyses depict the actual expected costs of continued government ownership if the systems are not privatized. Therefore, DOD's reported \$650 million in long-term cost reductions is unrealistic

3.5.2. Since the May 2005 report, GAO summarized: Although DOD initially disagreed with the report's findings and recommendations, after further review the department subsequently reported to Congress that it generally agreed with the findings and recommendations and decided to issue new guidance on November 2, 2005. The new guidance, among other things, required the services to complete remaining evaluations of utility system potential for privatization in a timely and efficient manner, perform an independent review of the economic analyses supporting proposed projects, consider and plan for increased costs for utility services resulting from potential privatization projects, and take steps designed to improve the administration and oversight of awarded privatization projects. The GAO also noted that even before DOD had issued the new guidance, the services had implemented several program improvements including the requirement for independent reviews of project economic analyses.

3.5.3. GAO noted that the National Defense Authorization Act for FY 2006 made several modifications to the legislative authority for the utility privatization program, restricted the number of utility systems that DOD could privatize during FY 2006 and 2007, and required the Secretary of Defense to submit a report to congressional defense committees by April 1, 2006, addressing the program issues and any of the concerns noted in GAO's May 2005 report.

#### 3.5.4. Timeliness

3.5.4.1. GAO again reiterated the fact that implementation of the utility privatization program has been slower than expected. The report stated that the estimated program completion date slipped from September 2005 to September 2011.

3.5.4.2. As before DOD officials attributed the delays to privatization evaluation, solicitation, and contracting processes that were more complex and time-consuming than originally anticipated. Additionally, the program was suspended from October 2005 to March 2006 in order to allow DOD and the services time to review concerns noted in GAO's previous report, develop and issue supplemental guidance for the program, and implement program changes necessitated by modifications in the program's legislative authority.



### 3.5.5. Implementation Costs and Program Delays

3.5.5.1. With program delays, the services' total estimated program implementation costs through fiscal year 2006 had increased from \$268 million to \$285 million and additional amounts will be required before the program is projected to be completed by 2011

3.5.5.2. Program delays also caused the Defense Energy Support Center (DESC) to cancel solicitation to privatize 42 Army utility systems in May 2006. These had been closed from 1 to 4 years and there were concerns that conditions, such as the accuracy of the inventory and needed improvements, had changed or might change prior to award

### 3.5.6. The GAO highlighted concerns remaining from the previous report

3.5.6.1. Although DOD made changes to improve the reliability of project economic analyses by implementing independent reviews, as stated previously GAO found issues with the implementation of the change. Specifically, GAO reviewed the economic analyses supporting 10 privatization projects that had been subjected to independent reviews and found reliability issues that had not been identified during the independent review

3.5.6.2. Although DOD directed the services to adequately consider in their budgets the increased costs resulting from utility privatization, questions remain over the availability of the funds needed to complete the program. The services have estimated they will need \$453 million more than is currently programmed for continuing government utility operations to pay implementation and contract costs associated with the remaining number of utility systems that might be privatized through 2010 for the Air Force and the Navy and Marine Corps and through 2011 for the Army. DOD had not made any decisions on the funding availability issue at the time of GAO's review

3.5.6.3. It may take some time to fully implement DOD changes to improve utility privatization contract administration and oversight as new privatization contracts are awarded. GAO's review of five projects awarded prior to DOD's changes found continued oversight concerns, including questions about the adequacy of resources provided to perform oversight and lack of required plans for overseeing contractor performance

3.5.6.4. DOD reported to Congress in March 2006 that, although privatization may limit the government's options during contract negotiations, the department continues to prefer

privatization with permanent conveyance and believes that safeguards are in place to adequately protect the government's interests. It is too early in the program's implementation to know to what extent DOD's efforts will be successful in ensuring equitable periodic contract price adjustments and limiting long-term cost growth in the utility privatization program. However, GAO found cost growth in three of six privatization projects it reviewed. In one case, the government's annual costs for utility service were expected to increase by 92 percent as a result of the contract's first periodic price adjustment

3.5.6.5.DOD did not change its guidance to require that project economic analyses depict the actual expected costs of continued government ownership in the event that the systems are not privatized. Therefore, although DOD reported to Congress that the 81 contracts awarded under the utility privatization authority will result in about \$650 million in long-term cost reductions to the government, the amount is unrealistic because it was not calculated based on the actual expected cost differences between continued government ownership and privatization, and because privatization generally results in increased, not decreased, utility service costs to the government

### 3.5.7. Program Legislative Authority

3.5.7.1. The National Defense Authorization Act of FY 2006, made several modifications to the legislative authority for the utilities privatization program. The act did the following:

3.5.7.1.1. Reinstated a requirement that the Secretary of Defense must submit to congressional defense committees an economic analysis and wait 21 days after the analysis is received by congressional defense committees, or 14 days in electronic form, before conveying a utility system. The economic analysis must demonstrate among other things that the conveyance will reduce the long-term costs to the United States of utility services provided by the utility system. The report and wait requirement has been replaced with a requirement for a quarterly report of conveyances by the National Defense Authorization Act for FY 2004

3.5.7.1.2. Added a requirement that the economic analyses incorporate margins of error in the estimates, based upon guidance approved by the Secretary of Defense, that minimize any underestimation of the costs resulting from privatization or any overestimation of the costs resulting from continued government ownership

- 3.5.7.1.3. Eliminated the requirement that DOD must receive as consideration for a conveyance an amount equal to the system's fair market value
- 3.5.7.1.4. Limited contract terms to 10 years, unless the Secretary concerned determines that a longer term contract, not to exceed 50 years, will be cost-effective and provides an explanation of the need for the longer term contract along with a comparison of costs between a 10-year contract and the longer term contract
- 3.5.7.1.5. Placed a temporary limitation on conveyance authority stating that during each of fiscal years 2006 and 2007, the number of utility systems for which conveyance contracts may be entered into under this authority shall not exceed 25 percent of the total number of utility systems determined to be eligible for privatization under this authority as of January 6, 2006
- 3.5.7.1.6. Required DOD to submit, not later than April 1, 2006, to congressional defense committees a report describing the use of section 2688 of title 10, United States Code, to convey utility systems. The report was to address several specified aspects of the utility privatization program.

### 3.5.8. Status of Utility Privatization Contracts

Component	Systems available for privatization	Systems pending solicitation or under reassessment	Systems in solicitation	Systems exempted	Total contract awards	Contract awards using 10 U.S.C. 2688 authority
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>

**Table 2      Utility Privatization Program Status as of March 31, 2006.**

(Sources: DOD via GAO September 2006 report)

3.5.8.1. The GAO noted that of the 1,496 utility systems available for privatization, only 81 have been awarded under title 10 U.S.C 2688, 36 systems have been privatized under other programs such as DOD's housing privatization program, and 147 additional systems have been exempted, bringing to total exempted systems to 458. Between May 31, 2005 and September 30, 2005, the services privatized 14 utility systems, however the services have awarded no projects under title 10 authority since DOD issued supplemental program guidance in November 2005.

### 3.5.9. Additional Privatization Possibilities

3.5.9.1. The Army estimated that 41 additional systems might be privatized with the associated contract costs totaling about \$212 million; the Navy and the Marine Corps estimated that 40 additional systems might be privatized with associated contract costs totaling about \$139 million; and

the Air Force estimated that 210 additional systems might be privatized with the associated contract costs totaling about \$602 million. Air Force officials stated that its estimated 210 additional systems was a “worst case” estimate used to determine the maximum funding needed for possible additional privatization contracts.

### 3.5.10. Management and Oversight Improvements since May 2005 Report

3.5.10.1. The GAO noted that DOD now requires economic analyses to undergo an independent review to assess the inputs and assumptions, ensure that cost estimates for the government-owned and privatization options are treated in a consistent manner, and verify that all relevant guidance has been met. Also, in supplemental program guidance in November 2005, DOD reminded the services to consider and plan for increased costs for utility services contracts resulting from potential privatization projects and prepare O&M budgets based on the expected costs.

3.5.10.2. The guidance also emphasized the importance of contract oversight and directed a number of actions designed to ensure adequate contract administration and oversight. Among other things, the guidance directed the Defense Energy Support Center to develop specific pre-award and post-award procurement procedures for the

effective management of utilities services contracts, directed contract agencies to adequately train and prepare personnel involved in the utility privatization contracts, noted that DOD components are responsible for ensuring that the acquisition plan adequately addresses cost growth control, and stated that DOD components are responsible for ensuring that resources required to properly administer the contracts have been identified and provided.

3.5.10.3. GAO also noted remaining concerns. GAO stated that changes to address some issues have not been effectively implemented, some changes were not sufficient to totally eliminate the concerns, and DOD did not make changes to address some concerns causing continued questions about the reliability of the economic analyses, the availability of funds to pay for the remaining projects that might be privatized, the adequacy of contract oversight in projects that might be privatized, the adequacy of contract oversight in projects awarded prior to DOD's changes, and the control of long-term cost growth in utility privatization contracts. GAO also reiterated the concern that the program may continue to provide an unrealistic sense of savings and decision makers may have



incomplete information on the financial effect of privatization decision.

#### 3.5.11. Economic Analyses

3.5.11.1. Even before DOD issued the November 2005 guidance requiring independent reviews, Army and Air Force officials stated that they had implemented such reviews to help ensure reliability of their project analyses. The official stated that independent reviews were performed on the analyses supporting 12 utility privatization projects that were awarded in September 2005, after GAO's previous report, but before DOD's issuance of the guidance requiring independent reviews.

3.5.11.2. As an additional step to help ensure reliable economic analyses, DOD's March 2006 report to Congress stated that the services must conduct post-conveyance reviews that compare actual project costs with the estimated costs included in the projects' economic analyses. DOD stated that the post-conveyance reviews are conducted 2 to 3 years after contract award, and that the results of these reviews will be compiled until such time as the analysis of all conveyance is complete. DOD stated that the reviews are to include an analysis of the system's inventory, changes in requirements and contract costs, and a

comparison of actual contract costs with estimates from the economic analyses.

3.5.11.3. GAO stated that although DOD's changes are steps in the right direction, they found issues with the implementation of the changes. First, GAO reviewed the analyses associated with 10 Army and Air Force projects awarded in September 2005

3.5.11.3.1. As one of three examples provided by GAO: the economic analyses for the water and wastewater privatization projects at Andrews Air Force base were based on the systems' inventory (i.e. the wells, pumps, water treatment equipment, valves, fire hydrants, water distribution mains, meters, storage tanks, reservoirs, and other components that constitute the systems) and conditions 2 years prior to contract award. The Air Force stated that adjustments to the contract could be made after contract award, if needed, to reflect changes in the inventory. However, because the analyses were not updated to reflect inventory changes before contract award, the reliability of the analyses is less certain. This issue was not noted in the independent review.

3.5.11.4. Second, although DOD noted in its March 2006 report to Congress the importance of post-conveyance reviews as an additional measure to help ensure reliable economic

analyses, DOD has not issued guidance that requires the services to perform the reviews. Service officials stated that they had performed only a limited number of post-conveyance reviews and do not have plans to perform the reviews in the manner or frequency described in DOD's report to Congress.

### 3.5.12. Funding Concerns

3.5.12.1. GAO reported that the services estimate that they potentially will need \$453 million more than is currently programmed for continuing government utility operations to pay implementation and contract costs associated with the remaining number of utility systems that might be privatized through 2010 for the Air Force, the Navy, and Marine Corps, and through 2011 for the Army.

3.5.12.2. Similar to the May 2005 report, the GAO again stated that utility costs increase with privatization. Essentially, under the privatization program, the services leverage private sector capital to achieve utility system improvements that otherwise would not be feasible in the short term because of limited funding caused by the competition for funds and budget allocation decisions. The services pay for the improvements over time through the utility services contracts, which are "must pay" bills.

As a result , if the installation's funds were not increased sufficiently, then funds provided for other installation functions where there was more discretion in spending might be used to pay the higher utility bills. This, in turn, could negatively affect those other functions, such as the maintenance of installation facilities. The GAO recommended that DOD provide guidance emphasizing the need to consider increased utility costs under privatization when the military services prepare their O&M budget requests. In November 2005, DOD issued supplemental program guidance that reminded DOD components to consider the increase in utility costs from privatization.

3.5.12.3. The November 2005 guidance also directed DOD components to advise the Deputy Under Secretary of Defense (Installations and Environmental) if significant shortfalls are anticipated that will affect utilities privatization efforts. In response to that direction, each service estimated the remaining number of utility systems that might be privatized, calculated the associated implementation and contract costs, compared these costs with the funds already programmed for continued government operations of the systems that might be

privatized, and determined whether any potential funding shortfalls existed.

### 3.5.13. Cost Growth

3.5.13.1. GAO noted that because contractors own installation utility systems after privatization and, therefore, may have an advantage when negotiating contract changes and renewals, containing utility privatization contract cost growth may become a challenge as contracts go through periodic price adjustments and installations negotiate prices for additional needed capital improvement projects and other changes.

3.5.13.2. DOD has recognized that privatization may limit the government options during contract renegotiations and has taken steps to help control cost growth.

3.5.13.2.1. DOD stated the March 2006 report to Congress that a contractor also may have limited options under privatization because the contractor typically cannot use the installation's utility system to service other customers. This creates a one-to-one relationship between the installation and the contractor. In this relationship, DOD stated that both parties must work together to execute fair and equitable contract changes, both parties have significant vested interests in successful

negotiations, and both parties retain substantial negotiation leverage.

3.5.13.2.2. DOD also noted that service contracts awarded as part of a privatization transaction are contracts subject to the FAR and applicable statutes. DOD stated that all contracts will include appropriate provisions to protect the government's interest while allowing the contractor reasonable compensation for the services provided. DOD's report further stated that fixed price contracts with prospective price adjustment provisions have been determined to be the most appropriate contract in most situations and that this type of contract will mitigate cost risk and hopefully result in a satisfactory long-term relationship for both the contractor and the government.

3.5.13.2.3. DOD noted that utility services contracts may include a contract clause that provides an option for the government to purchase the system at the end of the contract period. According to Defense Energy Support Center officials, the center has developed language for future Army and Air Force contracts that would provide an option for the government to buy back a system at the end of the contract period. Navy officials stated that the Navy does not plan to include a buy back clause in its future contracts because a system could be taken back, if necessary, through condemnation procedures.

3.5.13.2.4. DOD also emphasized in its November 2005 report the importance of controlling contract cost growth. Specifically, the guidance noted that prior to awarding a services contract resulting from a utility conveyance; DOD components are responsible for ensuring that the acquisition addresses cost growth control, which includes specifying the appropriate price adjustment methodology and post-award contract administration.

3.5.13.3. According to DOD, most utility privatization contracts include provisions for periodic price adjustments. The price adjustment process allows contract price changes based on changes in market prices, generally to cover inflation, and changes to the service requirement from system additions or modifications resulting from capital upgrades. Under this process, the contractor is required to submit sufficient data to support the accuracy and reliability of the basis for service charge adjustments. If the contractor's data is determined to be fair and reasonable, the CO negotiates a service charge adjustment. Utility privatization contracts normally provide for price adjustments after an initial 2-year period and every 3 years thereafter. In addition to cost increases from service charge adjustments, contract costs can also increase as a

result of contract modifications to pay for additional capital improvement projects not included in the initial contract.

3.5.13.4. GAO reported that according to the services, utility privatization contract for 22 systems are currently undergoing, or will be subject to, their first periodic price adjustment before the end of calendar year 2007. The GAO also noted that according to Air Force officials, four additional utility privatization contracts were previously eligible for periodic price adjustment but no adjustment was made because neither the contractor nor the government requested an adjustment.

#### 3.5.14. Use of Should Cost

3.5.14.1. As in its previous report, the GAO again noted that DOD's guidance directs the services to compare the estimated long-term costs of the contract with the estimated long-term "should costs" of continued government ownership assuming that the service would upgrade, operate, and maintain the system in accordance with accepted industry standards as called for in the proposed contract.

3.5.14.2. The GAO continues to believe that this method would be appropriate, if in the event the system is not privatized,



the services proceeded to upgrade, operate, and maintain the system as called for in the estimate. However, this is generally not the case due to DOD's budget allocation decisions, which have limited funds for utility improvements.

3.5.14.3. According to GAO, DOD's report to Congress in March 2006 illustrates their concern. DOD's report stated that the department's total cost avoidance from utility conveyances is expected to exceed \$1 billion in today's dollars and, as shown in table 3, the report included information showing that the 81 contracts awarded under 10 U.S.C. § 2688 will result in about \$650 million in reduced costs to the government in today's dollars compared to DOD's "should cost" estimate.

Dollars in millions				
Component	Number of systems privatized	Estimated costs under government ownership	Estimated costs under privatization	Estimated cost avoidance with privatization
Army	70	\$2,377.0	\$1,867.5	\$509.5
Navy and Marine Corps	1	308.1	215.4	92.7
Air Force	10	220.5	173.0	47.5
<b>Total</b>	<b>81</b>	<b>\$2,905.6</b>	<b>\$2,255.9</b>	<b>\$649.7</b>

Source: DOD.

Note: Estimates are totals in today's dollars over the contract terms (50 years for most projects).

**Table 3      DOD's Estimated Cost Avoidance from Utility Privatization**  
(Sources: DOD via GAO September 2006 report)

3.5.14.4. The GAO report stated that DOD's reported cost avoidance amounts provide an unrealistic sense of savings for several reasons:

3.5.14.4.1. The estimated costs under government ownership are not based on the actual expected costs if the system is not privatized but rather on a higher "should cost" amount. As a result, estimated costs under government ownership are overstated and, therefore, DOD's estimated cost avoidance is overstated, at least in the short term.

3.5.14.4.2. The government's costs for utility services increase with privatization. Army officials estimated that average annual cost increase for each privatized Army system was \$1.3 million more than is currently programmed for continuing government ownership to pay for the contract and other costs associated with the remaining number of utility systems that might be privatized through 2010 for the Air Force and the Navy and Marine Corps, and through 2011 for the Army.

3.5.14.4.3. DOD's reported cost avoidance does not consider the program's one-time implementation costs. Through fiscal year 2005, about \$268 million was spent to implement the program.

3.5.14.4.4. The economic analyses used to estimate the cost avoidance between the government-owned and privatization options for

several of the 81 projects included in DOD's report to Congress are unreliable. GAO had noted in its previous report, that the cost estimates generally favored the privatization option by understating long-term privatization costs or overstating long-term government ownership costs. When GAO made adjustments to address the issues in the analyses, the estimated cost avoidance with privatization was reduced or eliminated.

3.5.14.4.5. Cost growth in privatization contracts might reduce or eliminate the amount of the estimated cost avoidance from privatization. GAO reviewed the analyses supporting the Navy's one privatization project under 10 U.S.C. § 2688, awarded in 1999, and compared actual contract costs to the estimated contract costs included in the analysis. The analysis showed that if contract costs continue to increase at the same rate experienced since the contract was awarded, then the project's estimated cost avoidance would be reduced from about \$92.7 million to about \$18 million. This analysis also did not include consideration of privatization contract oversight costs. Consideration of these costs would further reduce the estimated cost avoidance to about \$4 million.

3.5.14.5. The National Defense Authorization Act for Fiscal Year 2006 modified the program's legislative authority by

requiring that project economic analyses incorporate margins of error in the estimates that minimize any underestimation of the costs resulting from privatization of the utility system or any overestimation of the costs resulting from continued government ownership and management of the utility system. The GAO states that this step could help improve the reliability of the cost differences between the government-owned and privatization options. The modified authority stated that incorporating margins of error in the estimates was to be based upon guidance approved by the Secretary of Defense. However, as of June 2006, DOD had only issued general guidance in this area with no details on how the services were to comply with the new requirement. Specifically, on March 20, 2006, DOD issued guidance directing the services to include in the economic analyses an explanation as to how margin of error considerations were addressed in developing the independent government cost estimate and carried forward in the price analysis report and cost realism report. At the time of GAO's review in June 2006, Army and Navy officials stated that they were evaluating how to include margins of error into future economic analyses. Air Force officials stated that

their economic analyses already included margins of error calculations but that no formal rules existed on how to use the results of the calculations.

### 3.5.15. Fair Market Value

3.5.15.1. In the May 2005 report, the GAO recommended that DOD place greater scrutiny on the implementation of the fair market value requirement in proposed contracts to minimize cases where contractors recover more than the amounts they paid for system conveyances. Subsequent to the report, in January 2006, the National Defense Authorization Act for FY 2006 was enacted. The act changed the legislative language from stating that fair market value from a conveyance must be received to stating that fair market value from a conveyance may be received.

3.5.15.2. The GAO then stated that in March 2006, DOD issued guidance to implement modifications in the legislative authority made by the act. DOD's guidance noted that military departments are no longer required to obtain fair market value exclusively through cash payments or rate credits. The departments now have the flexibility to seek consideration in a manner other than a payment of the fair

market value when the economic analysis demonstrates it is in the best interest of the government.

3.5.15.3. GAO's review of 10 economic analyses for projects awarded after their May 2005 report showed that the fair market value paid by the contractor and the amount recovered were the same. Thus, according to these analyses, the receipt of the fair market value for the conveyances in these cases did not result in any increased costs to the government.

#### 3.5.16. Recommendations by the GAO and DOD response

3.5.16.1. Require independent reviewers to report to decision makers on the thoroughness of each economic analysis and any significant anomalies in the assumptions used and estimated costs for each ownership option

3.5.16.1.1. DOD concurred with this recommendation stating: the guidance issued on 2 November 2005 requires and independent review for all analyses supporting a proposed conveyance. While there are clearly some areas of concern in the independent reviews that were studied, the report also states that these reviews were conducted prior to the Department issuing guidance requiring them. Additionally, these reviews were the first ones conducted and were learning experiences for all involved. Since these reviews, lessons

learned have been shared through the Utilities Privatization Working Group (UPWG) to improve the quality of later reviews. DOD's plan of action included:

3.5.16.1.1.1. Continuing independent reviews as per current guidance and,

3.5.16.1.1.2. Through the UPWG, emphasize the scope of the reviews and continue to share lessons learned to improve the quality of future reviews

3.5.16.2. Issue guidance requiring the services to perform the post-conveyance reviews as noted in DOD's March 2006 report to Congress

3.5.16.2.1. DOD concurred with this recommendation stating: as noted in the March 2006 report to Congress, the Department recognizes the value of post conveyance reviews. The report expresses concern over the limited number and scope of the reviews that have been conducted. While the Department agrees that the scope of the reviews may be less than adequate, it is important to note that conducting these reviews at a time before the contractor has reached steady state operations is not conducive to reliable and realistic results. DOD's plan of action is to:

3.5.16.2.1.1. Issue guidance requiring Service officials to perform post conveyance reviews in a manner and time frame consistent with the March 2006 report to Congress

3.5.16.3. Address the utility privatization program potential funding shortfall in view of all DOD and service funding and priority needs

3.5.16.3.1. DOD partially concurred with this recommendation, stating: the guidance issued on 2 November 2005 directs Components to consider and plan for all costs associated with utility privatization before and after conveyance. GAO reports that without identifying additional resources for utility privatization costs, funding for these contracts must come from other base operating support funds. In reality, it has been the utility sustainment funds that have been used in the past for other base support operations that has led to the need and desire privatize. Components must continue to prioritize competing interests within the constraints provided by budgets and guidance. DOD's plan of action was to:

3.5.16.3.1.1. Reiterate guidance through the UPWG, and

3.5.16.3.1.2. Monitor and respond to program reviews and waiver requests.

3.5.16.4. Ensure that utility privatization contracts awarded prior to the November 2005 supplemental guidance have



adequate resources and contractor performance

surveillance plans

3.5.16.4.1. DOD concurred with this recommendation, stating: the

GAO report states that written performance evaluation plans as required by Federal Acquisition Regulations were not in place at two installations. Additionally, the report points to concerns that adequate personnel resources have not always been identified. It is the responsibility of the requiring activity and the contracting officer to ensure that both of these items are adequately addressed prior to award. In those cases where that were not done prior to award, it is imperative that the problem be corrected. There is sometimes a difference of opinion in the level of detailed oversight that is necessary and in the adequacy of the workforce to handle the workload in a particular office. These issues should be resolved under the purview of the Service and not at the DOD level. The DESC, in cooperation with Defense Acquisition University, recently provided a new online course for Utility Privatization Contract Administration. This module will be used in a continuing environment to help ensure adequate training for personnel involved with privatized utility contracts. The DOD's plan of action was to:

3.5.16.4.1.1. Reiterate through the UPWG that Federal Acquisition Regulations require a written performance evaluation plan and these plans are valuable and essential components of government oversight, and

3.5.16.4.1.2. Advertise availability of the new Utilities Privatization Contract Administration module through Defense Acquisition University

3.5.16.5. Place additional emphasis on monitoring contract cost growth as utility privatization contracts undergo periodic price adjustments and other changes are negotiated

3.5.16.5.1. DOD partially concurred with this recommendation stating:

the GAO report identifies cost growth in several contracts, some of which appear to be excessive at first look, but the report does not classify the growth as warranted or unwarranted. Cost growth may occur in utility service contracts due to many factors, including but not limited to, increased labor costs, increased energy costs, and the addition of infrastructure that needs to be covered by the contract. Much of the cost growth discussed in the report occurred in the fifth year of a contract due to inventory adjustments that were made after contract award. GAO only looked at the contract cost and did not review the impact to the government estimate. In most cases, while there is cost growth, it would

have affected both estimates and as such, the savings delta remains valid. The Component's necessity to prioritize budget constraints is an inherent driver toward emphasizing and controlling unwarranted cost growth. As such, the Department does not consider that there is anything to gain by issuing guidance on this topic. The DOD's plan of action was to:

3.5.16.5.1.1. Continue to emphasize the requirement to implement procedures to control cost growth in privatized utility contracts.

3.5.16.6. Require, in addition to the "should cost" estimate, that each project economic analysis include the system's current annual costs and the actual expected annual costs if the system is not privatized

3.5.16.6.1. The DOD did not concur with this recommendation, but stated: The Department can include the current annual costs in the economic analysis but cannot provide the expected annual cost if the system is not privatized. It went on to state, the current annual cost, alone, would be of limited use because it could only be compared to the "should cost", which is what we should be spending, as opposed to what we are or will be spending to maintain the system. At most, only a handful of systems currently being considered for privatization would

have reasonably projected recapitalization projects that could be included to formulate the future annual costs if not privatized. Without inclusion of such recapitalization costs, the projected annual costs would be essentially the same as current annual costs. The projection, therefore, would be of no real value except in those very few cases with pending projects, and then only if the project was essentially a complete recapitalization of the entire system, in order to be comparable to the cost of privatization. DOD's plan of action stated:

3.5.16.6.1.1. Considering the intent to provide reliable utility services support, continue to use the appropriate industry standard in determining the long-term costs of the United States for utility services provided by the utility system concerned

3.5.16.7. Issue detailed guidance explaining how the services should incorporate margins of error in the economic analyses

3.5.16.7.1. DOD concurred with this recommendation stating: although the March 2006 guidance directs Components to include an explanation as to how margin of error considerations were addressed, there is no clear guidance on

how margin of error should be addressed. DOD's plan of action was:

3.5.16.7.1.1. The Department will work with the Components to identify the best method for considering margin of error and will issue guidance directing that method be used in future analyses.

## Chapter 4: Discussion and Analysis

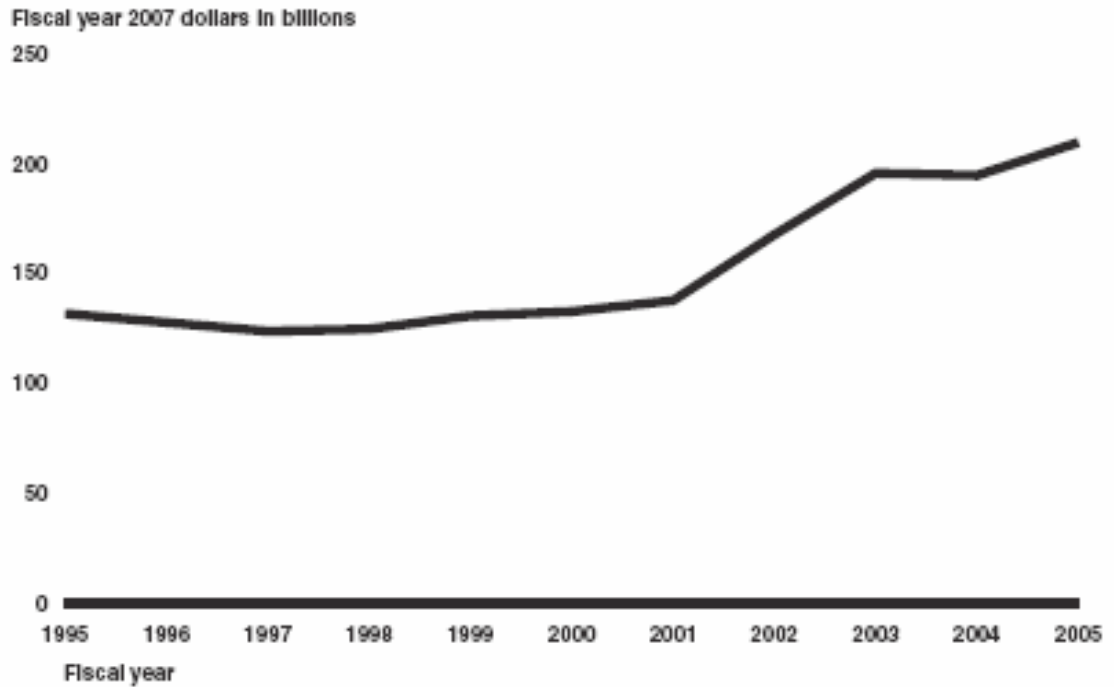
### 4. Discussion

#### 4.1. Understanding the Project Environment

4.1.1. According to the Project Management Institute (PMI), via *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*, understanding the project environment is one of the areas of expertise required for effective project management

4.1.2. The keen reader may have noted that in both reports, the GAO commented on the slower than expected progress of utility privatization program implementation. In fact, both reports literally begin with the following statements: “DOD’s progress in implementing the utility privatization program has been slower than expected...” This is a true and valid point. However, in this section we will explore in greater detail, the external environment affecting utility privatization in DOD.

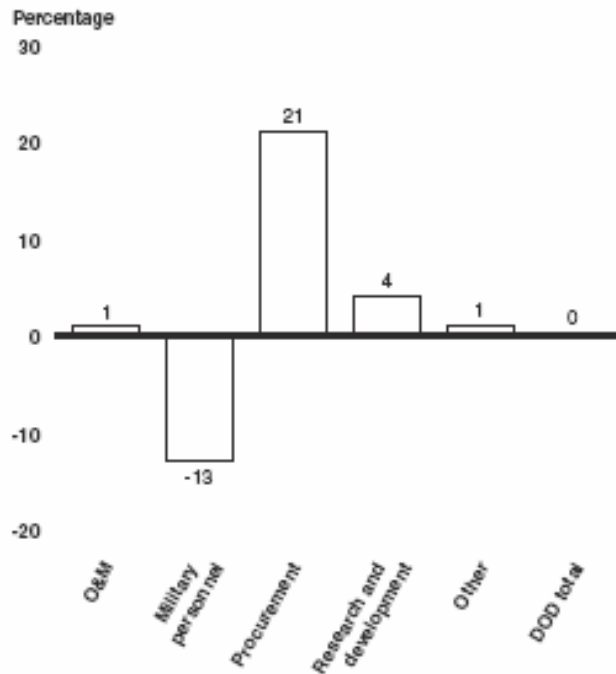
4.1.3. In a separate report titled *Defense Budget; Trends in Operations and Maintenance Costs and Support Services Contracting* issued by the GAO in May 2007, the following graph was obtained:



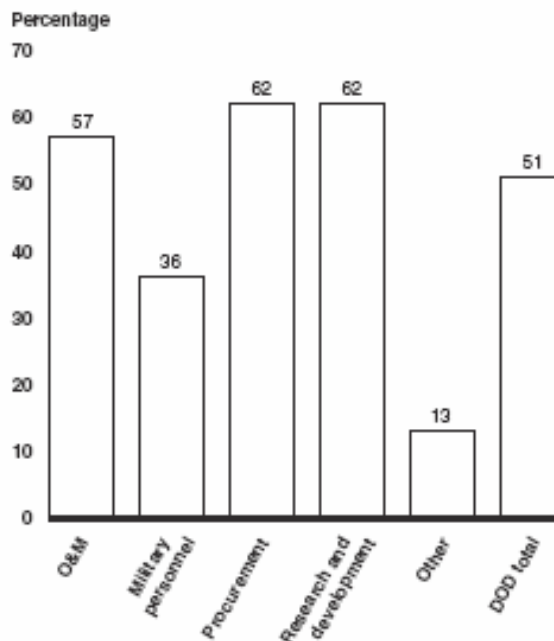
**Figure 5 O&M Costs for Fiscal Years 1995 through 2005**

4.1.4. The GAO noted that the costs shown in the figure are actual total obligation authority, which includes regular O&M appropriations, any supplemental O&M appropriations, and any funding from other appropriation accounts transferred or reprogrammed into the O&M account during budget execution.

4.1.5. The GAO stated that although DOD's O&M costs increased significantly between fiscal years 1995 and 2005, there was a distinct difference in the rate of growth between the early and latter years of this 10-year period. Specifically, as shown in the figure, DOD's annual costs were practically constant until 2001, when the costs began to increase.



**Figure 6** Percentage Change in DOD Costs by Major Budget Category from FY 1995 to 2000



**Figure 7** Percentage Change in DOD Costs by Major Budget Category from FY 2000 to 2005



## 4.2. O&M Funding

4.2.1. As the GAO noted, O&M appropriations are a major component of DOD's funding for readiness, O&M, training, supply, and equipment maintenance of military units as well as the administrative and facilities infrastructure of military bases. The funds provide for a diverse range of programs and activities that include the salaries and benefits of most DOD civilian employees; depot maintenance activities; fuel purchases; flying hours; base operations; consumable supplies; health care for active duty service personnel and other eligible beneficiaries; reserve component operations; and DOD-wide support functions including several combat support agencies, four intelligence agencies, and other agencies that provide common information services, contract administration, contract audit, logistics, and administrative support to the military departments.

4.2.2. Figure 6 on the previous page, can be examined to yield the following observation as made by the GAO: during the first half of the 10-year period from FY 1995 to 2000, DOD's O&M costs increased by about 1 percent. More specifically, O&M costs increased by 2 percent for the Army and declined about 1 percent in the Navy and Marine Corps and declined by 2 percent in the Air Force. In comparison, costs in DOD's other major budget categories during this period changed as follows: military personnel costs declined by about 13 percent; procurement costs increased by about 21 percent; research and development costs increased

by about 4 percent; and other costs increased by about 1 percent. DOD's total costs were almost constant between FY 1995 and FY 2000.

4.2.3. Figure 7 shows that a significant change in cost growth occurred during the subsequent 5-year period from FY 2000 to FY 2005, when DOD's O&M costs increased by about 57 percent. In other major categories during this period, GAO reported that military personnel costs increased about 36 percent, procurement costs increased by about 62 percent, research and development increased by about 62 percent, and other costs increased by about 13 percent. DOD total costs increased about 51 percent between FY 2000 and FY 2005. The GAO went on to report that during the period, the Army's O&M costs increased by about 137 percent, while the Navy and Marine Corps' and the Air Force's O&M costs increased by about 30 percent and 29 percent respectively.

4.2.4. By now, based on the timeline of the utilities privatization program, hopefully the reader has developed a suspicion of what happened which was the primary cause in the uptrend in O&M costs: the unfortunate events of September 11, 2001.

4.2.4.1. The GAO stated: according to DOD and service officials, the primary cause for increased O&M costs since FY 2001 is the increase in military operations associated with the Global War on Terrorism (GWOT) and other contingencies, including hurricane relief. However, the officials also stated that other factors have contributed to

the growth in O&M costs, such as the aging of military infrastructure and equipment; increased costs for installation security, antiterrorism force protection, communications, information technology, transportation, and utilities; and certain changes in acquisition approaches.

4.2.4.2. GAO went on to state the fight against terrorism has resulted in operations and deployments around the globe that are in addition to the usual peacetime operations. According to DOD, the related costs have included not only the personnel costs associated with mobilizing National Guard and reserve forces but also the costs of supporting these forces and the increased pace of operations. O&M-funded costs include a wide range of activities and services supporting operations including costs related to:

- 4.2.4.2.1. Pre-deployment and forward-deployed training of units and personnel
- 4.2.4.2.2. Personnel support costs including travel, subsistence, reserve component personnel activation and deactivation costs, and unit-level morale, welfare, and recreation
- 4.2.4.2.3. Establishment, maintenance, and operation of housing and dining facilities and camps in the theaters of operation

- 4.2.4.2.4. Petroleum, oils, lubricants, spare parts, consumable end items, and other items necessary to support the deployment of air, ground, and naval units
- 4.2.4.2.5. Establishment, maintenance, and operation of facilities including funds for roads, water, supply, fire protection, hazardous waste disposal, force protection bunkers and barricades
- 4.2.4.2.6. Command, control, communications, computers, and intelligence within the contingency areas of operations
- 4.2.4.2.7. Organizational-level maintenance including repairs to equipment and vehicles
- 4.2.4.2.8. Intermediate- and depot-level maintenance of weapons and weapons system platforms requiring service after the wear and tear of combat operations; and
- 4.2.4.2.9. Contracts for services for logistics and infrastructure support to deployed forces.

4.2.5. Congress provides O&M appropriations to 11 service-oriented O&M accounts: the Army, Navy, Marine Corps, Air Force, Army Reserve, Navy Reserve, Marine Corps Reserve, Air Force Reserve, Army National Guard, Air National Guard, and defense-wide (and to defense accounts, such as the defense health program). In addition to regular O&M appropriations, the Congress can make supplemental

appropriations to finance the incremental costs above the peacetime budget that are associated with contingencies, such as the GWOT.

4.2.6. To meet military requirements during a period of increased operations without an increase in active duty and civilian personnel, DOD has relied not only on reserve personnel activations but also on increased use of contractor support in areas such as management and administrative services, information technology services, medical services, weapons systems, and base operations support. Between FY 2000 and FY 2005, DOD's service contract costs in O&M-related areas increased over \$40 billion, or 73 percent.

Fiscal year 2007 dollars in billions

Service category	Contract costs		Change from fiscal year 2000 to 2005	
	Fiscal year 2000	Fiscal year 2005	Amount	Percentage
Professional, administrative, and management support	\$14.6	\$30.1	\$15.5	107
Maintenance and repair of equipment	7.7	12.3	4.6	60
Data processing and telecommunications	6.3	11.0	4.7	74
Medical	2.8	8.4	5.6	199
Maintenance and repair of real property	6.6	8.0	1.5	22
Utilities and housekeeping	3.9	7.0	3.1	79
Transportation and travel	3.4	6.6	3.3	97
Conservation and natural resources	1.7	2.3	0.7	39
Operation of government-owned facilities	2.3	2.1	(0.2)	-9
Technical representative services	1.4	1.7	0.3	23
Special studies and analyses	1.2	1.5	0.2	19
Modification of equipment	1.1	1.4	0.3	29
Educational and training services	1.1	1.4	0.3	23
Other <sup>a</sup>	1.3	2.0	0.7	58
<b>Total</b>	<b>\$55.4</b>	<b>\$95.9</b>	<b>\$40.6</b>	<b>73</b>

**Table 4 Changes in Service Contract Costs in Selected Categories**

(Sources: DOD via GAO Sept 2007 Defense Budget Report)

4.2.7. DOD officials noted several factors that have contributed to DOD's increased use of contractor support:

4.2.7.1.First, GWOT and other contingencies have significantly increased O&M requirements and DOD has met these without an increase in active duty and civilian personnel. To do this, DOD relied not only on reserve personnel activations, but also on increased use of contractor support

4.2.7.2.Second, Office of Management and Budget Circular A-76 notes that the long-standing policy of the federal government has been to rely on the private sector for needed commercial services and that commercial activities should be subjected to the forces of competition to ensure that the American people receive maximum value for their tax dollars.<sup>9</sup>

4.2.7.3.Third, DOD initiatives that have required that consideration be given to outsourcing certain work performed by uniformed and DOD civilian personnel have resulted in outsourcing decisions. For example, between FYs 1995 and 2005, DOD's competitive sourcing, or A-76 public/private competition, program resulted in 570 decisions to contract out work that had been performed by over 39,000 uniformed and DOD civilian personnel. In another section of the report, GAO noted that the number of A-76 public/private competition contracts is small in comparison to overall O&M expenditure, with the total

contract values between FY 1995 and 2005 being \$1.2 billion. Additionally, GAO cited utility privatization as another example of outsourcing.

4.2.7.4.Fourth, Service officials noted that in some instances certain personnel issues tend to favor the use of contractor support.

Military service	A-76 decisions			Positions covered by A-76 decisions		
	Total	To outsource	Percent outsourced	Total	To outsource	Percent outsourced
Army	222	98	44	31,481	13,395	43
Navy	405	99	24	28,746	6,440	22
Marine Corps	35	15	43	4,072	1,214	30
Air Force	450	358	80	27,892	18,116	65
<b>Total</b>	<b>1,112</b>	<b>570</b>	<b>51</b>	<b>92,191</b>	<b>39,165</b>	<b>42</b>

**Table 5      A-76 Public/Private Competition Decisions for FY 1995-2005**  
(Sources: DOD via GAO Sept 2007 Defense Budget Report)

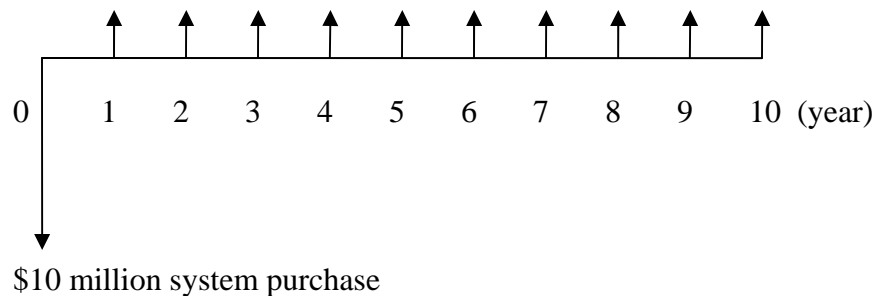
4.2.8. For the decade ending with FY 2005, GAO noted that the military services decided to outsource 51 percent of the cases. The report also stated that its analysis of the military services' reported information from the A-76 program, and case studies it performed at three contracted out installations, showed that outsourcing decisions generally resulted in reducing the government's costs for the work.

#### 4.3. Fair Market Value and Use of Should Cost

4.3.1. The GAO questioned the validity behind the requirement for the services to obtain Fair Market Value for the conveyance of utility systems.

4.3.2. The following capital recovery formula and diagram were created in order to aid the reader in a brief understanding of why the Fair Market Value requirement does not help the government to obtain the lowest prices for utility services:





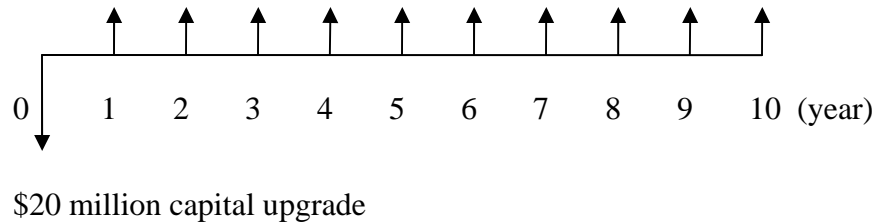
**Figure 8 Capital Recovery Diagram (Fair Market Value)**

4.3.3. Assuming that the utility service provider will pay \$10 million as the Fair Market Value of the system, and the contractor must pay a modest 6 percent interest rate for a \$10 million loan, what must the contractor change the government in order to break-even at the end of the ten year period?

4.3.3.1. The formula  $A = P [ i ( 1 + i )^n ] / [(1+i)^n - 1]$  is used, with  $i$  equaling the interest rate of six percent,  $n$  equaling the number of periods (in this case ten years),  $P$  equaling the initial investment of \$10 million, and  $A$  being the yearly cost to the government the service provider must be charged in order to break-even at the end of the ten year period. In this situation,  $A$  equals \$1,358,680. This would mean that the government would inevitably

payback \$13,586,800 to the contractor, for a system which the government initially owned. And it should be noted, that this simplified example did not include any profit for the contractor nor did it include taxes owed by the contractor. This model is merely meant to show that economically, even in a simplistic ten-year model with a modest interest rate, it is not economically wise to require a Fair Market Value for a system. This requirement, as the GAO correctly noted, does not aid to any of the goals of utilities privatization: to leverage private sector financing for the upgrade, operations, and maintenance of utility systems. It is this author's opinion, that Congress, through the National Defense Authorization Act of FY 2006, made the correct decision to eliminate the requirement that DOD receive Fair Market Value for the conveyance of any utility system.

4.3.4. In both reports, the GAO disagreed with DOD's use of should cost in lieu of actual projected costs. This author disagrees with the opinion of the GAO concerning this topic, and it is hoped that the following examples, in combination with the discussion will help to show why the use of should cost is more appropriate.



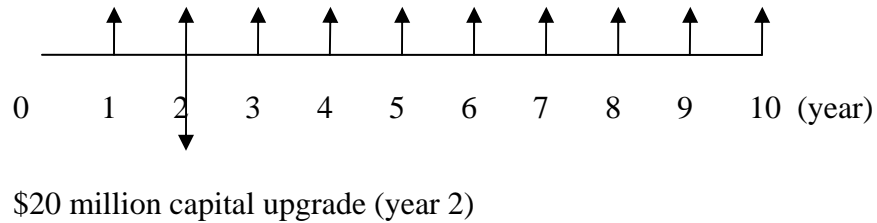
**Figure 9      Capital Recovery Diagram (Use of Should Cost #1)**

4.3.5. In an example very similar to that provided to refute the Fair Market Value requirement, this hypothetical scenario will assume that the system is conveyed to the contractor for \$0, the contractor wishes to earn a 10 percent profit, and there is only one capital investment of \$20 million required to bring the system to industry standards. The capital improvement project will be completed in the first year of the contract.

4.3.5.1. This example, would mean  $A = \$20,000,000$

$[\cdot 1(1.1)^{10}]/[(1.1^{10}-1)] = \$3,254,908$ . In other words, the utility service provider, in order to earn a ten percent profit on the infrastructure upgrade it provided to the government, would recoup over \$32 million over the ten year period.

4.3.5.2. It should be noted, that for the sake of simplicity, this example, as well as the following example, does not include the contract costs for O&M of the system.



**Figure 10     Capital Recovery Diagram (Use of Should Cost #2)**

4.3.5.3. In this example, we will assume that the government had a planned capital upgrade two years from contract initiation. A reader familiar with cash-flow, will realize that this example will be less expensive than the previous example, but to be thorough, the solution requires the capital upgrade expenditure be first brought back to the current year, then solve for the yearly costs to the government. Again, assuming a ten percent interest rate:

$$4.3.5.4. P = F (1+i)^{-n} = \$20,000,000 (1.1)^{-2} = \$16,528,925$$

$$4.3.5.5. A = P [ i ( 1 + i )^n ] / [(1+i)^n - 1] = \$2,690,006$$

4.3.5.6. This would mean that over ten years, the government would pay the contractor \$26,900,060 in lieu of \$32,549,080. At first glance, according to cash-flow the GAO appears to be correct. However, there is a much larger topic which this author believes is being essentially ignored or overlooked by the GAO.

4.3.5.7. First and foremost, one of the major purposes of DOD privatizing utilities is to “get out of the business of owning, managing, and operating utility systems” and more importantly, “Utilities privatization is the preferred method for improving utility systems and services by allowing military installations to benefit from private sector financing and efficiencies.” For the GAO to recommend the government use actual costs in lieu of should costs, overlooks the necessity to upgrade many of these utility systems now. Economically, the GAO is correct; it would be much less expensive to contract for delayed utility system improvements. At the present time, the government, more specifically the DOD, does not have enough capital programmed for the level of utility system improvements which are presently required. If the DOD were to currently fund this level of capital improvements,

it would more than likely have substantial impacts on higher priority military requirements.

4.3.5.8. Second, if the government deemed it necessary, it has the right to modify the contract and postpone utility upgrades. This would lead to a reduction in costs to the government, as shown by the most recent analysis. As long as the CO can successfully implement the modification, the government will not lose money. Therefore, if the United States were ever to enter a budget crisis, the Congress or DOD would have the capability of reducing its present cost, by modifying these projects to delay some of the infrastructure improvements.

4.3.5.9. Third, one of the key benefits of privatizing utilities is the fact that the government does not need to have large lump-sums of funding at the present time in order to obtain the needed capital upgrades. Utilities privatization enables the government to spread the costs of capital upgrades out over time, and those capital upgrades are less expensive, due to the competitive nature of privatization contract.

4.3.5.10. Fourth, another monetary advantage utilities privatization provides to the government is stable-planned expenditure. Upon contract negotiation and award, installation will have a set-rate of expenditure which will

be used by the base FM for planning purposes, with little or no price flux. This of course, is barring any modifications by the base to the contract and excludes the periodic contract price adjustments.

4.3.6. Additionally, it should be noted, that during the Preliminary Economic Analysis (ref section 2.7.1.7), the Air Force specifies very carefully how to properly develop a 50-year government should cost. The Facilities energy Center (CEN) of HQ AFCESA also maintains its website to provide Air Force personnel involved in Utilities Privatization with Contract Transfer Briefings, Policy and Guidance, RFP and EA Templates, Questions and Answers, Lessons Learned, Related Public Utility Privatization Links, and Utility Privatization Archived Information. Concerning the Certified Economic Analysis, AFCESA provides a standard model for all Air Force Installations to use, as well as a user manual. HQ AFCESA and MAJCOM personnel provide support and oversight to installations throughout the program, and help to ensure that EAs are conducted and finalized according to standards. So now lets consider how likely it would be for an Air Force Installation's Utility Privatization erroneous should costs, be filed by the CO for an RFP release or an RFP that is "on-the-street."

#### 4.4. Possibility of errors in Air Force Should Cost

4.4.1. As noted, the Air Force should costs are first performed during the Preliminary EA phase. This phase has an 80% confidence rate, meaning

that unless the estimated privatization costs are greater than the government should cost by 20 percent or more, MAJCOMS proceed on to Phase II obtaining binding proposals from industry to develop a CEA. This “20% rule” applies only to the Preliminary EA conducted during Phase I.

4.4.2. Once Phase I is approved by the MAJCOM, Phase II is initiated. As part of Phase II, among other things described in Section 2.8, the Acquisition Plan is prepared with updated costs. It states the cost goals of the acquisition, discusses how life-cycle cost will be considered, and discusses how should cost figures into the acquisition. The acquisition strategy must demonstrate cost avoidance to the Air Force should cost in order to meet the requirements of 10 U.S.C. § 2688. Once the Draft RFP and Draft Comprehensive Analysis Report are prepared, they are approved at the installation. The SSA will approve the RFP before it can be issued.

4.4.3. Phase III is focused on completing the acquisition, accessing the value of the contractor proposals, gaining HQ USAF approval, notifying Congress, awarding the project, and implementing the transition. During this phase, government should costs are once again updated (ref section 2.9.2.9 for greater detail). The Draft EAs must be reviewed following DOD guidance for certification and coordination by the base and MAJCOM Civil Engineer, FM, and HQ AFCESA personnel. Functional managers and reviewers at each stage of the review process must sign the



Certificate of Satisfactory Economic Analysis. EAs forwarded to Air Staff must give evidence of MAJCOM certification. HQ AFCESA sends the Draft EA to the AFAA for review. The Base Civil Engineer (BCE; this is the Commander of the Civil Engineer Squadron) signature is required on the CEA.

4.4.4. So to return to the topic of this section, what is the likelihood that erroneous government should costs remain in the RFP? The fact that the documents are prepared and reviewed by the SSET means that there will be many “eyes” on the documents throughout the process. Additionally, these projects receive “high-visibility” by Squadron, Group, and Installation Commanders involved. This author cannot speak for every Civil Engineer in the Air Force, but thus far has never experienced a Commander who would willingly allow government should costs to be overestimated. Personnel in the Civil Engineer career field are instinctively the most apprehensive about Utilities Privatization. After all, these personnel have been operating and maintaining these systems for their entire career. The livelihood of these personnel, both Military and Civilian, may be affected by this process. The likelihood that these personnel would attempt to push a higher government should cost estimate up the chain of command, is slim. If anything, Civil Engineers would err on the side of safety, and estimate their costs more conservatively, thus reducing the government should cost. At the installation level, the BCE and Contracting Squadron Commander would

be the two key players in any Utility Privatization contract. They will of course, delegate many of the action items of this process to subordinates for action, but prior to the any review at the Group or Installation level, these two individuals will be very thorough and critical of the final product. Once approved at the Squadron level, the Project Approval Package would then progress up the chain of command to the Group, and then to the Installation Commander. Following Installation approval, the MAJCOM, HQ AFCEA, AFAA, and Air Staff will review the package, and finally, Congress will be notified.

4.4.5. Given the many concerns and lessons learned regarding Utilities Privatization, hopefully by now the reader has a sense of how thoroughly these approval packages are reviewed. Although no process will ever yield a 100% guarantee, it can be assumed that the likelihood of a poor government should cost estimate supporting a UP RFP, is extremely small.

#### 4.5. Cost Growth

4.5.1. This author agrees with the GAO, cost growth should be monitored extremely carefully throughout the lives of these contracts. Given the above argument, it is highly unlikely that a contract will be awarded that would be more expensive than government continued control. However, if a contract is awarded for less than estimated government should costs, then cost growth of the contract may eventually lead to privatized

utilities which are no longer less expensive than had the government retained control.

4.5.2. That being said, according to AFCESA officials, the only true justification for contract growth is inflation. For instance, following Hurricane Katrina, the price of copper increased significantly, and thus some contracts required additional funding. But inflation is a national issue and does not simply affect Utility Privatization projects. Inflation would also impact the cost of these utility upgrades if the services continued to manage and accomplish them via MILCON appropriations. So theoretically, it is a “wash,” meaning that the contractor is entitled to additional funding due to inflation, and the government would have bore these costs inevitably if it were to maintain control over the utility systems.

4.5.3. One last point which the GAO also commented on was cost growth due to inventory errors. According to AFCESA officials, overwhelmingly, inventories are underestimated by the services. This is due to the nature of any military installation. Similar to any city, maintaining accurate records of all underground utilities is extremely challenging. Over the course of time, Mylar drawings, blue-prints, AutoCAD drawings, and currently GIS have been used to identify underground utilities as accurately as possible. However, as most Civil Engineers or personnel in the construction industry are aware, there is always some risk of finding underground utilities which are different

from what was recorded. That is an unfortunate fact of life for many townships and cities world-wide. Air Force Installations, and all military installations for that matter, are not immune to this. The Air Force has made vast improvements in implementing GIS over the past decade, but there is always some risk of unidentified utilities, due to the fact that many of the records are over 50-years old, may not have been accurate to begin with, changes during construction were not identified on the as-built drawings, a utility outage created a situation where an emergency repair was performed, etc. There are countless reasons why some of the inventory may be slightly in error, but the cost of digging up every utility in order to verify its status 100%, is simply too great, and any reasonable person would not suggest going to that level in a city or military installation simply to reduce all risk. The cost would excessively outweigh the benefit. Instead, Utilities Privatization contracts are written with inventories which are known. In some cases, during the joint inspection between the contractor and the government, additional quantities are identified. Furthermore, during the course of the contract, additional utilities may be found. But the costs to maintain and upgrade (if applicable) would have been part of the RFP had the government known about them, and would have therefore been included in the base-bid. The identification of additional inventory represents some risk, but not much. If anything, since the government is typically in the position of underestimating the inventory, it would potentially be saving money

until that additional inventory is found. At that point, the contract can and should be adjusted, to properly compensate the contractor. Similar to the issue of inflation, the government would have been responsible for these costs if it had retained control of the system and therefore the contractor is entitled to a price adjustment.

4.5.4. It should also be noted, that without allowing periodic price adjustments in the contract, the government would be paying significantly higher contract amounts due to risk. A contractor would be responsible for agreeing to a 50-year contract and be expected to make accurate cost estimates concerning inflation, taxes, the price of labor, material prices, the cost of fuel, etc. Any reputable contractor would realize that the risk associated with trying to estimate unknowns for that length of time would simply be too high. That would lead to one of three situations:

4.5.4.1. Only un-reputable companies would bid on the contract, and more than likely the government would face future terminations for default if inflation and/or the previously mentioned costs escalate.

4.5.4.2. Reputable companies would bid, but price this risk into their bids. This would boost the bids to such a high level that no awards would be made, since the government should cost would always be less than the bids. Therefore the utilities would not be privatized.

4.5.4.3. The government may get lucky by having a reputable contractor bid, by assuming a great deal of risk at a low-price. The future of that contract would be based on inflation and costs. If inflation stays at or below current levels, as do costs, the contract may work out. But if inflation or costs were to escalate, the company may be forced out of business, or may make the business decision to stop work, and accept a termination for default.

4.5.4.4. None of these options sound very good to this author.

Allowing for contract price adjustments after two years and then after every three years, helps reduce risk for the contractor, and inevitably helps the government obtain reputable companies with the potential to fulfill this long-term contract.

#### 4.6. Government Retained Ownership

4.6.1. This author initially shared the concern of the GAO that DOD is going about privatization in a way that is not typical to industry. DOD is permanently conveying these utility systems, which is a cause for concern for the GAO, at the end of the contract or in the event of a contract termination.

4.6.2. However, in response to lessons learned early in the utilities privatization program, the Air Force revised its RFP to include a Repurchase Clause. The clause requires the contractor to maintain

repurchase price data for the end of every year in the contract. In the event of a Termination for Convenience, Termination for Default or at the end of the contract life, the Air Force now has a pre-negotiated price (performed prior to bid) for the utility system.

4.6.3. This added level of protection for the Air Force helps to reduce its risk. Pre-determined prices are now available for future negotiations. As with any contract, if negotiations could not be reached, the government always has the ability to settle the matter in a court of law. With the pre-determined repurchase price, the Air Force is now in a much better negotiating position.

#### 4.7. Additional Legal Issues

4.7.1. It should be noted that the Air Force has three separate RFPs. One is for the sole-source selection of a regulated utility company; one is for the sole-source selection of non-regulated utility company; and the most frequently used, is the competitive RFP.

4.7.2. Military installations reside in many states, and some states have a Public Utilities Commission (PUC) or a Utility Regulatory Commission (URC) that regulates the rates and services of a utility or several utilities. Though Congress, through 10 .U.S.C. § 2688 does not require DOD to sole-source to regulated utility companies, it did not strictly prohibit it. In some cases it is beneficial for the Air Force to receive the benefit of PUC or URC oversight. These issues vary from state-to-state, but personnel involved in Utilities Privatization should be cognizant of the

different RFPs available for use, and consult their installation Judge Advocate, MAJCOM and AFCESA concerning which RFP is best suited for that particular state and situation.

#### 4.8. Conclusion

4.8.1. It is hoped that this document has provided the reader with the history of Utilities Privatization, an understanding of the Air Force's Program and Guidance Manual, issues raised by the GAO during the past couple of years, and actions taken by both the DOD and more specifically the Air Force to address many of the concerns. As it has been shown, based on its own lessons learned, in many cases the Air Force actually implemented changes prior to the DOD policy revisions. In some instances, such as the use of should cost, disagreement remains between the DOD and the GAO. Hopefully the reader has a better understanding of why this author agrees with the DOD's approach, that the use of should costs is more appropriate than the use of actual projected costs. That being said, the personnel at the GAO whom performed many of these analyses and reports deserve a lot of respect for their research into this program and many of the recommendations they provided. In the end, this author believes the GAO's exploration into this program has done nothing less than strengthen it. Above all others, the DOD personnel involved in Utilities Privatization deserve a tremendous amount of respect from this nation. Over the past decade, these personnel have taken this vast initiative, organized it, developed detailed



Program and Guidance, continually looked for and applied lessons learned to the RFPs (as well as the Utilities Privatization process as a whole), and created what this author considers to be an impeccable program. The service these individuals have performed on behalf of the taxpayers is remarkable. As with any program of this magnitude, there will continue to be challenges but it can be seen with the current history of this program, these challenges become smaller every step of the way. So long as the DOD personnel involved maintain their current mindset of correcting these issues and continually apply lessons learned to the greater program, this author believes this already strong program will only become more robust. As a final note, the following chapter provides the reader with a brief timeline of the Utilities Privatization Program. It is intended to serve as a quick-reference for key milestones in the Utilities Privatization program.

## Chapter 5: Utility Privatization Timeline in Review

### 5. Key milestones

- 5.1. December 1997, DOD issued DRI Directive Number 9
  - 5.1.1. Instructed the military departments to develop a plan that would result privatizing all installation electric, natural gas, water, and wastewater systems by January 1, 2000 unless exempted for unique security reasons or would be uneconomical
- 5.2. December 1998, DOD issued DRI Directive Number 49
  - 5.2.1. Established program management and oversight responsibilities and provided guidance for performing economic analyses for proposed projects, exempting systems from the program, and using competitive procedures to conduct the program. The implementation goal was reset to September 30, 2003
- 5.3. October 2002, DOD issued revised program guidance stating that owning, operating, and maintaining utility systems was not a core DOD function and utility privatization was the preferred method for improving utility systems. The goals were again reset for the military departments to reach a privatization or exemption decision on at least 65 percent of systems by September 30, 2004 and on all systems by September 30, 2005
- 5.4. October 2004, inquiry by US Navy to OSD concerning whether it was required to obligate funds to cover potential contract termination expenses should the contract be terminated prior to the contractor recovering its

acquisition and system improvement costs. All services shared the Navy's concerns. Utilities privatization contracts were placed on hold

- 5.5. February 2005, DOD Office of General Counsel issued guidance to the service, resolving the contract termination inquiry and releasing the contract hold
- 5.6. July 2004 – March 2005, GAO conducted its review in preparation for its May 2005 report
- 5.7. May 2005, GAO issued *Defense Infrastructure; Management Issues Requiring Attention in Utility Privatization*
- 5.8. October 2005 – March 2006, the services suspended the utilities privatization program in order to reassess the management of the program. According to service officials, the suspension allowed DOD and the services time to review concerns noted in GAO's May 2005 report, develop and issue supplemental guidance for the program, and implement program changes necessitated by modifications in the program's legislative authority<sup>2</sup>
- 5.9. November 2005, DOD issued new guidance, partially in response to the May 2005 GAO report, requiring the services to complete remaining evaluations of utility system potential for privatization in a timely and efficient manner, perform an independent review of the economic analyses supporting proposed projects, consider and plan for increased costs for utility services resulting from potential privatization projects, and take steps designed to improve the administration and oversight of awarded privatization projects<sup>2</sup>

- 5.10. January 2006, the National Defense Authorization Act for Fiscal Year 2006 made several modifications to the legislative authority for the utilities privatization program, restricted the number of utility systems that DOD could privatize (not to exceed 25 percent of the total number of utility systems eligible for privatization) during FY 2006 and 2007, and required the Secretary of Defense to submit a report to congressional defense committees by April 1, 2006, addressing the program issues and many of the concerns noted in GAO's May 2005 report <sup>2</sup>
- 5.11. March 2006 – July 2006, GAO conducted its review in preparation of its upcoming report to be issued in September 2006
- 5.12. September 2006, GAO issued Defense Infrastructure; Actions Taken to Improve the Management of Utility Privatization, but Some Concerns Remain

## Glossary

A-E	Architect-Engineer
AFCEE	Short form for HQ AFCEE
AF/A7CAE	Air Force Energy Management Asset Management and Operations Division
AFAA	Air Force Audit Agency
AFSC	Air Force Specialty Code
ANG	Air National Guard
BRAC	Base Realignment and Closure
BV	Book Value
CATEX	Categorical Exclusion
CEA	Certified Economic Analysis
CO	Contracting Officer
DOD	Department of Defense
DRI	Defense Reform Initiative
DRID	Defense Reform Initiative Directive
EA	Economic Analysis
EBS	Environmental Baseline Survey
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
ESPC	Energy Savings Performance Contract
FAR	Federal Acquisition Regulation

FCAR	Final Comprehensive Analysis Report
FM	Financial Management or Financial Manager
FY	Fiscal Year
G&A	General and Administrative
GAO	United States Government Accountability Office
GDP	Gross Domestic Product
GSCE	Government Should Cost Estimate
GWOT	Global War on Terrorism
HQ AFCEE	Headquarters, Air Force Center for Engineering and the Environment ( <i>formerly Air Force Center for Environmental Excellence</i> ); occasionally written as AFCEE in short form
HQ AFCESA	Headquarters, Air Force Civil Engineer Support Agency
HQ USAF	Headquarters, United States Air Force
IPT	Integrated Process Team
MAJCOM	Major Command
MFH	Military Family Housing
MILCON	Military Construction
NEPA	National Environmental Policy Act
NPV	Net Present Value
O&M	Operations and Maintenance
OCNLD	Original Cost New Less Depreciation
PMI	Project Management Institute
PMBOK	Project Management Body of Knowledge

Prime BEEF	Prime Base Engineer Emergency Force
QA/QC	Quality Assurance/Quality Control
R&R	Renewal and Replacements
RCN	Replacement Cost New
RCNLD	Replacement Cost New Less Depreciation
RIF	Request for Interest
RFP	Request for Proposal
SAF or SECAF	Secretary of the Air Force
SAF/GCN	Deputy General Counsel for Installations and Environment
SAF/IEI	Deputy Assistant Secretary of the Air Force, Installations
SIOH	Supervision, Inspection, and Over-Head
SON	Statement of Need
SOW	Statement of Work
SSA	Source Selection Authority
SSP	Source Selection Plan
SSS	Staff Summary Sheet
SSET	Source Selection Evaluation Team
USD (A&T)	Under Secretary of Defense (Acquisitions and Technology)

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