

Electrical Template User Guide

Electrical User Guide Contents

1. Electrical Template User Guide.....	1
1.1 Introduction	1
1.1.1 Purpose.....	1
1.1.2 Scope of Electrical	1
1.1.3 Annex Alignment to Installation Management Accounting Project	1
1.1.4 CAC Definition	2
1.1.5 Standard Numbering for Electrical	3
1.2 Electrical Template Elements.....	3
1.3 Using the Electrical Template	4
1.3.1 Defining Client Expectations	4
1.3.2 Tabular Format.....	6
1.3.3 Service Levels	8
1.3.4 Section J Attachments	9
1.3.5 Section L Questions	9
2. Conclusion.....	11
3. Web References	12

Index of Figures

Figure 1. Annex Alignment to IMAP.....	2
Figure 2. Standard Numbering Convention Example	3
Figure 3. Electrical WBS	5
Figure 4. WBS Tailoring Example.....	6

Index of Tables

Table 1. IMAP CACs for Electrical.....	2
Table 2. Electrical Template Elements	4
Table 3. Tabular Format.....	7
Table 4. Related Information	8
Table 5. Section L Questions for Electrical	10
Table 6. Web References	12

1. Electrical Template User Guide

1.1 Introduction

1.1.1 Purpose

The Facility Support Contract/Base Operations Support (FSC/BOS) Template provides a common framework for Navy-wide performance-based contracts. NAVFAC and DoD policy is to obtain FSC services in a “performance-based” manner. This User Guide describes how to apply the Template to Electrical utilities services. The Template is to be used for fixed-price negotiated procurements using source selection procedures. Users are encouraged to tailor the application of this template to the unique circumstances of their individual acquisitions. There are a number of things to keep in mind during the tailoring process:

1. Read the General Information User Guide in addition to this User Guide.
2. Pay particular attention to the annotation <<Note to Spec Writer>>.
3. Delete, add, or modify as required, but avoid adding unnecessary “how to” requirements and management prescriptions.
4. When tailoring, be careful not to create conflicts or ambiguities.
5. Be sure ALL the individual elements of the acquisition are consistent and designed for the best overall outcome.

1.1.2 Scope of Electrical

The Electrical Template includes all labor, management, supervision, tools, materials, supplies, equipment, and transportation required to provide electrical utilities. Included are services such as operating, maintaining and repairing the electrical power generation plant and transmission and distribution systems, boiler water testing and treatment, fuel oil sampling, handling and testing, and operating stand-by electrical power generators located within, or which supplement the electrical power generation plant. The following services are not considered electrical and are not included in this Template:

- Testing, maintenance, and operation of emergency power generators (EPGs) are included in the Template for Sustainment, Restoration and Modernization (SRM)

1.1.3 Annex Alignment to Installation Management Accounting Project

Figure 1 below shows how the Electrical sub-function aligns with the Navy’s Installation Management Accounting Project (IMAP) Core Business Model (CBM) and Cost Account Codes (CACs). For additional information on IMAP, see the General Information User Guide.

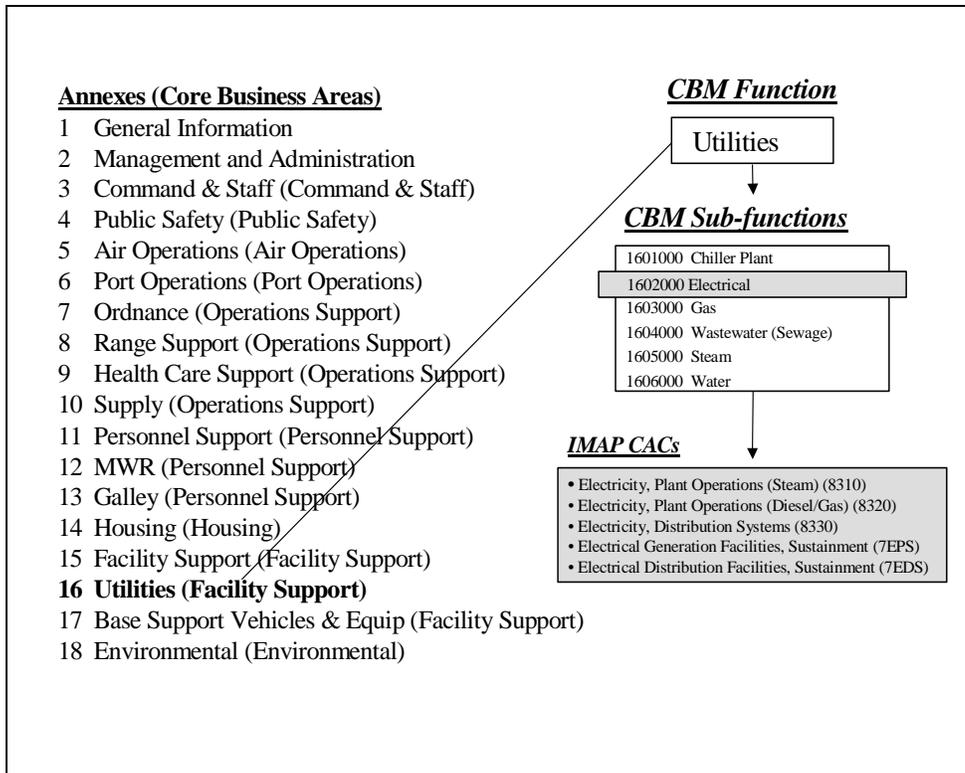


Figure 1. Annex Alignment to IMAP

1.1.4 CAC Definition

Table 1 below shows a partial list of the IMAP 2004 Electrical CAC definitions. Since CACs change periodically, refer to the IMAP website for the latest. The Electrical Template may accommodate different cost models such as the Installation Process Model (IPM) used by the Marine Corps.

Title	CAC	Definition
Electricity, Plant Operations (Steam)	8310	Includes cost of operation of all equipment in the steam electric generating plant which is used to generate and control electric current including operation of turbine generators, switchboards, circulating water, and condensate pumps. Excludes costs for maintenance of plant equipment and distribution system. (Operation of facilities included in DoD/ Navy Category Codes 81125 and 81160).
Electricity, Plant Operations (Diesel/Gas)	8320	Includes cost of operation of all equipment used in the generation of electricity at internal combustion electricity plants including cost of operation of both diesel generator and gas turbine generators and all auxiliaries. Excludes costs for the maintenance of plant equipment and distribution system, and auxiliary and no-break units. (Operation of facilities included in DoD/Navy Category Codes 81110, 81145, and 81160).
Electricity, Distribution Systems	8330	Includes all operating costs incidental to the exterior distribution of electricity, including substations and switching operations up to, and including, the user's meter or similar point of count. Includes all operating costs of Energy Monitoring and Control Systems incidental to electricity savings. (Operation of facilities included in DoD/Navy Category Codes 812, 813, and 890-50).

Table 1. IMAP CACs for Electrical

1.1.5 Standard Numbering for Electrical

Figure 2 below shows the standard numbering convention for Electrical. Annex 16, Utilities has six first-tier sub-annexes. Specification 1602000 will always represent Electrical in NAVFAC contracts. Users are not authorized to edit the numbering convention.

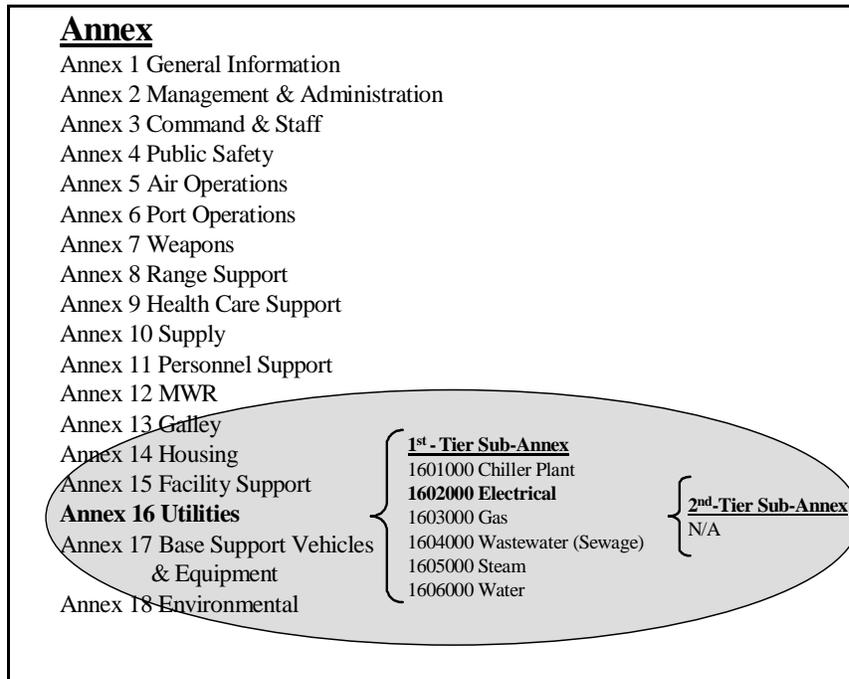


Figure 2. Standard Numbering Convention Example

The numbering convention for specification number xxyyzz0 is:

- The first 2 digits xx represent the annex number (varies from 01 to 18)
- The next 2 digits yy represent the first tier sub-annex number
- The next 2 digits zz represent the second tier sub-annex number (00 when N/A)
- The last digit is reserved for future use

1.2 Electrical Template Elements

The Electrical Template includes specifications and supporting documentation that supplement all other required contract regulations, policy and procedures as shown in Table 2 below.

Section	Title	Description
C	Performance Work Statement	Section C contains technical specifications expressing expectations of the work to be performed stated as performance objectives, related information and measurable standards. Annexes 1 and 2 will be included in every solicitation. See General Information User Guide.
J	List of Documents, Exhibits, and Other Attachments	Section J contains sample attachments (e.g., historical data, inventory, and ELINs).
L	Instructions, Conditions, and Notices to Offerors or Respondents	Section L contains sample technical proposal questions specific to Electrical.
-	Functional Assessment Plan (FAP)	The Electrical FAP provides suggested methods of assessment and sample sizes for accomplishing tiered performance assessment. For additional guidance see the General Information User Guide.

Table 2. Electrical Template Elements

1.3 Using the Electrical Template

The Template is intended to be tailored to meet client requirements for Electrical services. Users should read and understand the entire User Guide before starting the tailoring process. Users must consider all relevant guidelines to ensure that all appropriate topics are addressed.

Throughout the Template you will find the annotation <<Note to Spec Writer>>. Text within these symbols provides additional information and/or advises the user to insert appropriate information such as installation name, dollar limits, percentages, and peak electrical demand.

1.3.1 Defining Client Expectations

Pre-Planning Meetings and Analyses. The first step in the tailoring process is to determine the client’s expectations in terms of specific performance objectives and standards. An initial review of inventory and existing conditions will provide a better understanding of client expectations. Care must be taken to ensure that the client realizes the tradeoff between contract cost and “service level” expectations. In general, it will cost more to get service levels that satisfy higher expectations. Concurrent with understanding client expectations, it is essential to conduct market surveys. This statutory requirement is intended to compare the client’s desired outcomes against the technical, management and pricing alternatives available in the marketplace for satisfying the Government’s requirements.

The next step is to determine whether the client’s requirements are currently contracted, if they are a new requirement, or if they are a result of an outsourcing effort (e.g., OMB Circular A-76). Comparisons should be made with any existing acquisition strategy, in order to optimize requirements for the greatest overall good of all clients and geographic areas. Pre-planning meetings shall be held as necessary to develop a full understanding of all expectations.

The Chief of Naval Operations (CNO) Integrated Process Team (IPT) has developed standard service levels for several functional areas. Service levels will be used for resource programming and budgeting and may require the fund recipients to use the funded service levels in their solicitation. For further guidance see Section 1.3.3, *Service Levels*.

If a Client is not required to use service levels, the appropriate changes must be made to Sections C and J.

Comparison of Template WBS with Client Expectations. The next step is to evaluate site-specific requirements in conjunction with the existing Electrical Work Breakdown Structure (WBS) for Section C. The WBS is the basis for communication throughout the acquisition process. A WBS defines an acquisition in product terms, and relates them in a tree diagram that displays the relationships of the products and services to each other and to the overarching performance outcomes.

Once the client’s expectations are fully understood and the WBS has been tailored, the performance objectives and performance standards for firm fixed-price work may be reviewed and tailored to align with clients’ expectations.

Figure 3 below is the WBS for the electrical firm fixed-price work:

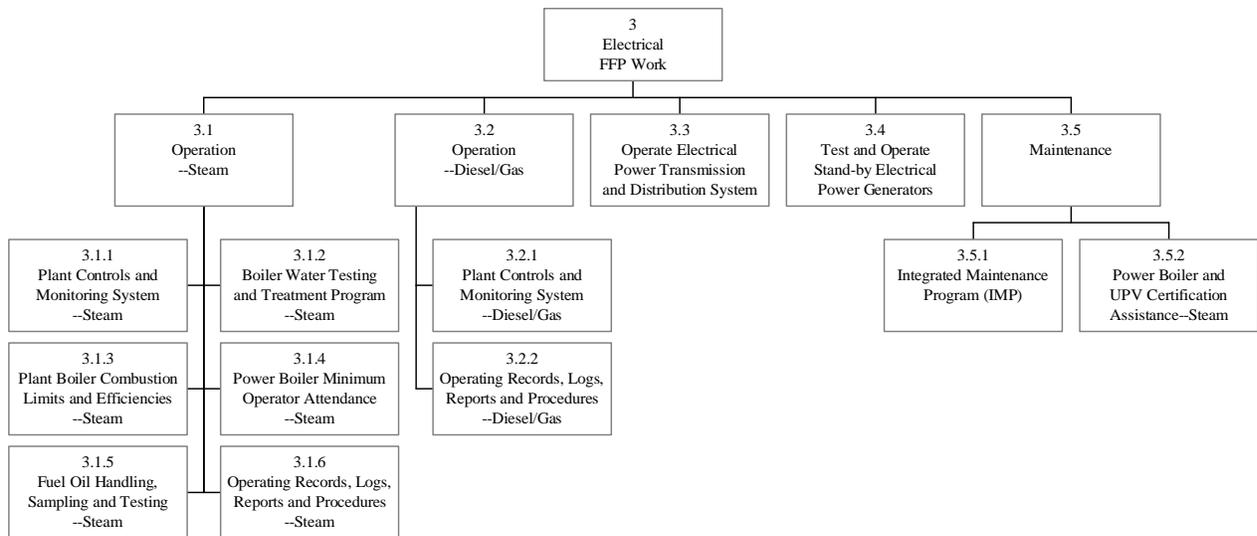


Figure 3. Electrical WBS

Client requirements that are not included in the WBS should be added and those that do not apply should be removed. For example, assume client requirements have been identified and it has been determined there are no requirements for diesel or gas-fired equipment operation and maintenance. The revised WBS would look like Figure 4 below.

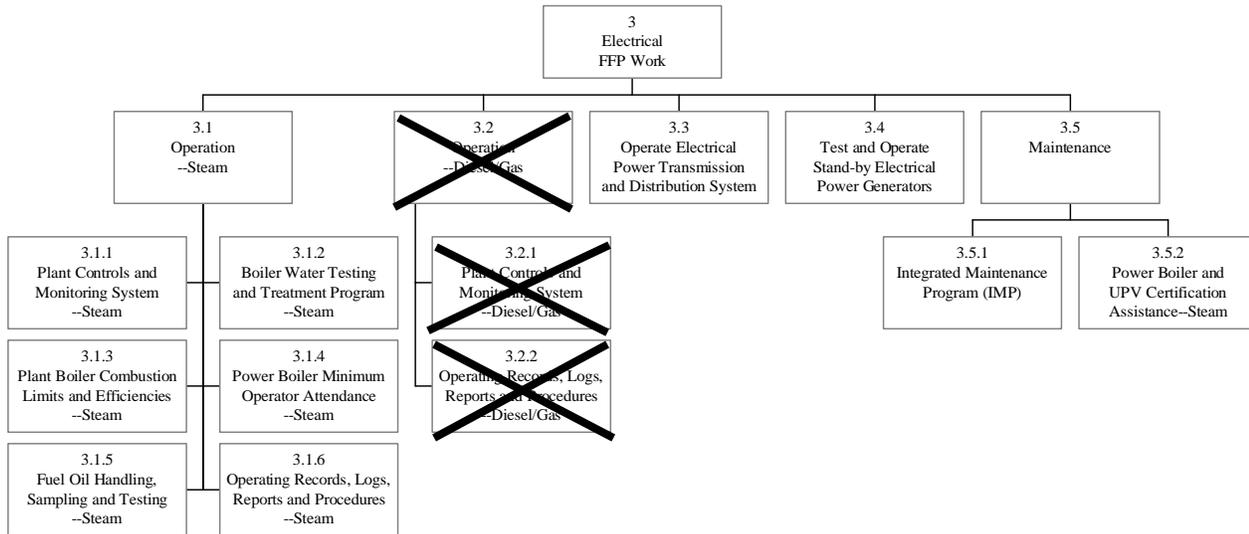


Figure 4. WBS Tailoring Example

Since there are no requirements for diesel or gas-fired equipment operation and maintenance, WBS items 3.2, 3.2.1, and 3.2.3 would be removed from the tailored WBS.

1.3.2 Tabular Format

Section C is arranged in a tabular format that facilitates methodical arrangement of requirements, clear definition of expectations, and alignment of objectives with related information and measurable standards. The tabular format shown in Table 3 below provides a small extract of the Electrical specification and includes five columns of required information: Spec Item, Title, Performance Objective, Related Information, and Performance Standard.

Spec Item	Title	Performance Objective	Related Information	Performance Standard
3.1.3	Plant Boiler Combustion Limits and Efficiencies--Steam	The Contractor shall efficiently operate plant boilers to continuously meet or exceed minimum specified combustion limits and efficiencies.	Plant boiler combustion limits shall be established by mutual test with the Government within 120 days following start of contract. Combustion limits, efficiency ratings and flue gas constituents shall be determined, checked, and measured per <<Note to Spec Writer: Insert current applicable directives and instructions, e.g., Section 3140 of NAVFACINST 11300.37>>.	Established combustion limits and combustion efficiencies for plant boilers are continuously met or exceeded. Plant boiler efficiency rating meets or exceeds 85 percent per boiler.

Spec Item	Title	Performance Objective	Related Information	Performance Standard
3.1.4	Power Boiler Minimum Qualified Operator Attendance--Steam	The Contractor shall provide qualified boiler operators in sufficient quantities of staffing per shift to efficiently and safely operate Power Boilers at all times of operation, 24 hours per day, seven days per week, throughout the contract period.	Attendance visits for operating boiler(s) shall be of sufficient duration to observe a complete operational cycle and perform operator checks.	Power Boiler operators meet minimum attendance requirements specified in <<Note to Spec Writer: Insert current applicable directives and instructions, e.g., Section 3150 of NAVFACINST 11300.37>>.

Table 3. Tabular Format

Spec Items shown in Table 3 above provide examples of firm fixed-price requirements. However the tabular format for every Section C will actually address four distinct categories of work:

- **Spec Item 1** will always include general information unique to understanding the technical requirements of the spec. This item will not require pricing by the offeror.
- **Spec Item 2** will always include management and administrative requirements unique to the planning, execution, management and administration of the performance requirements of the specification. The cost of this item will be included the offeror's total contract price. Some management conditions are necessary to ensure successful performance, e.g., Government regular working hours and environmental protection, while others are excessive, e.g., requiring ISO 9000 with no equivalent and 10 minute service call response time.
- **Spec Item 3** will always include firm fixed-priced performance requirements. For example, in Table 3 above, items 3.1.3 and 3.1.4 for Electrical are shown.
- **Spec Item 4** will always include IDIQ work requirements.

The Performance Objective is an end state that someone wants to achieve. Objectives are often expressed in terms of specific accomplishments by an organization, levels of service provided to customers, or improvements in performance of some activity when measured against an established baseline. A Performance Objective for plant boiler combustion limits and efficiencies--steam would be the following statement: *The Contractor shall efficiently operate plant boilers to continuously meet or exceed minimum specified combustion limits and efficiencies.*

Related Information consists of information for the Contractor that is specific to a performance objective. Most tailoring occurs in the Related Information column. An example of related information for plant boiler combustion limits and efficiencies--steam would be the following statement: *Plant boiler combustion limits shall be established by mutual test with the Government within 120 days following start of contract.*

Once the performance objectives and standards have been tailored to reflect client expectations, related information may be added to further clarify requirements. Information contained in this column does not merit routine Government assessment or is too costly to individually assess for the level of risk that they present. Table 4 below identifies four types of related information:

Type of Related Information	Description
Informational Notes	Informational notes is information that is not intended to constitute a material representation by the Government. Information notes will always be the last entry in the Related Information column. An example would be <i>INFORMATIONAL NOTES: Recommended frequencies for sampling boiler water are specified in Section 3120 of NAVFACINST 11300.37.</i>
Clarifying Information	Clarifying information describes client expectations in a more detailed manner than the performance objective and performance standard alone. An example of clarifying information would be <i>Operation consists of "watch-standing" or attendance type work by qualified persons during a specified time period.</i>
Constraining Information	Constraining information describes limitations to the work performed to meet the performance objective and performance standard. An example of constraining information would be <i>The Contractor shall provide the reports electronically utilizing <<Note to Spec Writer: Specify requirements or software as necessary>>.</i>
Requirement Information	Requirement information further describes client requirements associated with each performance objective. Such requirements do not individually rise to a level that merits routine Government assessment against a separate performance standard. An example of requirement information would be <i>Plant boiler combustion limits shall be established by mutual test with the Government within 120 days following start of contract.</i>

Table 4. Related Information

Performance Standards are targeted levels or ranges of performance for each characteristic that the Government monitors. At least one performance standard must exist for each performance objective. Achievement of a performance standard will either demonstrate directly that the Contractor has met the performance objective, or will enable the Government to infer with a high degree of confidence that the Contractor has met the contract performance objective. A performance standard for plant boiler combustion limits and efficiencies--steam would be the following statement: *Plant boiler efficiency rating meets or exceeds 85 percent per boiler.*

Performance objectives, related information, and performance standards clearly describe client expectations. The Electrical WBS is arranged with more subjective performance objectives and standards at higher levels (e.g., 3.1) and more quantitative performance objectives and standards at lower levels (e.g., 3.1.1). This tiered approach allows Contractor performance evaluation at higher levels provided the Contractor can demonstrate adequate performance at that higher level. Only after the Contractor has failed to perform at the higher level would we normally need to evaluate Contractor performance at lower levels of the WBS. The WBS structure lends itself well to tiered performance assessment. For additional information on performance assessment refer to the General Information User Guide.

1.3.3 Service Levels

Service levels established by OPNAV N46 are not included in the Electrical Template due to lack of existing connectional infrastructure to accommodate varying levels of utilities provision, e.g., distribution of electricity only to critical facilities. However, if a client determines service levels are required, the following provisions will allow for upgrades or downgrades in service levels on an annual basis, at time of award and/or at the exercise of an option period. The option to change service level(s) requires a preliminary notice to the Contractor. It is very important to set a

reasonable time period for this preliminary notice to allow the Contractor time to alter staffing and schedule work appropriately to be successful in meeting the new requirements. It is important to note that the shorter the notice, the riskier the start-up and the greater likelihood of higher prices. The following service level provision (NFAS approval pending) should be used for changing service levels on an annual basis. Use Alternate I if change in service levels is contemplated at the time of contract award for the base period:

Option to Change Service Level, Alternate I. Upon initial contract award the Government reserves the right to award options to increase or decrease service levels for the base period.

Option to Change Service Level. The Government reserves the right to increase or decrease the service level for each client at the time it exercises its option to extend the contract at the prices indicated in the schedule. The Government will provide _____ [*insert number of calendar days between 15 and 90*] calendar days preliminary notice of its intent to change the service level. Notice of intent will be in writing but may be in the form of an e-mail attachment, facsimile letter, or official mail signed by a Contracting Officer.

1.3.4 Section J Attachments

Sample Electrical attachments are provided in the Template. These sample attachments contain information to help Contractors determine the scope of work to be performed. Electrical attachments include inventory and historical data, and are labeled J-1602000-attachment number (two-digit number from 01 to 99).

Sample Electrical ELINs for firm fixed-price and IDIQ work are provided in the Template and labeled J-0200000-07. The Electrical firm fixed-price ELINs are structured to capture costs by IMAP CAC. The IDIQ ELIN structure includes the following columns: CAC, short description title, and full description of the work to be performed including completion times to facilitate the uploading of the IDIQ schedule into DoD EMALL. DoD EMALL is a web-based tool that allows clients to order pre-priced line items directly from the contractor using their Government purchase card.

The ELIN structure closely adheres to the guidance provided in NAVFAC Memorandum of 07 Mar 02, CONTRACT LINE ITEM RESTRUCTURING GUIDANCE.

1.3.5 Section L Questions

In a performance based contract, the Government identifies what it requires (i.e., performance objectives and performance standards) and offerors propose the “how to” methods for accomplishing these requirements. Section L contains a clause entitled CONTENT OF PROPOSALS in which offerors are required to explain their proposed performance methods and associated costs. To aid in evaluating and negotiating these proposals, it may be helpful to include in Section L specific questions for offerors to address.

Every effort should be made to minimize the number of questions. However, where information regarding the contractor’s method for performing the work poses an unacceptable risk to the Government, a specific question should be asked. Sample questions are shown in Table 5 below.

Spec Item	Questions for Electrical, Specification 1602000
2.3.1 3.1.4	What skills, experience, training, and other qualifications do proposed boiler, steam turbine, and diesel engine electrical generator plant operators possess?
3	What is the experience and technical capability of proposed key supervisory personnel in operating similar plants and systems?
3.1 3.5	What is your methodology for timely response to electrical power outages and completion of all repairs to keep the electrical power generation plant and transmission and distribution system in a fully operational condition?

Table 5. Section L Questions for Electrical

2. Conclusion

The use of the Electrical Template will facilitate performance-based contracting, use of standard service levels, IMAP accounting, and tiered performance assessment. For Template documents, training and additional assistance using the Template, contact the local Engineering Field Division (EFD).

3. Web References

Table 6 below provides helpful web references.

Title	URL	Description
OPNAVINST 4860.7	http://ned.s.nebt.daps.mil	Guidance on implementing CA program requirements
OMB Circular A-76 Supplemental Handbook	http://emissary.acq.osd.mil/inst/share.nsf	Guidance on implementing CA program requirements
IMAP website	https://ucso2.hq.navy.mil/IMAP/	Contains the latest IMAP Core Business Model
NAVFAC Acquisition	http://acq.navfac.navy.mil	NAVFAC Acquisition home page
Seven Steps to Performance Based Services Acquisition	http://oamweb.osc.doc.gov/pbsc/	Guidance for performance-based acquisition: Team Approach, Etc.
DoD PBSA Desk Guide	http://www.acq.osd.mil/ar/doc/pbsaguide010201.pdf	Department of Defense Performance-Based Services Acquisition Desk Guide.
OFPP Best Practices Guide	http://www.arnet.gov/library/OFPP/bestpractices/PPBSC/bestPPBSC.html	Office of Federal Procurement Policy best practices guide to implementing performance-based services contracting.
HHS KnowNet	http://knownet.hhs.gov/aboutKnowNet.htm	The Health and Human Services information repository of performance support.
USDA performance based service contracting	http://www.usda.gov/procurement/textonly/toolkit/pbsc.htm	United States Department of Agriculture performance based contracting toolkit
NAVFAC Facility Support Contracts	http://www.navfac.navy.mil/pw/fsc	FSC Product Line Plan initiatives and documentation.

Table 6. Web References