ATTACHMENT J1

Bolling AFB Electric Distribution System

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J1 Bolling AFB Electric Distribution System

J1.1 Bolling AFB Overview

Bolling AFB occupies 607 acres of land in southeast Washington, D.C. at the confluence of the Potomac and Anacostia Rivers. The Base is contiguous with the South Capital Street / I-295 corridor along its eastern boundary and has approximately one and one half miles of Potomac River shoreline to the west. To the south is the Naval Research Laboratory and on the north is Naval Station Washington, Anacostia (NSWA).

On the base are 61 major operational buildings and 1385 units of military family housing.

The host organization at Bolling AFB is the 11th Wing. The Wing supports Air Force members in the Pentagon, to include the Secretary of the Air Force, the Chief of Staff, and all of the Air Force's senior leadership in the D.C. area. Also supported are some 40,000 personnel in over 80 countries who are not assigned to a MAJCOM. Finally, base level support is provided at Bolling AFB, to Air Force and other services personnel, their family members, and retirees.

The Wing's support responsibilities are accomplished by the Wing Commander's staff and four Groups: The 11th Support Group, 11th Logistics Group, 11th Medical Group, and the 11th Operations Group. Unique in the Air Force, the Operations Group consists of the USAF Band, USAF Honor Guard, Arlington National Cemetery Chaplains, and the Ceremonies and Protocol Flight.

J1.2 Electric Distribution System Description

J1.2.1 Electrical System Fixed Equipment Inventory

The Bolling AFB electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Base and Government ownership currently starts to the point of demarcation, defined by the real estate instruments (Exhibit B). The system may include, but is not limited to, transformers, circuits, protective devices, utility poles, ductbanks, switches, and other ancillary fixed equipment. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base the proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

J1.2.1.1 Description

The existing medium voltage (13.2kV) electrical power distribution system consists of the main substation located in Building 18, the mini-substation located in building 4505, and a

network of underground ductbanks and feeders connected to switchgear and transformers throughout the base.

Potomac Electric Power Company (PEPCO) provides primary power to two sites at Bolling AFB. One is the main distribution substation located in Building 18, and the other is the switchgear room in Building 6000, the Defense Intelligence Agency (DIA). There are four PEPCO feeders to the main substation, and three PEPCO feeders to the DIA. The distribution system within the DIA facility is not included in this contract.

Bolling AFB has no power generation capabilities except for emergency backup generators that fall outside the scope of this utility's privatization.

J1.2.1.2 Inventory

Table 1 provides a general listing of the major electrical system fixed assets for the Bolling AFB electrical distribution system included in the purchase. The system will be sold in an "as is, where is" condition, without any warranty, representation, or obligation on the part of the Government to make alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating of the system, though not specifically mentioned here in, is considered part of the purchased utility.

TABLE 1
Fixed Inventory
Electrical Utility System Bolling AFB

Item	Size	Quantity	Unit	Approximate Year of Construction
Service Entrance (building 18)	13.2 kV	1	EA	1999
Shielded Cable, direct burial in conduit		16,070	LF	1970
4 Conductor Shielded, 4/0, in duct bank	4/0	143,580	LF	1975 – 1998
Electrical Feeder (conduit & wire)	60A	13,000	LF	1970 – 1995
Electrical Feeder (conduit & wire)	100A	12,980	LF	1970 – 1995
Electrical Feeder (conduit & wire)	400A	21,590	LF	1975 – 1987
Electrical Feeder (conduit & wire)	1200A	1,200	LF	1982
Overhead Circuits	None			
Transformers, Dry Type Ventilated	15kV/150kVA	8	EA	1974 – 1995
Transformers, Dry Type Ventilated	15kV/225kVA	30	EA	1974 – 1985
Transformers, Dry Type Ventilated	15kV/500kVA	1	EA	1980
Transformers, Dry Type Ventilated	15kV/750kVA	2	EA	1974 – 1995
Transformers, Dry Type Ventilated	15kV/1500kVA	4	EA	1974 – 1995
Transformers, Oil Filled, Pad Mounted	15kV/150kVA	14	EA	1986 – 1995
Transformers, Oil Filled, Pad Mounted	15kV/225kVA	81	EA	1986 – 1995
Transformers, Oil Filled, Pad Mounted	15kV/300kVA	34	EA	1986 – 1995
Transformers, Oil Filled, Pad Mounted	15kV/500kVA	9	EA	1986 – 1995
Transformers, Oil Filled, Pad Mounted	15kV/750kVA	11	EA	1975 – 1997
Transformers, Oil Filled, Pad Mounted	15kV/1500kVA	3	EA	1986 – 1997
Utility Poles	None			
Switches	13kV	66	EA	1970 – 1995
Vaults	4' X 6' X 7' Deep	34	EA	1920 – 1987
Vaults	6' X 8' X 7' Deep	34	EA	1920 – 1987
Vaults	6' X 10' X 7' Deep	34	EA	1920 – 1987

Item	Size	Quantity	Unit	Approximate Year of Construction
Street and Parking Lighting	None			

Notes: V = volts
EA = each LF = linear feet
kVA = nominal kilovolt-amperes

J1.2.2 Electrical System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 2
Spare Parts
Electrical System Bolling AFB

Qty	Item	Make/Model	Description	Remarks
1	Switchgear	S&C	PMH-9	None
3	Transformer	ABB-	167kVA 240/120	None
1	Transformer	Cooper	167kVA 240/120	None

TABLE 3
Specialized Vehicles and Tools
Electrical System Bolling AFB

Description	Quantity	Location	Maker
None			

J1.2.3 Electric System Manuals, Drawings, and Records Inventory

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals and Records
Electrical System Bolling AFB

Qty	Item	Description	Remarks
1	Electrical Distribution System Drawings	Drawing G-4 of the Comprehensive Plan	CADD Format
1	Electrical System Basewide Study	Study of electrical distribution system completed in August 1998	Project BXUR (96-1019)
1	Infrastructure Master Plan	Copy of the chapter on the electrical distribution system, August 1998	Hard Copy

J1.3 Specific Service Requirements

The service requirements for the Bolling AFB electrical distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Bolling AFB electrical distribution system and are in addition to those found in Section C. If there is a conflict between standards described below and Section C, the standards listed below take precedence over those found in Section C.

All replacement transformers servicing buildings 16, 20, 1304, and 5681 must be “Type K”.

J1.4 Current Service Arrangement

PEPCO provides primary power to two sites at Bolling AFB. As required by this contract, the Contractor shall demonstrate the ability to meet and shall establish the requirements to provide electrical service to Bolling AFB. The power consumption in Fiscal Year 1999 was approximately 53 Million kWh through the meter at Building 18 with a monthly maximum demand of ranging from approximately 6000 kW to 12000 kW.

J1.5 Secondary Metering

The Base may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3 (except those noted in Table 5 as being owned by PEPCO).

J1.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW Paragraphs C.3 and J1.6 below.

TABLE 5
Existing Secondary Meters
Electrical System Bolling AFB

BLDG ##	No. of Meters	Type	Location/Comments
1	1	Digital	SouthEast Electric room
2	1	Digital	Inside SouthEast Electric room
4	2	Digital	In Basement Mech Room
5	1	Digital	On south wall in South bay (need to remove the old meter)
7	1	Digital	On East interior wall
8	1	Dial	On North west Exterior wall
10	1	Digital	In Northwest corner office
11	1	Digital	In Southeast Mech Room
12	1		New slot in hallway to mechanical room
15	2		Has 2 slots for meters on east exterior wall
16	1	Digital	inside mechanical room
17	1	Digital	In Mech room
18*	3	Dial	owned by PEPCO
		Digital	All new switch gear
20	1	Dial	In Basement Mech Room
21	1	Dial	In Basement Mech Room

38	2	Digital	In Mech room (1 is reading error)
41	1	Dial	On East Exterior wall
47	1	Digital	On East Exterior wall
46/49	1	Digital	On XFMR
50	2	1 Ea Digital & Dial	Digital on West Electrical Gear/Dial on East Electrical Gear
51	1	Digital	Just inside Laundry Room
52	1		Slot for meter on west exterior wall of electrical room
56	1	Digital	On East wall in office
90	1	Dial	On east exterior wall
94	1	Digital	In electric Room South wall (need to call PWS for Navy for access)
361	1	Dial	In mech room (Secondary off of the meter on XFMR by 362)
362	2	1 Ea Digital/Dial	Dial on XFMR on North of Bldg/Digital on north wall in Mech room
364	1	Digital	In 2nd bay from North end on BLDG
370	1	Digital	in Mechanical Room
371	1	Digital	in Mechanical Room
520	1	Digital	in Northeast Mechanical Room
602	1	Dial	in Mechanical room
628	1	Digital	in North mechanical room
902	1	Dial	on East exterior wall
928	2	Digital	in North mechanical room (1 may be running backwards)
1300	1	Digital	In Mechanical room
1301	1	Dial	In electric room (Does not Work)
1302	2	1 Ea Digital & Dial	In Electric room (Bell Atlantic meter is Dial/BLDG meter is digital)
1303	1	Digital	In Mechanical room
1305	1	Digital	In mechanical room
1306	1	Digital	In mechanical Room
1307	1	Digital	In Electric room thru tickets & tours office
1310	1	Dial	On XFMR 164 on south side of bldg
1311	1	Both	on XFMR at northeast corner on Bldg
1527A	1	Dial	On Storage Shed (MFH)
2482	1	Digital	In electric closet
2565	1	Digital	in Mechanical room

3610	1	Digital	on east wall In mechanical room
3618	1	Dial	on XFMR 190
3621	1	Dial	on XFMR 159
3623	2	1 EA Digital & Dial	Digital in Mechanical Room/Dial on XFMR 142
4439	1	Digital	in Mechanical room
4447	1		In Mechanical room (Bad/missing CT's)
4472	2	Dial	in Mechanical Room
4485	1	Dial	on XFMR 155
4500	1	Dial	on East exterior wall
4505	6	Dial	None are working
4514	9	Dial	1 Main in Main Mech room/8 in mech room by latrines for Food Court
4570	1	Dial	in Mechanical Room
5681	1	Dial	in Electrical room
5683	1	Dial	in Electrical room in Penthouse
5795 *	1	Dial	owned by PEPCO
5797	1	Digital	on West Inside Wall
6000 *	3	Dial	owned by PEPCO
7101	1	Digital	In SouthWest corner of BLDG
By Qtrs 88	1	Dial	on XFMR 105

* Meters owned by PEPCO do not become the property of the new service provider but remain the property of PEPCO. The new service provider must however, read these meters and report the readings in the same fashion as all other meters.

J1.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J1.6 below.

TABLE 6
New Secondary Meters
Electrical System Bolling AFB

Meter Location	Meter Description
Transformer 170 near Building 23	KWH
Transformer 171 near Building 29	KWH
Building 18 power supply to the Central Chilled Water Plant**	KWH
Building 18 power supply to the Central Heat Plant**	KWH
Building 523, Launderette	KWH
Building 4514, Base Exchange	KWH – Replace existing inoperable meter

Meter Location	Meter Description
Building 4447, Bolling Federal Credit Union	KWH– Replace existing inoperable meter

** Not sure whether these can be separated easily – Figure on four (4) meters – one (1) each on the three (3) transformers inside building 18, and one on the 120v/208v transformer on Brookley Avenue.

J1.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW paragraph G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

   Name: Financial Management Section Chief, 11CES/CERF
   Address: 370 Brookley Avenue, Washington DC 20332-5000
   Phone number: 202-404-6516

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

   Name: Maintenance Engineering Section Chief, 11CES/CEOE
   Address: 370 Brookley Avenue, Washington DC 20332-5000
   Phone number: 202-404-8204

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

   Name: Maintenance Engineering Section Chief, 11CES/CEOE
   Address: 370 Brookley Avenue, Washington DC 20332-5000
   Phone number: 202-404-8204

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

   Name: Maintenance Engineering Section Chief, 11CES/CEOE
   Address: 370 Brookley Avenue, Washington DC 20332-5000
   Phone number: 202-404-8204

J1.7 Energy Saving Projects

IAW paragraph C.3, Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes.

None.

J1.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Bolling AFB boundaries to include the Civil Engineering Squadron (CES) complex located on Naval Station Washington, Anacostia served by the electrical distribution system originating from Bolling AFB.

J1.9 Off-Installation Sites

No off-installation sites are included in the sale of the Bolling AFB electric distribution system.

J1.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** lists service connections and disconnections required upon transfer.

TABLE 7
Service Connections and Disconnections
Electrical System Bolling AFB

Location	Description
None.	

J1.11 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the BOLLING AFB electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered when the upgrade is put in useful service and, as proposed in Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Improvement Projects
Electrical System Bolling AFB

Project Location	Project Description
4505	Correct undersized CT's at switching station 4505

Refer to Bolling Air Force Base Infrastructure Master Plan for additional information