ATTACHMENT J23

Sheppard AFB Electric Distribution System

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J23 Sheppard AFB Electric Distribution System

J23.1 Sheppard AFB Overview

Sheppard AFB, located immediately north of Wichita Falls in Wichita County, Texas, is an Air Education and Training Command (AETC) installation that conducts technical, medical, field, and pilot training. The host command is the 82nd Training Wing (82 TRW), the largest of the four AETC technical training wings. The Base's primary tenant is the 80th Flying Training Wing (80 FTW), which trains pilots under the Euro NATO Joint Pilot Training (ENJJPT) Program.

Sheppard AFB occupies 5,719 acres and contains approximately 1,120 buildings with a total of 8.6 million square feet.[1] Four parallel runways bound the Base to the northeast, and approximately 220 functional aircraft (T-37s and T-38s) are assigned to the 80 FTW.

The Base has a total population of approximately 24,000, including military personnel, civilian employees and support personnel, students, and dependents. Sheppard AFB's annual payroll is approximately $315 million (combined military and civilian), and the Base contributes significantly to the local economy through civilian employment, contracting, and purchases from local businesses.

J23.2 Sheppard AFB Electric Distribution System Description

J23.2.1 Electric Distribution System Fixed Equipment Inventory

The Sheppard AFB electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, transformers, circuits, protective devices, utility poles, ductbanks, switches, street lighting fixtures, and other ancillary fixed equipment. The actual inventory of items sold will be established in the Bill of Sale at the time the system is transferred. 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 its 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.

Specifically excluded from the electric distribution system privatization are:

- Security lights that are mounted directly on buildings.
- Airfield lighting, airfield lighting vaults and all associated equipment

[1] The nonresidential structures include offices, industrial maintenance and repair facilities, and community service facilities such as Sheppard Hospital. The housing units include detached single residences, townhouses, Visiting Officers' Quarters (VOQs), Visiting Airmens' Quarters (VAQs), and Temporary Lodging Facilities (TLFs).

J23.2.1.1 Description

Electric power is supplied to Sheppard AFB through two 69-kilovolt (kV) transmission lines into the Base-owned substation. The substation contains the incoming transmission structures, transformers, switches, switchgear, and connecting bus and cables. The two 69 kV lines feed two 69/12.47 kV transformers.[2] Motor-operated switches, owned by Texas Utilities Electric (TUE) are located on the high-voltage side of the transformers. Base ownership of the electric facilities starts at the high-voltage side of the transformers.

The distribution system consists of three-phase, four-wire line rated at 15 kV; the overhead portion currently total approximately 68,325 linear feet (lf) and the underground portions (in conduit) total approximately 143,297 lf. The three Military Family Housing (MFH) areas, for example, are served by underground circuits that minimize tree trimming and problems associated with rear lot servitudes in residential areas. A three-phase circuit that splits to serve the housing with single-phase underground circuits feeds these areas.

A single TUE line in the event of a problem with the other line may feed the entire base distribution system. This is accomplished by closing a manual tiebreaker between the two sections of 12.47 kV bus in the switchgear. To close the tie, the main breaker must be tripped and the tie closed manually. There is no supervisory control and data acquisition (SCADA) system for remote operation of the switchgear, but the equipment and switchgear are wired for future SCADA installation. The switchgear contains 12 feeder breakers; 11 are for the distribution circuits and 1 serves as a spare.

The positioning of switches throughout the distribution system in most cases provides backup from one circuit to another. Mission-critical facilities such as the flight training area have diesel generators for backup power, rather than feeds from other circuits. Most of the dormitories are also located on radial feeds with no backfeed; however, the dormitories are not considered mission-critical facilities and do not have backup generators. In addition, electrical power for the on-base school is supplied directly by TUE through a circuit separate from the Base system.

Construction dates for the underground and overhead circuits, and other system components, range from the mid 1970s to the 1990s. The substation was constructed in 1995. Seventy utility poles were replaced in 1992.

J23.2.1.2 Inventory

Table 1 provides a general listing of the major electric distribution system fixed assets for the Sheppard AFB electric distribution system included in the sale**.**

TABLE 1
Fixed Inventory
Electric Distribution System, Sheppard AFB

Item	Size	Quantity	Unit	Approximate Year of Construction
Substations				
Main		1	EA	1985
Power Transformers				
MVA	20	2	EA	1995

[2] The Base typically receives 64 kV from TU; automatic tap changers on the substation transformers adjust the voltage to provide 12.47 kV to the distribution system. Low voltage is therefore not a problem.

Item	Size	Quantity	Unit	Approximate Year of Construction
Underground Circuits	**AWG**	**Length (ft)**		
3ph, 4w, 15000V, in conduit	#4/0	1,920	LF	1995
3ph, 4w, 15000V, in conduit	#350	27,767	LF	1995
3ph, 4w, 15000V, in conduit	#2	4,056	LF	1985
3ph, 4w, 15000V, in conduit	#1/0	7,759	LF	1985
3ph, 4w, 15000V, in conduit	#4/0	13,777	LF	1985
3ph, 4w, 15000V, in conduit	#350	46,013	LF	1985
3ph, 4w, 15000V, in conduit	#500	2,288	LF	1985
3ph, 4w, 15000V, in conduit	#2	18,299	LF	1975
3ph, 4w, 15000V, in conduit	#1/0	4,651	LF	1975
3ph, 4w, 15000V, in conduit	#4/0	5,206	LF	1975
3ph, 4w, 15000V, in conduit	#350	4,429	LF	1975
3ph, 4w, 15000V, in conduit	#500	7,132	LF	1975
Overhead Circuits				
3ph, 4w, 15000V, Conductor	#2/0 CU	11857	LF	1995
3ph, 4w, 15000V, Conductor	#4/0 CU	2800	LF	1995
3ph, 4w, 15000V, Conductor	#6 CU	1020	LF	1985
3ph, 4w, 15000V, Conductor	#4 CU	3345	LF	1985
3ph, 4w, 15000V, Conductor	#2/0 CU	1361	LF	1985
3ph, 4w, 15000V, Conductor	#4/0 CU	1800	LF	1985
3ph, 4w, 15000V, Conductor	#4 CU	9840	LF	1975
3ph, 4w, 15000V, Conductor	#2 CU	4185	LF	1975
3ph, 4w, 15000V, Conductor	#1 CU	937	LF	1975
3ph, 4w, 15000V, Conductor	#1/0 CU	5430	LF	1975
3ph, 4w, 15000V, Conductor	#2/0 CU	7406	LF	1975
3ph, 4w, 15000V, Conductor	#4/0 CU	10157	LF	1975
3ph, 4w, 15000V, Conductor	#350 CU	9087	LF	1975
Transformers	**Nom kVA**	**No.**		
3-Phase	75	1	EA	1995
3-Phase	112.5	3	EA	1995
3-Phase	150	1	EA	1995
3-Phase	225	1	EA	1995
3-Phase	300	1	EA	1995
3-Phase	500	5	EA	1995
3-Phase	750	7	EA	1995
3-Phase	1000	3	EA	1995
3-Phase	45	4	EA	1985
3-Phase	75	6	EA	1985
3-Phase	113	10	EA	1985
3-Phase	150	12	EA	1985
3-Phase	225	7	EA	1985
3-Phase	300	14	EA	1985
3-Phase	500	15	EA	1985
3-Phase	750	14	EA	1985
3-Phase	1000	16	EA	1985
3-Phase	1500	7	EA	1985
3-Phase	2000	1	EA	1985

Item	Size	Quantity	Unit	Approximate Year of Construction
3-Phase	45	2	EA	1975
3-Phase	75	2	EA	1975
3-Phase	112.5	8	EA	1975
3-Phase	150	5	EA	1975
3-Phase	225	3	EA	1975
3-Phase	300	11	EA	1975
3-Phase	500	11	EA	1975
3-Phase	750	7	EA	1975
3-Phase	1000	9	EA	1975
3-Phase	1500	2	EA	1975
3-Phase	2000	1	EA	1975
1-Phase	10	1	EA	1995
1-Phase	15	4	EA	1995
1-Phase	25	11	EA	1995
1-Phase	37.5	33	EA	1995
1-Phase	50	57	EA	1995
1-Phase	75	27	EA	1995
1-Phase	100	8	EA	1995
1-Phase	167	3	EA	1995
1-Phase	5	1	EA	1985
1-Phase	15	9	EA	1985
1-Phase	25	10	EA	1985
1-Phase	37.5	10	EA	1985
1-Phase	50	30	EA	1985
1-Phase	75	65	EA	1985
1-Phase	100	2	EA	1985
1-Phase	167	3	EA	1985
1-Phase	5	1	EA	1975
1-Phase	10	21	EA	1975
1-Phase	15	25	EA	1975
1-Phase	25	26	EA	1975
1-Phase	37.5	19	EA	1975
1-Phase	50	26	EA	1975
1-Phase	75	9	EA	1975
1-Phase	100	5	EA	1975
Utility Poles	**Height (ft)**	**No.**		
	40	5	EA	1995
	45	3	EA	1995
	Other	0	EA	1995
	25	10	EA	1985
	30	45	EA	1985
	35	274	EA	1985
	40	183	EA	1985
	45	79	EA	1985
	25	2	EA	1975
	30	15	EA	1975
	35	231	EA	1975

Item	Size	Quantity	Unit	Approximate Year of Construction
	40	242	EA	1975
	45	110	EA	1975
Switches	**Type**	**No.**		
	3-Way	2	EA	1985
	4-Way	32	EA	1985
	2-Way	1	EA	1975
	3-Way	3	EA	1975
	4-Way	7	EA	1975
Vaults	**Type**	**No.**		
	Utility	122	EA	1995
	Utility	40	EA	1985
	Utility	49	EA	1975
Lighting	**Type**	**No.**		
	Street	1013	EA	1985
	Street	1014	EA	1975
Traffic Signals				
Traffic Signal Systems		4	EA	1975

Notes:
EA= Each LF= Liner Feet
Nom kVA= Nominal kilovolt-amperes PH= Phase
AWG= American Wire Gauge

J23.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the sale. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2
Spare Parts
Electric Distribution System, Sheppard AFB

Qty	Item	Description	Make/Model /Remarks
2	Substation Transformers	Type OLTC - 20/26/33 MVA; High Voltage: 69000 Delta; Low Voltage 12470Y/7200	North American Transformer/ Serial No. 51393 A&B
15	Lightning Arrestor	10 KV; Elbow	Underground
12	Insulating Plug	15 kv/600A with cap; epoxy	Underground
6	In line splice	2 AWG-3/0; poured	Underground
15	Electrical elbow	15 kv #2 Cu; Load break	Underground
15	Electrical elbow	1/0 AWG; Load break	Underground
15	Electrical elbow	2/0 AWG; Load break	Underground
24	Electrical elbow	4/0 AWG; Load break	Underground
15	Terminal Connector	#2 Str. Cu; Stem	Underground
15	Terminal Connector	1/0 AWG; Stem	Underground
15	Terminal Connector	2/0 AWG; Stem	Underground
15	Terminal Connector	4/0 AWG; Stem	Underground
30	Mounting Bracket	Termination	Underground
30	Electrical elbow	8.3 kv/600A; Deadbreak	Underground
6	T- Body	15kv/600A	Underground
15	Insert Bushing	200A/15 kv; Rubber; Loadbreak	Underground

Qty	Item	Description	Make/Model /Remarks
8	Termination Kit	5633k, Quick Term	Underground
8	Termination Kit	15kv cable; 5635 k; cold shrink	Underground
6	Compression Connector	1/0; 15 kv/600 A; Al/Cu	Underground
6	Compression Connector	4/0; 15 kv/600 A; Al/Cu	Underground
6	In line splice	#2; Molded rubber	
6	In line splice	1/0 AWG; Molded rubber	
6	In line splice	2/0 AWG; Molded rubber	
40	In line splice	10 - 1/0; Cold shrink	
4	In line splice	3/0 - 4/0; 15 kv; Cold shrink	
4	In line splice	#2 - 1/0:15 kv; Cold shrink	
6	Electrical elbow	8.3 kv/600A; Deadbreak	
6	Bushing equipment	600 amp; epoxy w/o stud	
15	Insert loadbreak	15 kv/ 200 amp; feed thru; rubber	
25	Compression Connector	#6 - #14 AWG; Al / Cu	
25	Compression Connector	#6 - #1 AWG; Al / Cu	
25	Compression Connector	2/0 - 3/0; Al / Cu	
25	Electrical connector	1/0 - 3 ACSR Crimp on; All purpose	
25	Electrical connector	2/0 - #2 Crimp on; All purpose	
25	Electrical connector	4/0 - 4 ACSR Crimp on; All purpose	
25	Compression Connector	4/0 - 1/0 AWG; Al/ Cu	
25	Compression Connector	4/0 - 4/0 AWG; Al / Cu	
9	Compression Connector	4/0 - 400 MCM Crimp on; All purpose	
9	Compression Connector	336 - 500 MCM Crimp on; All purpose	
20	Split Bolt connector	2/0 Cu	
15	Split Bolt connector	500 MCM; Al /Cu	
15	Split Bolt connector	250 - 350 MCM wire; Bronze	
12	Terminal Lug	#2 AWG; Compression 2 hole	
20	Terminal Lug	1/0; Compression 2 hole	
20	Terminal Lug	2/0; Compression 2 hole	
20	Terminal Lug	500 MCM; Compression 1 hole	
12	Split Bolt connector	750 MCM; Al / Cu	
15	Bolted connector	4/0 - 500; Cu; 2 hole lug	
20	Compression Connector	2 - 1 AWG; In line; Al / Cu	
10	Compression Connector	2 - 4 AWG; In line; Al / Cu	
20	Compression Connector	1/0; In line; Al / Cu	
20	Compression Connector	2 -1/0; In line; Al / Cu	
20	Compression Connector	2/0; In line; Al / Cu	
6	Splice kit	10 - 2 AWG; Resin poured	
10	Ballast HPS	250 W multi tap; S50	
2	Ballast kit	400 w multi tap	Magnetek
3	Board assembly	30 amp / 480 volt contactor	MR-PH
1	Lightning contactor w/ enclosure	30 amp / 480 volt; 120 v coil	
2	Breaker	100 amp; 2 pl bolt on	EQ-B
1	Ballast	120 v, 400 w; Metal Halide	Magnetek
6	Timer (Tennis Courts)	120 v, 60 minute; Spr wound	
20	Fuse link	8.3 - 15 kv, 65 amp; Type T	

Qty	Item	Description	Make/Model /Remarks
20	Fuse link	15 amp	
20	Fuse link	20 amp	
20	Fuse link	8.3 - 15 kv, 25 amp; Type T	
20	Fuse link	8.3 - 15 kv, 30 amp; Type T	
20	Fuse link	7.2 kv, 50 amp; Type T	
20	Fuse link	5.2 - 27 Kv, 140 amp; Type T	
20	Fuse link	8.3 - 15 kv, 40 amp; Type T	
20	Fuse link	7.2 - 14.4 kv, 6 amp; Type T	
20	Fuse link	7.2 - 14.4 kv, 4 amp; Type T	
20	Fuse link	7.2 - 14.4 kv, 10 amp; Type T	
20	Fuse link	7.2 - 14.4 kv, 20 amp; Type T	
20	Fuse link	7.2 - 14.4 kv, 80 amp; Type T	
20	Fuse link	7.2 - 14.4 kv, 100 amp; Type T	
20	Fuse link	7.2 - 14.4 kv, 200 amp; Type T	
20	Fuse link	8.3 - 15 kv, 3 amp; Type T	
12	Step Down Transformer	480 v / 120 v Dry type	
1	Fault locator		Stock # P573A/P
1	Grounding Set	200 amp, 3 ph; Load break elbow	
6	Grounding bushing	200 amp, 1 ph; parking stand	
1	Overhead grounding set	3 ph; Primary distribution	
13	30' Wood poles		
8	35' Wood poles		
11	40' Wood poles		
11	45' Wood poles		
1	55' Wood poles		
1	High reach truck		IHC Model 51700

TABLE 3
Specialized Vehicles and Tools
Electric Distribution System, Sheppard AFB

Qty	Item	Description	Maker/Remarks
	Hot line sticks		
2		30' Extendo stick	Test due 10 Sep 99
2		8' Grip all stick	Test due 10 Sep 99
3		8' Tie stick	Test due 10 Sep 99
2		8' Hot line holder	Test due 10 Sep 99
1		12' Switch stick	Test due 10 Sep 99
1		6' Switch stick	Test due 10 Sep 99
2		5' Hot line holder	Test due 10 Sep 99
1		6' Grip all stick	Test due 10 Sep 99
1		6' Hot line cutter	Test due 10 Sep 99
2		4' Link Stick	Test due 10 Sep 99
1		7' Hydra pruners	Test due 10 Sep 99
1		7' Hydra chainsaw	Test due 10 Sep 99
1		6' Hydra cutter	Test due 10 Sep 99
5		4' Extend pruner	Test due 10 Sep 99
1		4' Extend pruner	Test due 29 Aug 99

Qty	Item	Description	Maker/Remarks
2		9' Grip all sticks	Test due 29 Aug 99
1		8' Grip all stick	Test due 29 Aug 99
1		5' Switch stick	Test due 29 Aug 99
3		Mechanical jumpers	Test due 29 Aug 99
3		5' Tension puller	Test due 29 Aug 99
2		6' Universal stick	Test due 29 Aug 99
1		50' Extendo measure	Test due 29 Aug 99
1		30' Extendo stick	Test due 29 Aug 99
1		40' Extendo stick	Test due 29 Aug 99
1		6' Elbow puller	Test due 29 Aug 99
2		6' Grip all stick	Test due 29 Aug 99
1		5' Hot line holder	Test due 29 Aug 99
	Hoses, Hoods & Blankets		
13		Rubber hoses	Test due May 00
7		Rubber hoses	Test due Feb 00
6		Line guard hoses	Test due May 00
6		Rubber hoods	Test due Feb 00
9		Rubber hoods	Test due May 00
3		Line guard hoods	Test due May 00
11		Rubber blankets	Test due Nov 99
3		Rubber blankets	Test due Feb 00

J23.2.3 Electric Distribution System Manuals, Drawings, and Records

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

TABLE 4
Manuals and Records
Electric Distribution System, Sheppard AFB

Qty	Item	Description	Remarks
1	CD	Utility System Drawings	Electric Distribution System

J23.3 Specific Service Requirements

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

- In accordance with paragraph C.5.1.3, *Contractor Facilities*, all new and renewal electric utility services shall be placed underground unless otherwise agreed to by both parties.
- The Contractor shall coordinate with the Base Civil Engineer or equivalent agency as designated by the contracting officer any changes to the street lights or security lights that may affect blackout procedures during Government operations.
- The Contractor shall enter into a Memorandum of Understanding with the Sheppard Air Force Base Fire Department for fire protection of all facilities included in the purchase of the utility. The Contractor shall abide by Sheppard AFB fire protection requirements. The Contractor shall maintain the fire alarm system for all facilities included in the

purchase of the utility. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.

- IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by the Sheppard Air Force Base Civil Engineer Control Center or equivalent agency for exercises and crisis situations.
- The Contractor shall provide monthly meter reading reports IAW Paragraph J23.6, and that meet the following requirements:
  The Contractor shall keep a meter books with monthly consumption and demand (if applicable) for each meter readings. Meter books shall also include building address or facility number, meter number, previous month readings, current month readings, multipliers for each meter, total monthly consumption, points of contact for meter questions, and procedure for converting meter reads into consumption (including multipliers). The Government may provide a format in a Microsoft Excel files to be used for meter readings.
- For all privatized lighting fixtures, operations and maintenance of lighting fixtures includes the purchase and replacement of the lighting element and the removal and disposal of replaced lighting element.

J23.4 Current Service Arrangement

Texas Utilities Electric (TUE) supplies power to Sheppard AFB. Electric power annual consumption at Sheppard AFB is approximately 118.7 million kilowatt-hours (kWh). The Air Force however, may enter into agreements in the future to purchase power from other wholesalers.

The peak demand for FY98 was approximately 28 megawatts (MW), occurring in August. Several projects planned for Sheppard AFB may increase the total square footage of buildings on base by about 6 percent.

J23.5 Secondary Metering

The Installation 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.

J23.5.1 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 Paragraph C.3 and J23.6 below.

TABLE 5
Existing Secondary Meters
Electric Distribution System Sheppard AFB

Meter Location	Meter Description
Building 61, Cold Storage	Serial No:
Building 55 & 57,Auto Hobby	Serial No: 83081466
Building 810, Chapel	Serial No: 64798284
Building 811, North Bowling	Serial No: 64796114

Meter Location	Meter Description
Building 832, Arts & Crafts	Serial No: 64661142
Building 825, N Gym	Serial No: 82854679
Building 840, Theater	Serial No: 70187045
Building 726, Dorm	Serial No: 70198653
Building 716, Dorm	Serial No: 74202297
Building 526, Dorm	Serial No: 70198654
Building 516, Dorm	Serial No: 70198650
Building 402, CBPO	Serial No: 39808185
Building 400, L Snack Bar	Serial No: 55470538
Building 400, 480v HQ	Serial No: 70105292
Building 318, South Bowling	Serial No: 70187042
Building 333, BOQ	Serial No: 64794747
Building 332, BOQ	Serial No: 64791901
Building 331, BOQ	Serial No: 64791892
Building 312, Library	Serial No: 70181479
Building 316, Legal Office	Serial No: 39637356
Building 202, BX Shoppette	Serial No: 64083899
Building 200, Ft. Sill National Bank	Serial No: 44297721
Building 212, SF Credit Union	Serial No: 43092025
Building 101, ATM Machine	Serial No: 64651065
Building 100, Pharmacy	Serial No: 89012012
Building 125, Package Store	Serial No: 82676691
Building 127, ENJJPT Qtrs	Serial No: 74969602
Building 128, ENJJPT Qtrs	Serial No: 74969529
Building 129, ENJJPT Qtrs	Serial No: 74969540
Building 130, ENJJPT Qtrs	Serial No: 74969598
Building 131, ENJJPT Qtrs	Serial No: 74969518
Building 132, ENJJPT Qtrs	Serial No: 74969516
Building 133, ENJJPT Qtrs	Serial No: 74969515
Building 134, ENJJPT Qtrs	Serial No: 74969538
Building 120, Commissary	Serial No: 63488447
Building 238, Barber Shop	Serial No: 58893018
Building 239, Main BX	Serial No: 30886636
Building 237, Data Auto	Serial No: 84306473
Building 340, O Club Transformer	Serial No:
Building 340, O Club Mech Room	Serial No: 70187053
Building 430, Rec Center - Inside	Serial No: 62041553
Building 430, Rec Center	Serial No: 83116481
Building 649, W Amn Club	Serial No: 70187034
Building 649, E Amn Club	Serial No: 70182696
Building 740, Mini Mall	Serial No: 69881458
Building 790, Dorm	Serial No: 70176515
Building 796, Family Services	Serial No: 39637348
Building 776, Dorm	Serial No: 70198657
Building 692, PP Dorm	Serial No: 71521042
Building 633, Electrical Room	Serial No:
Building 596, Dorm	Serial No: 70198658
Building 551, R Post Office	Serial No: 82615075

Meter Location	Meter Description
Building 551, L Post Office	Serial No: 82615076
Building 530, Dorm	Serial No: 31082613
Building 450, Main Gym	Serial No: 64794571
Building 473, Football Field	Serial No: 83901252
Building 460, Pool	Serial No: 64791885
Building 370, VOQ	Serial No: 71410249
Building 370, NE	Serial No: 68169944
Building 370, SW Center	Serial No: 68169945
Building 370, W	Serial No: 68169943
Building 260, E Mech Room	Serial No:
Building 240, VOQ	Serial No: 70581382
Building 240, VOQ 2017-2024	Serial No: 76374679
Building 240, VOQ 2041-2048	Serial No: 76372894
Building 240, VOQ 2081-2088	Serial No: 76374678
Building 147, Youth Center	Serial No: 49200012
Building 140, SE Water Tower	Serial No: 90124034
Building 140, SW Water Tower	Serial No: 90134371
Wherry	Serial No: 90150257
Building 4493, Golf Maintenance	Serial No: 84982956
Golf Course Irrigation System	Serial No: 71540587
Building 10037, SE Ball Field	Serial No: 83901266
Building 10037, SW Ball Field	Serial No: 82804900
Building 4475, Chapel	Serial No: 64791908
Building 10037, SW Ball Field	Serial No: 82804901
Building 195, Child Care W Mech Room	Serial No:
Building 160, TLF	Serial No: 69455130
Building 161, TLF	Serial No: 69455170
Building 162, TLF	Serial No: 69455172
Building 163, TLF	Serial No: 69455176
Building 163, TLF	Serial No: 69386551
Building 164, TLF	Serial No: 69455133
Building 165, TLF	Serial No: 69455168
Building 280, Dorm Transformer	Serial No: 92680187
Building 280, Dorm Transformer	Serial No: 92658270
Building 384, Fitness Center	Serial No:
Building 10032, Golf Course	Serial No: 83081456
Building 1662, 7 Level School	Serial No:
Building 1664, Inspector	Serial No: 70185714
Building 1664, Mech Room	Serial No: 70174219
Building 1658, Religious Education	Serial No: 82776004
Building 1638	Serial No: 82748219
Building 1624, Mech Room	Serial No: 76464794
Building 1364, 1362 PMEL	Serial No: 81785051
Building 1368, Pad Northwest	Serial No: 78727932
Building 1360, Transformer	Serial No: 76311570
Building 10027, Field	Serial No: 81354255
Building 10027, Restrooms	Serial No: 83901254
Building 1100, Visitor Center	Serial No: 86873329

Meter Location	Meter Description
Building 1105, Gas Station	Serial No: 91414083
Building 1108, Enlisted Club	Serial No: 31019939
Building 1121, Base Supply	Serial No: 75941986
Building 1511, VOQ	Serial No: 64799405
Building 128, Mercury	Serial No: 62439443
Building 128, Mercury	Serial No: 74969599
Bunker Hill	Serial No: 79124191
Building 1215, Chiller/Boiler Plant	Serial No: 71085556
Building 1400, N. Gas Station	Serial No: 83037970
Building 5590, Capehart Pool	Serial No: 82775994
Building 10031, Hospital Tennis Court	Serial No: 85451394
Capehart	Serial No: 63262776
Building 10028, N. Ball Field	Serial No: 85451406
Building 2123, Rifle Range	Serial No: 70188713
Building 2135, DRMO	Serial No: 70188712
Building 2142, Haz Mat Storage	Serial No: 81200469
Building 2117, Outdoor Rec	Serial No: 91159237
Building 2111, Mech Room	Serial No: 70513339
Building 2112, Motor Pool Wash	Serial No: 70549443
80th FTW Area	Serial No: 64861629
Building 2207, Lift Station	Serial No: 92530131
Building 2380, Skeet Range	Serial No: 84894350
Building 2416	Serial No: 82665688
Building 2414, Fuel Cell Repair	Serial No: 31037207
Building 2412	Serial No: 76261533
Building 2558, RAPCOM	Serial No: 68580250
Building 2400	Serial No: 75941982
CASS L	Serial No: 69981259
Building 2320, Snack Bar	Serial No: 56497936
CASS R	Serial No: 69981258
Building 2322, R Analog Dial	Serial No: 91476109
Building 2322, R Digital	Serial No:
Building 2322, Analog Dial	Serial No: 91476108
Building 2322, L Digital	Serial No:
Building 2330, SW Transformer	Serial No: 31055606
Pad #3, AAFES	Serial No: 61690340
Building 1917, Dental Training	Serial No: 31021139
Building 1921, Bernard Hall	Serial No: 70198648
Building 1927, CE Training	Serial No: 70198651
Building 1929, Entomology	Serial No: 70191201
Building 1928, Metal Shop	Serial No: 64798278
Building 1937, On Transformer	Serial No:
Building 1927, CE Training Room 141	Serial No: 70198655
Building 1950, COMM Training	Serial No: 70198649
Building 1951, Central Plant	Serial No:
Building 1025, Tech Training Classroom	Serial No:
Building 1035, HTG Facility Building	Serial No:
Building 1045, HiBay Tech Training	Serial No:

Meter Location	Meter Description
Building 1093, Fire Station	Serial No: 68001428
Runway	Serial No: 64861627
Building 996	Serial No: 78831540
Building 1090, Hanger SE	Serial No: 90134370
Building 1090, Hanger SW	Serial No: 90134368
Building 962	Serial No: 90134380
Building 960	Serial No: 82587503
Building 961, TNG	Serial No: 90134374
Building 1060, Hanger SW	Serial No: 90134381
Building 1060, Hanger SE	Serial No: 82665995
Building 1060, Hanger Center	Serial No: 90134372
Pad #2 AAFES	Serial No: 61690501
Building 1040, Hanger SE	Serial No: 90134376
Building 1040, Hanger SW	Serial No: 90134369
Building 922, Mech Room	Serial No:
Building 1020, Hanger SE	Serial No: 90134367
Building 1020, Hanger SW	Serial No: 90134377
Building 920, Burns Hall	Serial No:
Pad #2 AAFES	Serial No: 61684931
Building 1003, Hanger	Serial No: 90134373
Substation West Feeder	Serial No: 30999697
Substation East Feeder	Serial No: 30999454
Building 1200, Hospital Feeder in Substation	Serial No: 30999662
Building 1900, Circuit 4 in Substation	Serial No: 30999740

J23.5.2 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 J23.6 below.

TABLE 6
New Secondary Meters
Electric Distribution System Sheppard AFB

Meter Location	Building Number	Meter Description
Vet Clinic	60	Electric Meter
Hospital Training Area	Old CE CONNEX Training Area	Electric Meter
Print Shop	60	Electric Meter
Horse Riding Club	NA	Electric Meter
Dorm	527	Electric Meter
Dorm	528	Electric Meter
Dorm	529	Electric Meter
Dorm	280	Electric Meter
Dorm	516	Electric Meter
Dorm	526	Electric Meter
Dorm	596	Electric Meter
Dorm	691	Electric Meter
Dorm	693	Electric Meter
Dorm	791	Electric Meter
Dorm	792	Electric Meter
Dorm	793	Electric Meter

J23.6 Submittals

The Contractor shall provide the Government submittals for the following:

1. Invoice (IAW 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: 82th CES/CERS
   Address: 231 9th Street, Sheppard AFB, TX 76311
   Phone number: (940) 676-6287

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 include the following information for Scheduled and Unscheduled outages:

   Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

   Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

   Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

   Name: 82th CES/CERS
   Address: 231 9th Street, Sheppard AFB TX 76311
   Phone number: (940) 676-5689

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: 82th CES/CERS
   Address: 231 9th Street, Sheppard AFB TX 76311
   Phone number: (940) 676-5689

4. System Efficiency Report. The Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. The Contracting Officer will determine the frequency of the report based on Government requirements. System efficiency reports shall be submitted to:

   Name: 82th CES/CERS
   Address: 231 9th Street, Sheppard AFB TX 76311
   Phone number: (940) 676-5689

J23.7 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.

- Sheppard AFB participates in a load deferral program a real-time effort to cut electrical demand during the peak demand months. The program objective is to defer all non-essential electric devices between 1300 and 1630 from 1 June till 1 September.

J23.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Sheppard AFB boundaries.

J23.9 Off-Installation Sites

No off-installation sites are included in the sale of the Sheppard AFB electrical distribution system.

J23.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

TABLE 7
Service Connections and Disconnections
Electric Distribution System, Sheppard AFB

Location	Description
	The Government does not require any connection or disconnections during the transition period.

J23.11 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 Sheppard AFB electric distribution system. If the electric distribution 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 through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Deficiencies
Electric Distribution System, Sheppard AFB

Project Identifier/Location	Project Description
	The Government has not identified any deficiencies with this system.