

ATTACHMENT J1

Keesler AFB Electric Distribution System

Table of Contents

Keesler AFB Electric Distribution System..... i

J1 Keesler AFB Electric Distribution System..... 1

 J1.1 Keesler AFB Overview 1

 J1.2 Electric Distribution System Description 4

 J1.3 Specific Service Requirements 9

 J1.4 Current Service Arrangement..... 9

 J1.5 Secondary Metering 10

 J1.6 Monthly Submittals 122

 J1.7 Energy Saving Projects 134

 J1.8 Service Area..... 144

 J1.9 Off-Installation Sites..... 144

 J1.10 Specific Transition Requirements..... 144

 J1.11 Government Recognized System Deficiencies 144

 J1.12 Right of Access to the Utility System.....15

List of Tables

Fixed Inventory 6

Spare Parts 8

Specialized Vehicles and Tools 9

Manuals and Records 9

Existing Secondary Meters 10

New Secondary Meters 122

Service Connections and Disconnections 144

System Improvement Projects 145

J1 Keesler AFB Electric Distribution System

J1.1 Keesler AFB Overview

J1.1.1 Description

Keesler Air Force Base is located in Biloxi, Mississippi, approximately midway between Mobile, AL and New Orleans, LA. The installation is on a narrow peninsula running west to east, with the Back Bay of Biloxi to the north and the Mississippi Sound, part of the Gulf of Mexico, to the south. US Highway 90 parallels the base's southern border and provides access via US Highways 49 and 110 to Interstate 10.

J1.1.2 Installation Profile

Keesler AFB is the home of the largest technical training center and the second largest medical training center in the Air Force. The 81st Training Wing is the host unit. Major tenant units are the Second Air Force, the 403d Airlift Wing, and the 738th Engineering Installation Squadron.

The mission of the 81st Training Wing is to enhance the world's most respected armed force by developing, conducting, and supporting training health care and associated missions for DoD, international and other governmental agency people. Second Air Force has the mission to manage all aspects of the more than 2,200 formal training courses taught to approximately 235,000 students annually in the Air Education and Training Command (AETC). Second Air Force has four training wings plus basic military training courses at Lackland AFB, TX; missile training at Vandenberg AFB, CA; and the 602d Training Support Squadron at Edwards AFB, CA. The 403d Airlift Wing of the Air Force Reserve Command (AFRC) is responsible for tactical airlift support of airborne forces, equipment and supplies. The Wing includes the 53d Weather Reconnaissance Squadron (Hurricane Hunters) who fly hurricane data gathering missions and relaying weather information to the National Hurricane Center. The 738th Engineering Installation Squadron performs engineering and installation of base and long haul communication air traffic control and secure systems for the Air Force and other government agencies worldwide. The Air Force Office of Special Investigations Detachment 407 is another tenant as is an office of the Defense Finance and Accounting Service. Detachment 2 of the 57th Aeromedical Evacuation Squadron provides administrative and ground support for aeromedical aircraft and crews. It is the aeromedical evacuation coordinator for the southeast region of the US. Lastly, the Keesler Noncommissioned Officer (NCO) Academy prepares technical sergeants for increased leadership responsibility.

Keesler AFB covers approximately 1,668 acres, consisting of the following parcels: Main Base – 1,447 acres; Falcon and Harrison Court Family Housing – 164 acres; Thrower Park Family Housing – 57 acres. The installation has 1,930 family housing units located in 1014 buildings. There are 321 non-housing buildings containing over 7.3 million square feet of area. The average assigned population of Keesler AFB is 9,500 military personnel, 4,200 civilians, and 14,400 dependents. Keesler's impact to

the local community is estimated at over \$1.4 billion, which covers local contracts, jobs, services, and retirees.

J1.1.3 Installation And Local History

Native American tribal groups traversed the land now occupied by Keesler AFB for hundreds of years. Members of the Biloxi tribe met French explorers of the peninsula in 1699. The Biloxi Peninsula was under French, English, and Spanish dominion before the Louisiana Purchase of 1803.

Nineteenth century settlement of the peninsula was tourist-based. Forested land near the present Keesler marina became part of the national Naval Reserve in 1832. In 1870, the rail link between New Orleans and Mobile was completed, spurring development. Tourism and the seafood canning industry flourished. In 1906, the City of Biloxi was given the Naval Reserve land, which was no longer needed for wooden ships. It became Naval Reserve Park, and the city expanded it through land acquisition. In 1925, a small section of the Naval Reserve Park was given to the Coast Guard for a base to enforce Prohibition and to support the area fishing fleet.

During the Great Depression, Biloxi officials sought ways to spur economic development through the use of the park land. The city provided land for a Veterans Administration hospital and built an airport. The airport, with 1,563 acres, was donated for the 1941 establishment of an Army Air Corps technical training school. Keesler Army Airfield was named in honor of Second Lieutenant Samuel Reeves Keesler, Jr. A combat aerial observer from Greenwood, Mississippi, he was killed in action in France during World War I.

During World War II, Keesler trained 142,000 aviation mechanics and 336,000 recruits. Most B-24 bomber mechanics were Keesler graduates. Since 1947, when aircraft mechanics training was moved to other centers and the Air Force's radar training school moved to Keesler, the base's primary mission has been electronics training.

The base underwent a multimillion dollar building program to meet the challenge of the Korean Conflict. Changes in radar and communications during the 1950s were reflected in technical training at Keesler. Communication and control courses moved to Keesler from Scott AFB. Missile and computer training began in the 1950s.

In the 1960s, flying training was added to the training center's mission with pilot training for foreign nationals, mostly from South Vietnam, in T-28, T-41, and C-47 aircraft. In 1968, personnel and administration courses were moved to Keesler from Amarillo AFB, and astronautics and space systems courses were added.

During the 1970s, tenant support expanded. The base's primary aircraft became the C-130, used by new cartographic, weather reconnaissance, and Reserve tactical airlift tenants. To meet the needs of the C-130s and C-9 aeromedical flights, the base extended the runway in 1974.

Throughout the 1970s and the 1980s, training at Keesler was continuously improved to be more cost effective and to develop the “whole person.” Two areas of training received increased attention in the early 1980s — the Airborne Warning and Control System (AWACS) and the Ground Launched Cruise Missile (GLCM). In 1981, when President Reagan fired striking civilian air traffic controllers, military controllers who were trained at Keesler stepped in to fill the gap.

The 1990s brought the nation another military conflict, Operation Desert Storm. Many Keesler personnel played an active role, not only supporting troop and equipment movements, but also deploying to the Middle East. The 1990s have also brought Keesler new missions, resulting from base realignment and closure. Weather training was moved from Chanute AFB in 1993. Flying training returned in 1994 with the instruction of pilots in C-12 and C-21 aircraft. The Second Air Force was reactivated in 1993 as part of AETC and was headquartered at Keesler.

Keesler remains the largest technical training center in the Air Force, having graduated nearly two million students, from every military branch and from more than 50 countries.

J1.1.4 Physical Assets

Keesler AFB covers 1,668 acres, consisting of the following parcels:

Main Base	1,447 acres
East/West Falcon and Harrison Court Family Housing	164 acres
Thrower Park Family Housing	57 acres

The base has 113 acres of easements for runway clearance and gas lines. Keesler has 1,930 family housing units located in 1,014 buildings and totaling 2,697,937 square feet. There are 321 non-housing buildings with 7,395,362 square feet of area.

J1.1.5 Socioeconomic Conditions

Biloxi is the second largest city in Harrison County and the third largest in Mississippi. The city’s estimated 1995 population is 53,403, a 15% increase over the 1990 Census population of 46,319. Harrison County’s estimated 1995 population is 173,868, a 5% increase over its 1990 Census population of 165,365.

The three strongest sectors of Biloxi’s economy are seafood, government, and tourism/gaming. Tourism/gaming has experienced phenomenal growth since dockside casino gambling passed county-wide referendum in 1992.

One-third of Biloxi’s labor force is military personnel. Almost one-fourth of Biloxi’s civilian, nonfarm employment is in government, and much of that is attributed to Keesler. Keesler

AFB and Northrup Grumman Ship Systems' Ingalls Operations are the largest employers in the Jackson-Harrison County area, each employing over 13,000 people. Keesler AFB contributes significantly to the regional economy through its direct employment and purchases from local businesses. The annual military payroll is about \$112 million and the civilian payroll is about \$72 million. In addition, the base has contracts with local entities totaling about \$65 million annually. The total annual economic impact of Keesler AFB is over \$820 million.

Average assigned personnel at Keesler AFB total about 28,100: 9,500 military personnel, 4,200 civilians, and 14,400 dependents. In addition, 9,000 military retirees reside near Keesler (within 395XX zip codes).

J1.1.6 Local Government

Except the Small Arms Range, Keesler AFB is located within the City of Biloxi. Biloxi has a mayor/council form of government. The city has a zoning ordinance. The city planning department coordinates development initiatives in the Keesler vicinity with the base planning staff.

J1.1.7 Community Involvement

Keesler AFB has excellent relations with the surrounding community. Between 4,000 and 5,000 base personnel are involved in volunteer activities in Biloxi, Ocean Springs, Gulfport, and Harrison County. The Family Support Center serves as a volunteer clearing house. Keesler AFB provides honor guards for functions across Mississippi and in part of Alabama. Marching groups, drum and bugle corps, and fife and drum corps from the base participate in community events. The base is actively involved with the nine chambers of commerce located on the Gulf Coast. It participates in education community exchanges, cleanup campaigns, and student mentoring programs. Keesler holds an open house for the community every two years.

J1.2 Electric Distribution System Description

J1.2.1 Electrical System Fixed Equipment Inventory

The Keesler 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 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.

Specifically excluded from the electric distribution system privatization are:

- Airfield Lighting System – Point of demarcation shall be the secondary of the transformer feeding the facility.
- Electrical distribution system within the following Military Family Housing areas: (1) Throter Park, (2) West Falcon, (3) East Falcon, (4) Maltby, (5) Shadowlawn, (6) Bay Ridge, Oak Park, (7) North Pinehaven, (8) South Pinehaven, (9) Harrison Court

J1.2.1.1 Description

Keesler AFB purchases all of its electricity from Mississippi Power Company (MPCo), a Southern Company. The power is received from MPCo from their 115KV transmission line located to the south of the Keesler AFB owned 115KV substation. Keesler's ownership of the substation begins at the load side of the MPC PT/CT combination Instrument transformer. The nominal system voltage is 23 kV grounded WYE. The power is distributed over the government owned distribution system by 7 radial distribution feeders designed to provide normal and emergency service through the use of contingency feed points. All feeder circuits are 600A class, 500MCM, and branch circuits are 200A class, #1/0 AWG. Branch feeding individual loads will be loop fed in most cases with normal open points maintained in pad mounted load break equipment pedestals.

The Harrison Court family housing area is located directly east of the base. This 23 kV system is fed and metered separately by MPCo. As stated above, the Harrison Court military family housing area is not included in the privatization action. The small arms firing range is located northwest of the base. It is metered at secondary voltage and is served by Coast Electric Power Association. The small arms range is to be turned over to the Navy prior to assumption of any contract for privatization and therefore is not included in the analysis.

MPCo meters incoming power at the main sub-station. Keesler AFB presently has approximately 208 additional meters at other locations. The meters are presently maintained and read by base personnel. The reimbursable customers are then billed according to monthly consumption plus an O & M fee calculated by the Base Civil Engineer.

J1.2.1.2 Inventory

Table 1 provides a general listing of the major electrical system fixed assets for the Keesler AFB electrical distribution system included in the sale.

TABLE 1
Fixed Inventory

Electric Distribution System Keesler AFB

Component Item	Size	Material Type	Quantity	Unit of Measure	Approximate Year of Installation
Primary UG Circuits	AWG				
3ph, 3w, 25KV	500MCM	Copper	63,000	SCLF	2001
3ph, 3w, 25KV	1/0	Copper	90,600	SCLF	2001
1ph, 1w, 25KV	1/0	Copper	13,442	SCLF	2001
3ph, 3w, 25KV	4/0	Copper	13,800	SCLF	2001
Secondary OH Circuit 1ph, 1w	3/0	Aluminum	300	SCLF	2001
Secondary UG Circuits	#2	Copper	171,600	SCLF	2001
	#8	Copper	57,200	SCLF	2001
Lighting Circuits UG	AWG				
L2	#2	Copper	6,300	SCLF	2001
	#8	Copper	2,100	SCLF	2001
L4	#4	Copper	54,000	SCLF	2001
	#8	Copper	18,000	SCLF	2001
L6	#6	Copper	37,200	SCLF	2001
	#8	Copper	12,700	SCLF	2001
L8	#8	Copper	109,290	SCLF	2001
	#10	Copper	41,080	SCLF	2001
L2A	#2	Copper	500	SCLF	2001
	#8	Copper	250	SCLF	2001
L4A	#4	Copper	5,600	SCLF	2001
	#8	Copper	2,800	SCLF	2001
L6A	#6	Copper	6,400	SCLF	2001
	#8	Copper	3,200	SCLF	2001
L8A	#8	Copper	39,200	SCLF	2001
	#10	Copper	13,200	SCLF	2001
Ductbank			117,875	LF	2001
Lighting Conduit			87,960	LF	2001
Light Poles	Height				
	40 ft.	Concrete	377	EA	2001
	16 ft	Concrete	356	EA	2001
	35 ft	Concrete	8	EA	2001
	35 ft	Wood	21	EA	2001
Elevated Street Lights	Watts				
	100	HPS	279	EA	2001
	250	HPS	164	EA	2001
	200	HPS	120	EA	2001
	400	HPS	37	EA	2001

Component Item	Size	Material Type	Quantity	Unit of Measure	Approximate Year of Installation
Lighting Pedestal			25	EA	2001
Meters	1ph & 3ph 120 - 480 V		208	EA	2001
Switch SF-6	25 KV	600 Amp	121	EA	2001
Sectionalizing Pedestal			151	EA	2001
Manholes	6' X 10'	Pre-Cast	122	EA	2001
Transformers	Nominal KVA				
Single Phase	25	Pad Mount	5	EA	2001
	50	Pad Mount	11	EA	2001
	100	Pad Mount	11	EA	2001
Three Phase	45	Pad Mount	19	EA	2001
	75	Pad Mount	19	EA	2001
	112.5	Pad Mount	10	EA	2001
	150	Pad Mount	20	EA	2001
	225	Pad Mount	11	EA	2001
	300	Pad Mount	6	EA	2001
	500	Pad Mount	7	EA	2001
	750	Pad Mount	1	EA	2001
	1000	Pad Mount	1	EA	2001
	1500	Pad Mount	1	EA	2001
Transformer 115KV-25KV	50 MVA		2	EA	2001
Transformer 25KV/13.2-120/240v	75 KVA		2	EA	2001
Transformer 23 KV-4160	7.5/8.4MVA		2	EA	2001
Circuit Breaker	2P 250V		2	EA	2001
Circuit Breaker 38 KV	2000 amp		2	EA	2001
Circuit Breaker 5 KV	2000 amp		3	EA	2001
Circuit Breaker 5 KV	1200 amp		4	EA	2001
Circuit Switcher	115KV		2	EA	2001
Bypass Switch	25 KV		1	EA	2001
Transfer Switch 600v	400 amp		1	EA	2001
Relays			16	EA	2001

Component Item	Size	Material Type	Quantity	Unit of Measure	Approximate Year of Installation
Panel	400amp		3	EA	2001
Capacitor Bank	6.3MVAR		2	EA	2001
Terminations	25KV		1136	EA	2001
Cable	500 MCM		1,000	LF	2001
Transformers (Current)	25 KV	Substation	81	EA	2001
Transformers (Potential)	25 KV	Substation	6	EA	2001
Schweitzer Relay			2	EA	2001
Multi Phase Relay			14	EA	2001
Switch Gear	25 KV		11	EA	2001
Elbow Connector		Steel	1648	EA	2001
Fault Indicator			1284	EA	2001
Lightning Arrestor			962	EA	2001
Substation Circuit Breaker	25KV		15	EA	2001
Substation bldg 0472			1	EA	2001

Legend:
 AWG - American Wire Gauge; KV – Kilovolt; ph – phase; UG – underground; ft – feet;
 KVA - Kilovolt-Amperes; MCM – Thousand Circular Mills; w-wire: amp - ampere
 EA – Each; MVAR – Mega Volt Ampere Reactive
 HPS - High Pressure Sodium; LF Linear Feet

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, vehicles, and tools.

TABLE 2
 Spare Parts
 Electrical Distribution System Keesler AFB

Qty	Item	Make/Model	Description	Remarks
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NONE

TABLE 3

Specialized Vehicles and Tools
Electrical Distribution System Keesler AFB

Description	Quantity	Location	Maker
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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 Distribution System Keesler AFB

Qty	Item	Description	Remarks
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NONE

J1.3 Specific Service Requirements

The service requirements for the Keesler AFB electrical distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Keesler 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.

- As to digging permits, the Contractor will be required to mark his own utilities and will be responsible for initiating, officiating, and tracking digging permits for his own utilities. IAW Mississippi Code of 1972 Section 77-13-5 and -11, the Contractor will provide not less than five (5) and not more that ten (10) working days notice of any needed excavations to Mississippi One Call System and to said Utilities Privatization Administrative Contracting Officer so the location of underground utilities may be located and marked by the applicable utility owner.
- The Contractor shall enter into a Memorandum of Understanding (MOU) with the Base Fire Department for fire protection of all facilities included in the purchase of the utility. The MOU shall be completed during the transition period and a copy provided to the Contracting Officer.

J1.4 Current Service Arrangement

MPCo provides service to Keesler AFB via their 115 KV transmission line located to the south of the Keesler AFB owned 115KV substation. Keeler's ownership of the

substation begins at the load side of MPC Bus Differential Auxiliary Lockout Relay. A power factor correction system has been installed at the substation and is designed to maintain the power factor at .95 minimum. Records for electrical demand from AF Form 3556 and billing records for FY 02 are provided below.

Annual Usage	167,543,879 KWh
Monthly Average Usage	13,961,990 KWh
High Month Demand: August 02	34,313 KVA
Low Month Demand: March 02	20,032 KVA

J1.5 Secondary Metering

J1.5.1 Existing Secondary Meters

Table 5 provides a listing of the known and read existing secondary meters that will be transferred to the Contractor. There are estimated to be 110 additional secondary meters installed as part of the 2001 system. All existing meters will be transferred to the Contractor. During the transition period and joint inventory the Contractor shall identify the location, functionality, necessity of any unidentified existing meters at unknown locations. The Contractor shall provide meter readings once a month for all secondary meters IAW Paragraph C.3 and J1.6 below.

TABLE 5
Existing Secondary Meters
Electrical Distribution System Keesler AFB

Keesler ID	Location	Keesler ID	Location
E0223	Bldg 0223 Mechanical Rm	E0233	Base Opns Flight line side
E0234	Bldg 0234	E0308	Child Dev Ctr bldg 0308
E0337-01	FamCamp	E0337-02	FamCamp
E0337-03	FamCamp	E0337-04	FamCamp #5 North 2d Bath House
E0337-05	FamCamp #3 South Bath House	E0337-06	FamCamp #6 2d Section Bath House
E0337-07	FamCamp #2 Near Front Bath House	E0337-08	FamCamp #1 Near Check in
E0337-09	FamCamp #7 south of 2d Section	E0337-10	FamCamp #4 South of Bath House and south of #3
E0404	Research Lab	E0408	Medical Food Inspection bldg 0408
E0412	403d Medical Sgdn bldg 0412	E0414	Fisher House bldg 0414
E0416	Clinical Research Lab bldg 0404	E0420	Bldg 420
E0468-1	Keesler Med Center	E0468-2	Keesler Med Center
E0468-3	MRI Lab Hospital bldg 0468	E0621w3	Water Well #3 Hospital Parking Lot
E0701-2	Behind Sabich Center bldg 0701	E0701-3	Sabich Center Mechanical Rm
E0824	Dental Clinic bldg 0824	E1002	Computer Tng bldg 1002
E1101-1	Communications Sqdn bldg 1101	E1101-2	Communications Sqdn bldg 1101
E11663	Behind bldg 159	E1203	Gaude Lanes bldg 1203
E1401	Main Credit Union	E1504	BX Gas Station
E1504v	Vending Shed BX Gas Station	E1505	NE of Bank
E1604	Soccer Field	E1704	Shoppette bldg 1704
E1901	Ball Field by bldg1921	E1917	Dolan Hall
E1921w2	Water Well #2 behind bldg 1917	E20007	Old meter 89651723
E2001	Dining Hall bldg 2001	E2002	Dormitory bldg 2002
Ehoakp-2	Bayview Street West End	E2003	Dormitory 2003
E2004	Dormitory 2004	E20043	Behind bldg 10043
E2101n	Muse Manor bldg 2101	E2101s	Muse Manor bldg 2101

E2101vn	Vending shed north end of Muse Manor bldg 2101	E2101vs	Vending shed south end of Muse Manor bldg 2101
E2221	NCO Club bldg 2221	E2221-1	Bldg 2222
E2302	Main Base Exchange	E2302-1	Main BX Mechanical Rm
E2503	Dormitory bldg 2503	E2504	Dormitory bldg 2504
E2505	Dormitory bldg 2505	E2602	Academic Training bldg 2602
E2801	Telephone Maint. bldg 2801	E2816	KTTC Headquarters bldg 2816
E2818	McClellan Hall bldg 2818	E2901	NCO Academy bldg 2901
E3101	Locker House off loading dock bldg 3101	E3101v	Vending shed east end bldg 3101
E3200	Officers Club bldg 3200	E3217	Intersection of D & 3d streets
E3401	Commissary bldg 3401	E3501	Security Police bldg 3501
E3821	Bldg 3821	E3823	Bldg 3823
E3902	CES Snack Bar in CE Yard	E3967	Water Pump station #9
E4004	Recycle Center	E4101	Steam Plant
E4104	Wellness Center	E4106	Tarpon Gym bldg 4106
E4108	Bldg 4108	E4120-1	Sub Shop bldg 4120
E4121	Chiller Plant bldg 4121	E4201	Hangar 1
E4202v	Vending shed by bldg 4206	E4203-1	Hangar 3 bldg 4203
E4203-2	Hangar 3 bldg 4203	E4203-3	Hangar 3 bldg 4203
E4203-4	Hangar 3 bldg 4203 Mechanical Rm	E4205	Hangar 5
E4206-1	Chiller Plant bldg 4206	E4206-2	Chiller Plant bldg 4206
E4218	Hangar Rd in front of Fire Dept	E4229v	Vending shed between Thompson Hall and Hangar 1
E4263	NDI Lab 4263	E4269	Flight Line next to bldg 4269
E4272	Test Stand next to TAC Flight Line Shack	E4275	TAC Flight Line Shack
E4301	Fabrications Shop bldg 4301	E4309	Air Conditioning Plant bldg 4309
E4329	Classrooms Bldg 4329	E4330	Wolff Hall bldg 4330
E4331v-1	Vending shed behind bldg 4309	E4331v-2	Vending shed behind bldg 4331
E4332	Weather Training bldg 4332	E4407	Bldg 4435
E4410	Petroleum Operations bldg 4410	E4420	Hazardous Storage bldg 4420 DRMO Yard
E4423	Bldg 4423	E4424	Fuel Yard by Liquid Oxygen Plant
E4430	Bldg 4430	E4431	Bldg 4431
E4435	PMEL Bldg 4435	E4435-1	Bldg 4435
E4503	Bldg 4503	E4514-1	Bldg 4514
E4605-1	Base Contracting bldg 4605	E4605-2	Base Contracting bldg 4605
E4605-3	Base Contracting bldg 4605	E4617	Base Contracting bldg 4605
E4705	CES Headquarters bldg 4705	E4803	Chiller Plant bldg 4803
E4811	Bldg 4811	E4812	Bldg 4812
E4813	Bldg 4813	E4818-1	Bldg 4818
E4904	Dormitory bldg 4904	E4906	Dormitory bldg 4906
E4908	Between Dormitories 4908 and 4910	E4910	Between Dormitories 4908 and 4910
E5020	Dormitory bldg 5020	E5020-1	Dormitory bldg 5020
E5022	Dormitory bldg 5022	E5024	Dormitory 5024
E5025	Dormitory bldg 5025	Ehwfalcon	Next to Water Well #13 and Water Tank #6
E5709	West side of pool bldg 5709	E5725	TLF bldg 5725
E5740	TLF bldg 5740	E5901	Arnold Hall bldg 5901
E5901L	Arnold Hall bldg 5901	E5904	Bldg 5904
E6005	Auto Hobby Shop bldg 6005	E6009w8-1	Water Well #8
E6017v	Vending shed bldg 5901	E6602	Bldg 6602
E6614	Golf Course Maint. Bldg 6614	E6642-1	Bldg 6642
E6642-2	North end of Golf Course Pond	E6643	Bldg 6643
E6653	Bldg 6653	E6627-1	Bldg 6627
E6728-1	Marina	E6728-2	Pole at Boat Storage - Marina
E6728-3	Marina Lift Station	E6728-4	Northeast wall bldg 6728
E6728-5	Northeast wall bldg 6728	E6728-6	Pedestal east of bldg 6728
E6731	Bldg 6731	E6744	Golf Shack
E6901-1	Bryan Hall bldg 6901	E6901-2	Bryan Hall bldg 6901
E69801v	Vending shed by bldg 6901	E6902-1	Jones Hall bldg 6902

E6902-2	Jones Hall bldg 6902	E6903-2	Hewes Hall bldg 6903
E6903-3	Hewes Hall bldg 6903	E6903v	Vending shed by bldg 6903
E6918	Garrard Hall bldg 6918	E6950	Bldg 6950
E6955	Bldg 6955	E6960	Bldg 6960
E6965	Dormitory Bldg 6965	E7202	Bldg 7202
E7301w10	Water Well #10 by bldg 7301	E7310	Bldg 7310
E7404	Dormitory Bldg 7404	E7405-1	AC Chiller Plant in Triangle
E7405-2	AC Chiller Plant in Triangle	E7405-3	AC Chiller Plant in Triangle
E7407	Triangle Mini Mall bldg 7407	E7408	Welch Theater bldg 7408
E7409	Triangle Dining Hall bldg 7409	E7501w11	Water Well #11 by bldg 7501
E7502	Dormitory Bldg 7502	E7503-1	Vanderberg Hall bldg 7503
E7503-2	Vanderberg Hall bldg 7503	E7504	Triangle Fitness Ctr bldg 7504
E7514	Bldg 7514	E7701	Bldg 7701 northwest corner
E7702	Bldg 7701 northeast corner	E7704	Bldg 7704
E9160w12	MFH East Falcon well #12	Ebells	Cold Storage Bldg Parking Lot
Ecable-01	Annex Road by first MFH Unit	Ecable-06	Pecan Dining Hall bldg 4812
Ecable-05	Facility 7514	Ecable-10	Bldg 3217
Ecable-07	Bldg 6903	Ecable-12	Intersection Fisher & 3d St
Ecable-09	Bldg 6254	Ehbayridge	Vandenberg Substation
Ecable-11	Bldg 1902	Ehefalcon	Next to Water Well #13 and Water Tank #6
Ecable-13	Bldg 181 Oak Park MFH	Ehoakp-1	Bayview Street East End
Ehbayridge-1	Bldg 8228	Ehpine	Intersection A & 5 th Streets
Ehmaltby	West of gas sub station off Vandenberg	Ehpine-1	Intersection Meadows & 6 th St

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 Distribution System Keesler AFB

Meter Location	Meter Description
Water Tower Facility Number 623	Single Phase Meter
Water Tower Facility Number 1923	Single Phase Meter
Water Tower Facility Number 3509	Single Phase Meter
Water Tower Facility Number 6015	Single Phase Meter
Water Tower Facility Number 7305	Single Phase Meter
Gas line cathodic protection system rectifier	Single Phase Meter

J1.6 Monthly Submittals

The Contractor shall provide the Government monthly 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: Utility Contract Administrator
Address: 81 CES/CEOC
508 L Street
Keesler AFB, MS 39534
Phone number: 228-377-3801

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: Utility Contract Administrator
Address: 81 CES/CEOC
508 L Street
Keesler AFB, MS 39534
Phone number: 228-377-3801

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: Utility Contract Administrator
Address: 81 CES/CEOC
508 L Street
Keesler AFB, MS 39534
Phone number: 228-377-3801

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: Utility Contract Administrator
Address: 81 CES/CEOC
508 L Street
Keesler AFB, MS 39534
Phone number: 228-377-3801

J1.7 Energy Saving Projects

IAW 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 Keesler AFB boundaries.

J1.9 Off-Installation Sites

No off-installation sites are included in the sale of the Keesler 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 Distribution System Keesler AFB

Location	Description
Substation Bldg 0468	Auto Tap changers operative in manual mode only
Substation Bldg 0468	Station power automatic transfer switch inoperative

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 Keesler AFB electrical distribution system. If the utility system is sold, the Government will not accomplish these improvements. The Contractor shall make a determination as to the actual need to accomplish and timing of any and all 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 Improvement Projects
Electrical Distribution System Keesler AFB

Project Location	Project Description
NONE	

J1.12 Right of Access to the Utility System

Exhibit A—Map of Premises

The map or maps attached as this Exhibit A show the known locations of the utility system. Portions of the utility system may not be fully shown on the map or maps. Any such failure to show the complete utility system on the map or maps shall not be interpreted as that part of the utility system being outside the Premises. The Premises are co-extensive with the entire linear extent of the utility system sold to Grantee, whether or not precisely shown on the map or maps attached hereto as this Exhibit A.

Record Drawing Set titled "Changes to Electrical distribution System, Keesler AFB, MS" as updated by installation. Drawings are available on CD ROM in the technical library.

Exhibit B—Description of Premises

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B.1. General Description of the Utility System, Lateral Extent of the Right-of-Way, and Points of Demarcation:

UTILITY SYSTEM DESCRIPTION:

The utility system may be composed of, without limitation, substations with outdoor switchgear, overhead and underground conductors, utility poles, ducts, raceways, manholes, pad-mount and pole-mount transformers, transformer pads, meters, and instrumentation related to metering of electricity delivered to end users on the Installation.

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LATERAL EXTENT OF UTILITY SYSTEM RIGHT-OF-WAY:

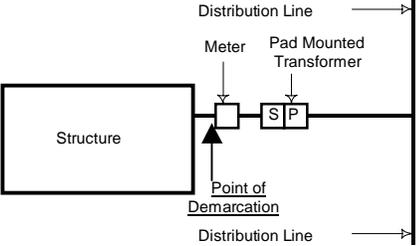
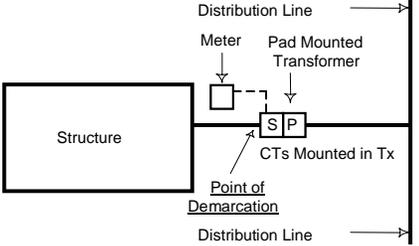
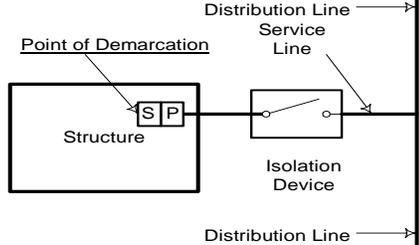
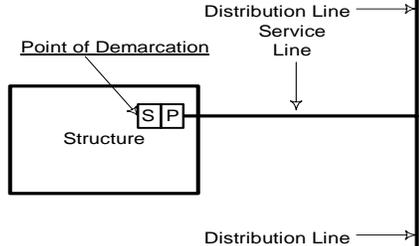
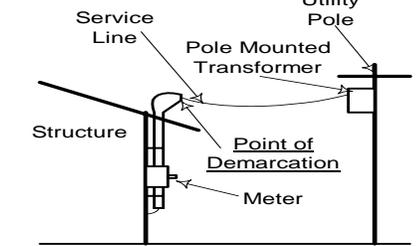
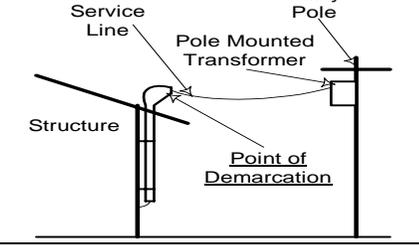
Where the utility system is installed above ground, 26-foot-wide, extending 13 feet on each side of the utility system, as installed.

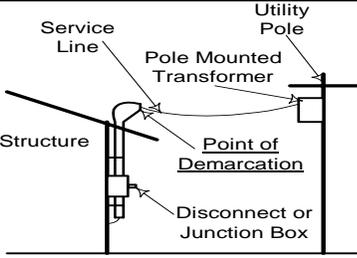
Where the utility system is installed on or under the ground, 26-foot-wide, extending 13 feet on each side of the utility system, as installed.

UTILITY SYSTEM POINTS OF DEMARCATION:

The point of demarcation is defined as the point on the utility system where ownership changes from the utility system owner to the facility owner. This point of demarcation will typically be at the point the utility enters a facility or the load side of a transformer within a facility. The table below identifies the type and general location of the point of demarcation with respect to the facility for each scenario.

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is the transformer secondary terminal spade.	Pad Mounted Transformer located outside of structure with underground service to the structure and no meter exists.	

Point of Demarcation (POD)	Applicable Scenario	Sketch
<p>POD is down current side of the meter.</p>	<p>Residential service (less than 200 amps and 240V 1-Phase), and three phase self contained meter installations. Electric meter exists on or within five feet of the exterior of the building on an underground secondary line.</p>	 <p>Detailed description: A schematic diagram showing a 'Structure' on the left. A 'Distribution Line' enters from the right, passes through a 'Meter' mounted on the exterior wall, then through a 'Service Panel' (S/P) also on the exterior wall. The line then goes to a 'Pad Mounted Transformer'. The 'Point of Demarcation' is indicated by a vertical line between the meter/S/P and the transformer.</p>
<p>POD is the transformer secondary terminal spade.</p>	<p>Three Phase CT metered service. Note: The meter, can, CTs, and associated wires are owned and maintained by the electric utility owner.</p>	 <p>Detailed description: A schematic diagram showing a 'Structure' on the left. A 'Distribution Line' enters from the right, passes through a 'Meter' and a 'Service Panel' (S/P) on the exterior wall. The line then goes to a 'Pad Mounted Transformer'. 'CTs Mounted in Tx' are shown on the transformer. The 'Point of Demarcation' is indicated by a vertical line at the transformer secondary terminal spade.</p>
<p>POD is secondary terminal of the transformer inside of the structure.</p>	<p>Transformer located inside of structure and an isolation device is in place with or without a meter. Note: Utility owner must be granted 24-hour access to transformer room.</p>	 <p>Detailed description: A schematic diagram showing a 'Structure' on the left. A 'Distribution Line' enters from the right, passes through a 'Service Panel' (S/P) on the exterior wall, then through an 'Isolation Device' inside the structure. The line then goes to a transformer inside the structure. The 'Point of Demarcation' is indicated by a vertical line at the secondary terminal of the transformer.</p>
<p>POD is secondary terminal of the transformer inside of the structure.</p>	<p>Transformer located inside of structure with no isolation device in place. Note: Utility Owner must be granted 24-hour access to transformer room.</p>	 <p>Detailed description: A schematic diagram showing a 'Structure' on the left. A 'Distribution Line' enters from the right, passes through a 'Service Panel' (S/P) on the exterior wall, then goes directly to a transformer inside the structure. The 'Point of Demarcation' is indicated by a vertical line at the secondary terminal of the transformer.</p>
<p>POD is where the overhead conductor is connected to the weatherhead.</p>	<p>Electric meter is connected to the exterior of the building on an overhead secondary line. Note: The meter and meter can, though beyond the POD, are owned and maintained by the utility owner.</p>	 <p>Detailed description: A schematic diagram showing a 'Structure' on the left. A 'Service Line' runs from a 'Utility Pole' to the exterior wall of the structure. It passes through a 'Meter' and a 'Service Panel' (S/P) on the exterior wall. The line then goes to a 'Pole Mounted Transformer' on the utility pole. The 'Point of Demarcation' is indicated by a vertical line at the weatherhead connection point on the exterior wall.</p>
<p>POD is where the overhead conductor is connected to the weatherhead.</p>	<p>Pole Mounted Transformer located outside of structure with secondary attached to outside of structure with no meter.</p>	 <p>Detailed description: A schematic diagram showing a 'Structure' on the left. A 'Service Line' runs from a 'Utility Pole' to the exterior wall of the structure. The line is attached to a 'Pole Mounted Transformer' on the utility pole. The secondary of the transformer is attached to the exterior wall. The 'Point of Demarcation' is indicated by a vertical line at the weatherhead connection point on the exterior wall.</p>

Point of Demarcation (POD)	Applicable Scenario	Sketch
<p>POD is where the overhead conductor is connected to the weatherhead.</p>	<p>A disconnect switch or junction box is mounted to the exterior of the structure with no meter.</p>	
<p>POD is at the overhead service line's connection to the service entrance mast.</p> <p>Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter and the can. The POD for the electric meter is at the water utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric utility owner's meter. The water utility owner owns the service entrance mast.</p>	<p>Electric power is provided to a water facility via an <u>overhead</u> service drop. This configuration could be found at facilities dedicated to the water utility such as a water well, pump station, or water tower.</p>	<p>None</p>
<p>POD is at the transformer secondary terminal spade.</p> <p>Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter and the can. The POD for the meter is at the water utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric meters and transformers.</p>	<p>Electric power is provided to a water facility via an <u>underground</u> service connection. This configuration could be found at facilities dedicated to the water utility such as a water well, pump station, or water tower.</p>	<p>None</p>
<p>POD is at the overhead service line's connection to the service entrance mast.</p> <p>Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter and the can. The POD</p>	<p>Electric power is provided to a wastewater facility via an <u>overhead</u> service drop. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station or wastewater treatment plant.</p>	<p>None</p>

Point of Demarcation (POD)	Applicable Scenario	Sketch
for the electric meter is at the wastewater utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric utility owner's meter. The wastewater utility owner owns the service entrance mast.		
<p>POD is at the transformer secondary terminal spade treatment plant.</p> <p>Note: If an electric meter is present, or is to be installed, the owner of the electric distribution system on the installation is the owner and maintainer of the electric meter and the can. The POD for the meter is at the wastewater utility owner's conductors to the electric utility owner's conductors. This meter POD applies regardless of the location of the electric meters and transformers.</p>	<p>Electric power is provided to a wastewater facility via an <u>underground</u> service connection. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station or wastewater treatment plant.</p>	None

UNIQUE POINTS OF DEMARCATION:

- The following table lists anomalous points of demarcation that do not fit any of the above scenarios.

Building No.	Point of Demarcation (POD) Description
Main 115 KV Base Substation	Load side of the MPC PT/CT combination Instrument transformer
Hospital Substation bldg 0472	Secondary(supply) terminal spades at 23 KV transformer
MFH – Thrower Park. Southeast of Qtrs 302	Load side of Switch feeding Transformer SEP-7/6-100-349
MFH – Thrower Park. North of Qtrs 200	Load side of Switch feeding Transformer SEP-7/6-100-357
MFH – Thrower Park. South of Qtrs 306	Load side of Switch feeding Transformer SEP-7/6-100-341

MFH – Thrower Park. North of Qtrs 226	Load side of Switch feeding Transformer SEP-7/6-100-351
MFH – West Falcon. South of Qtrs 45	Primary side of Transformer T-7/6-92-312
MFH – West Falcon. Southeast of Qtrs 48	Load side of SP-7.1-92-406 serving T-7/6-91-333
MFH – West Falcon. South of Qtrs 12	Load side of SP-7.2-92-405 serving T-7/6-92-301
MFH – West Falcon. Southwest of Bldg 60 Well #12	Load side of SP-7.1-92-405 serving T-7/6-91-541
MFH – East Falcon. Southwest of Qtrs 61	Load side of SP-7.1-90-404 serving T-7/6-90-294
MFH – East Falcon. Adjacent to Qtrs 06	Load side of SP-7.2-90-401 serving unidentified transformer
MFH – Maltby, Shadowlawn, Bayridge. South of Qtrs 16	Supply side of M-7/6-78-103
MFH – Maltby, Shadowlawn, Bayridge. North of Qtrs 81	Supply side of M-7/6-77-102
MFH – Maltby, Shadowlawn, Bayridge. West of Qtrs 21	Load side connections at SP-7/6-79-205
MFH – Maltby, Shadowlawn, Bayridge. East of Qtrs 36	Load side connections at SP-7/6-79-204
MFH – Maltby, Shadowlawn, Bayridge. East of Qtrs 50	Load side connections at SP-7/6-82-203
MFH – Maltby, Shadowlawn, Bayridge. West of Qtrs 26	Load side connections at SP-7/6-82-202
MFH – Maltby, Shadowlawn,	Supply side of M-7/6-82-101

Bayridge. West of Qtrs 28	
MFH – Oakpark. West of Qtrs 55	Supply side of M-1/3-111-104
MFH – Oakpark. Southeast of Qtrs 83	Supply side of M-1/3-111-103
MFH – North Pinehaven Adjacent to Meadows Drive	Load side of meter number M-1/3-55-102
MFH – South Pinehaven. Qtrs 25 at “A” Street	Load side of meter number M-1/3-52-101
MFH – Harrison Court. Intersection Banachi and DeSoto Ave	Load side of MPCO Utility owned meter
FamCamp (end MFH)	Sectionalizing Cabinets number SP-7.1-100-411 and number SP-7.2-100-411

B.2. Description of Restricted Access Areas:

Description	Facility #	State Coordinates	Other Information
None			

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Exhibit C—Environmental Baseline Survey

The Air Force has determined that it is not required to conduct an EBS in regard to the sale of this utility system.