

ATTACHMENT J1

Fort Polk Electrical Distribution System

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J1 Fort Polk Electrical Distribution System

J1.1 Fort Polk Overview

J1.1.1 General Statistics

The Fort Polk Military Installation is located in Vernon Parish in west-central Louisiana. The Army owns approximately 100,009 acres of land at the main post and at the Peason Ridge Training Area, located about 15 miles north of the main post. The Installation also maintains a small site on the eastern shore of Toledo Bend Reservoir that is used as a recreation site for military personnel and their families. Additionally, the Army utilizes about 98,125 acres of land owned by the U.S. Forest Service (USFS). The Main Post has two distinct developed areas that contain buildings, motor pools, and other facilities. These areas are known as the North and South Fort Cantonment Areas or North Fort and South Fort.

Real Property records indicate there are 2,384 buildings on Fort Polk (1,679, permanent; 255 semi-permanent; and 450 temporary). These buildings enclose a total of 15,572,096 square feet (SF) of floor space. Included in these totals are 1,163 permanent family housing buildings containing 3,424 family dwelling units encompassing a total of 6,955,318 SF.

According to data published by Fort Polk on the World Wide Web, the Installation supports a total population of 139,279 categorized as follows:

TABLE 1
 Population
Electrical Distribution System, Fort Polk, Louisiana

Fort Polk Population	
Active Military Personnel	10,441
Military Family Members	16,912
Army Civilian Employees	5,956
Retired Military Personnel and Families	73,573
Reserve Component, ROTC	25,227
JRTC Rotations (Monthly Average)	5,170
<i>Total</i>	<i>139,279</i>

Annual total economic impact of Fort Polk is estimated to be approximately \$970 million.

J1.1.2 History and Development

Fort Polk was established in 1941 and named in honor of the Right Reverend Leonidas Polk, the first Episcopal Bishop of the Diocese of Louisiana and a Confederate general. Since then Fort Polk has adapted to service during every U.S. military crisis.

Fort Polk was first developed as Camp Polk and was used for military training activities associated with World War II. Construction of Camp Polk began in January 1941. Camp Polk was used during the “Louisiana Maneuvers,” a series of large-scale, peacetime armored maneuvers conducted prior to the United States’ entry into World War II.

Following World War II, the Installation went through a series of temporary closings until the early 1960s. In 1960, Fort Polk was designated as an infantry-training center. Due to the dense, jungle-like vegetation that exists on portions of the Post, Fort Polk was used extensively for basic training of soldiers being deployed to Southeast Asia. For the 12 years following 1962, more soldiers shipped out to Vietnam from Fort Polk than any other U.S. Army training Installation.

The 5th Infantry Division (Mechanized) was permanently garrisoned at Fort Polk in 1974 as hostilities in Vietnam came to a close. Fort Polk underwent a tremendous amount of renovation and was rapidly transformed into one of the most modern Installations in the U.S. Army. Many of the buildings and other structures currently existing on Fort Polk were built at this time.

After the end of the Cold War in the early 1990s, the 5th Infantry Division (Mechanized) was relocated to Fort Hood, Texas beginning in 1992. This move was completed in early 1994. Following this move, Fort Polk was selected as the location of the Joint Readiness Training Center (JRTC). The basic mission of the JRTC is to train light infantry forces, Special Forces, Army Rangers, and units from other branches of the American Armed Forces.

Several other units were transferred back to the United States from Europe and were stationed at Fort Polk during this time. Most of these units, including the 2nd Armored Cavalry Regiment, the Warrior Brigade, and units affiliated with the XVIII Airborne Corps are currently garrisoned at the Installation and occupy and operate many of its motor pools and maintenance facilities.

Since Fort Polk was first developed by the U.S. Army, its land has been subject to a wide variety of uses including firing ranges, impact zones, industrial operations, military housing, and other operations that were necessary to support the Installation’s ever-changing missions.

The Installation headquarters are located at the South Fort cantonment area. Additionally, most of the motor pools, maintenance facilities, supply areas, and administrative offices operated by both military personnel and civilian employees of the Department of Defense are located on this portion of the Installation. South Fort Polk has relatively modern facilities compared to North Fort. The North Fort cantonment area is used primarily by rotational units training with the JRTC and by Louisiana National Guard and Army Reserve units. Buildings on North Fort Polk are primarily vintage World War II. Military housing areas are located in both cantonment areas and along the west side of Fort Polk.

The area of the Installation east of the cantonment areas is largely undeveloped and has been used for a variety of military training purposes including obstacle courses, firing ranges, impact areas, primitive airfields, drop zones, etc. (U.S. Army, 1995). The potential for the presence of unexploded ordnance exists over most of the Installation east of the cantonment areas. Landfills used for disposal of wastes generated by military activities at Fort Polk were developed on property located between the North and South Fort cantonment areas.

J1.1.3 Satellite Locations

Peason Ridge is a 33,000 acre-plus Army-owned parcel situated approximately 15 miles north-northwest of Fort Polk proper at the extreme north side of Vernon Parish. It consists of live-fire training areas, firing ranges, and impact zones. Additionally, Peason Ridge has a relatively small “operations” area that includes barracks and supply and maintenance buildings.

Toledo Bend Recreation Facility, a relatively small Army-owned parcel, is situated on the eastern shore of Toledo Bend Reservoir on the Louisiana-Texas border due west of Fort Polk. It contains boat docks, cabins, and other structures associated with recreational activities.

J1.1.4 U. S. Forest Service Lands

Fort Polk uses very large tracts of U.S. Forest Service lands for training. Some of this land is classified as Intensive Use Area (IUA) and some as Limited Use Area (LUA). In some areas there are Army-owned utility system components installed on these Forest Service lands. The Forest Service will not sell land, but will consider proposals to exchange land; Fort Polk is currently negotiating a land swap with the Forest Service that would place additional utility components on Forest service land. A Special Use Permit (SUP) is the mechanism used to formalize an agreement for use of Forest Service land. The Army is currently in the process of finalizing a multi-year, multi-use SUP. For the Army, there are no fees associated with these SUPs. However, a “for-profit” entity should expect to negotiate a SUP fee; the Forest Service waives fees only for “non-profit” entities. This fee is currently projected to be \$43/acre/year for for-profit entities. For linear utility components, acreage requirements are calculated by multiplying linear feet of utility lines by the typical easement width (26 feet). Approximate quantities of Fort Polk utility components on Forest Service lands are as follows:

- Electric Distribution Lines	102,000 LF
- Natural Gas Lines	674 LF
- Water Lines	2,465 LF
- Sewer Lines	15,391 LF
- Wastewater Dispersion Lines	7,200 LF
- Oxidation Ponds	80 Acres

J1.1.5 Army Family Housing

Fort Polk has recently privatized Army Family Housing. This Residential Community Initiative (RCI) transfers ownership and maintenance responsibility for all of the housing units to a private contractor. Under this RCI the new owner will also remodel, renovate, demolish some structures and build new units in multiple phases over several years. The net effect will be an increase of dwelling units from the current 3,424 units to a total of 3,821 units. Fort Polk is in the process of transitioning from their existing Housing Maintenance Contract to the new RCI arrangement. It should be pointed out that this RCI initiative does not involve the transfer of land nor does it include the utility mains and service lines. Utility mains and service lines have been retained by the Government and are therefore part of the UP package. It is important to recognize that the RCI

process will result in some reconfiguration of the various neighborhoods with resultant changes in the utility systems serving those neighborhoods. The utility system owner should expect to be very much involved in these future changes.

J1.2 Electrical Distribution System Description

J1.2.1 Electrical Distribution System Fixed Equipment Inventory

The Fort Polk electrical distribution system consists of all appurtenances physically connected to the distribution system between the points of demarcation separating government ownership of the distribution system from the electric supplier and separating the distribution system from end-users. The system may include, but is not limited to, circuit breakers, transformers, circuits, protective devices, utility poles, ductbanks, switches, street lighting fixtures, and other ancillary fixed equipment. The actual inventory of items sold will be conveyed to the Contractor using the Bill of Sale at the time the system is transferred.

The Government reserves the right to connect to the electrical distribution system and use the distribution system for any future cogeneration system that may be built/installed on the Installation.

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 description and inventory were developed based on best available, yet imperfect, record data.

The Offeror shall base its proposal on site inspections, information in the technical library, and other pertinent information, as well as the following description and inventory. As described in Paragraph C11.1, if after award the Offeror identifies additional substantial inventory not listed in Paragraph J1.2.1.4, the Offeror may submit to the Contracting Officer a request for an equitable adjustment. If the Offeror determines that the inventory listed in Paragraph J1.2.1.4 is overstated, the Offeror shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment. The intent here is not to encourage piecemeal adjustments, but rather address significant adjustments that have significant bearing on capital replacement investments.

J1.2.1.1 System Description

Fort Polk is currently supplied power at 13.8/7.92-kV and at 4.16/2.4-kV from Entergy Louisiana, Inc., formerly Louisiana Power & Light Company. Power is delivered from Entergy's 34.5-kV sub-transmission system at two Entergy substations: the North Fort Substation, located near Artillery Road and K Avenue, and Substation No.2, located approximately 0.5 mile east of Louisiana Highway 467 on Georgia Avenue. Government-owned medium-voltage circuit breakers at these substations provide overcurrent protection and control for each of the outgoing 13.8-kV distribution circuits.

Power is also supplied to the Government-owned distribution circuits serving the range areas (non-cantonment areas) from Entergy Louisiana, Inc., at 13.8 kV at various metered delivery points.

A total of 13 distribution feeders supply primary voltage to loads throughout the Post. Two 13.8/7.92-kV feeders and two 4.16/2.4-kV feeders originate at the North Fort Substation, and

supply loads in the North Fort area. Nine 13.8/7.92- kV feeders originate at Substation No. 2 and supply loads in the South Fort area. The majority of the existing facilities are of overhead construction. The majority of the underground facilities are located in family housing areas, although most newer service extensions also have been constructed with underground facilities, as have feeders in and around the airfields and in the active portions of the range areas. Both direct-buried facilities and duct-and-manhole construction have been used. Most of the three-phase feeders have been tied together through the use of air-break, gang-operated switches. Protection from faults and lightning is provided by fused cutouts and by lightning arrestors, although some automatic circuit reclosers have also been installed. The overhead distribution system is about evenly divided between lines built before 1968 and lines built or rebuilt in 1972 or 1985, with some of the larger conductor lines reconstructed in 1990 or later. Electrical energy is distributed through primary and secondary distribution conductors ranging in size from #6 to 636 kcmil.

An unusual situation exists at Fort Polk where there are certain stretches of distribution line owned by Entergy Louisiana, Inc. where an unofficial agreement has been negotiated that allowed Fort Polk to suspend Government-owned distribution lines (“under-build”) on Entergy power poles. In a cooperative arrangement, Fort Polk has allowed Entergy to “over-build” their distribution lines on Government-owned poles. In all situations, the higher voltage Entergy-owned lines are physically situated above the Government-owned lines. Prospective contractors must be prepared to negotiate a bi-lateral agreement with Entergy for continuation of these arrangements. Areas affected are described as follows:

Entergy-owned power poles: The line extends from Dragoon Substation westerly to Highway 467, then southerly along the east side of Highway 467 to Louisiana Avenue and then westerly on Louisiana Avenue to Holman Avenue.

Army-owned poles: The line extends from Dragoon Substation northerly and along Chaffee Road to Entrance Road.

Combination (some Army-owned, some Entergy-owned poles): - Line extends from North Fort substation northerly to the 7800 Substation and then westerly to Chaffee Road.

A utility map highlighting these jointly used power lines will be available for review in the Bidder’s Technical Library.

PEASON RIDGE AND TOLEDO BEND

Power is supplied to Peason Ridge and the Toledo Bend Recreation Area from Valley Electric Cooperative at low voltage. The Government owns only secondary and lighting facilities at these sites.

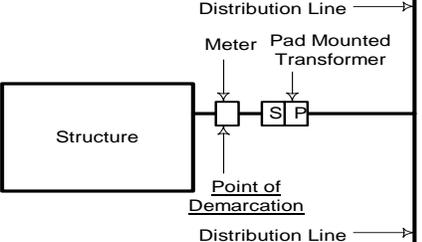
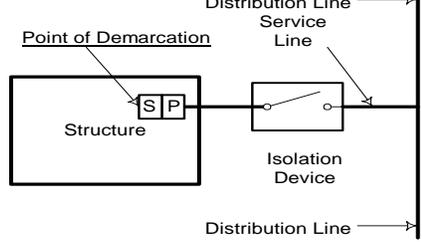
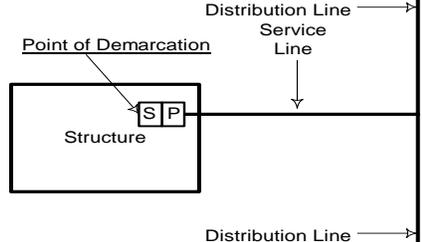
J1.2.1.2 Points of Demarcation

The point of demarcation is defined as the point on the distribution system where ownership changes from the Grantee to the building owner. The electrical distribution system consists of all components from the point where Fort Polk takes ownership from the supplier to the point where electrical service is delivered to end-users.

Specifically excluded from the electrical distribution system privatization are the electrical distribution lines that traverse the Post but not owned by the Post, and the airfield lighting system.

Table 2 identifies the type of service and general location of the points of demarcation with respect to each building served by the distribution system.

TABLE 2
 Points of Demarcation - Services
 Electrical Distribution System, Fort Polk, Louisiana

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the down current side of the meter	Residential service and a self-contained meter installation. Electric Meter exists within five feet of the exterior of the building on an underground secondary line.	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Distribution Line' enters from the right and passes through a 'Meter' and a 'Pad Mounted Transformer' (represented by a square with 'S' and 'P' inside) before entering the structure. An arrow labeled 'Point of Demarcation' points to the meter. The 'Distribution Line' continues to the right of the transformer.</p>
Point of demarcation is the meter pan or the first Isolation device supply point.	Residential service without meter but has a meter pan and/or an Isolation device.	None.
Secondary terminal of the transformer inside of the structure	All non-residential service with 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>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Distribution Line' enters from the right, passes through an 'Isolation Device' (represented by a square with a switch symbol), and then enters the structure. An arrow labeled 'Point of Demarcation' points to the transformer inside the structure. The 'Distribution Line' continues to the right of the isolation device.</p>
Secondary terminal of the transformer inside of the structure	All non-residential service with transformer located inside structure with no isolation device in place. Note: Utility Owner must be granted 24-hour access to transformer room.	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Distribution Line' enters from the right and enters the structure. An arrow labeled 'Point of Demarcation' points to the transformer inside the structure. The 'Distribution Line' continues to the right of the structure.</p>
Point of demarcation is the supply point inside the first Isolation device located on or inside the building.	All non-residential facilities located within a building such as water wells, pump house, treatment plants and lift stations.	None.

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the supply point inside the first Isolation device at the immediate proximity of the electric load served.	For all facilities not located in a building such as water wells, lift stations etc.	None.

Table 3 identifies the points of demarcation from the electric supplier system at the delivery points.

TABLE 3
 Points of Demarcation – Delivery Points
Electrical Distribution System, Fort Polk, Louisiana

Point of Demarcation	Applicable Scenario
Substation No. 2	Point of demarcation is at the point of attachment of the power supplier-owned 13.8-kV riser cables to the line side terminals of the Government-owned 13.8-kV circuit breakers in Substation No.2.
North Fort Substation	Point of demarcation is at the point of attachment of the power supplier-owned 13.8-kV riser cables to the line side terminals of the Government-owned 13.8-kV circuit breakers in North Fort Substation.
Ranges	Point of demarcation is at the down current side of the two power supplier-owned meters.
Toledo Bend and Peason Ridge	Point of demarcation is at the down current side of the power supplier-owned meter.

J1.2.1.3 Condition Assessment

The overhead distribution system is a mixture of components installed between the late 1960s and the 1990s. Though some older components require near-term replacement, the electric distribution system is generally in good condition.

J1.2.1.4 Inventory

Table 4 provides a general listing of the major electrical system fixed assets for the Fort Polk electrical distribution system included in the purchase. The system will be sold in an “as is, where is” condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned here in, is considered part of the purchased utility.

Construction of the Digital Mutli-Purpose Battle Area Course (DMPBAC) at the Peason Ridge range, located approximately 10 miles north of North Fort Polk, will be completed in 2004. These new electrical facilities under construction as part of this project are included in this inventory.

TABLE 4
 Fixed Inventory
 Electrical Distribution System, Fort Polk, Louisiana

Component	Size	Quantity	Unit	Approximate Year of Construction
MAIN POST				
<i>Overhead</i>	#6 Copper	307,320	LF	1970
	#4 Copper	202,180	LF	1972
	#2 Copper	215,185	LF	1972
	#1 Copper	15,200	LF	1968
	#2/0 Copper	44,540	LF	1975
	#4/0 Copper	127,140	LF	1976
	#4 ACSR	174,920	LF	1979
	#2 ACSR	96,760	LF	1983
	#1/0 ACSR	12,040	LF	1983
	#4/0 ACSR	152,200	LF	1981
	336kcmil ACSR	591,780	LF	1981
	477kcmil ACSR	261,760	LF	1982
	636kcmil ACSR	31,880	LF	1978
<i>Pole Switches</i>		53	EA	1980
<i>Oil Circuit Reclosers 25A</i>		6	EA	1974
<i>Oil Circuit Reclosers 15A</i>		1	EA	1989
<i>Oil Circuit Reclosers 3Ph</i>		5	EA	1989
<i>Fused Cutouts</i>		211	EA	1979
<i>Capacitor Bank 300KVAR</i>		11	EA	1980
<i>Capacitor Bank 150KVAR</i>		8	EA	1977
<i>Capacitor Bank 75KVAR</i>		4	EA	1972
<i>Poles</i>		2,542	EA	1977
<i>Underground</i>	#4 Copper	400	LF	1974
	#2 Copper	64,620	LF	1980
	#1 Copper	30,180	LF	1979
	#1/0 Copper	45,500	LF	1980
	3-#1/0 Copper	775	LF	2002
	#2/0 Copper	20,260	LF	1980
	#3/0 Copper	38,760	LF	1980

Component	Size	Quantity	Unit	Approximate Year of Construction
	#4/0 Copper	98,660	LF	1981
	350kcmil Copper	60,120	LF	1979
	500kcmil Copper	7,520	LF	1981
	#1/0 Aluminum	96,300	LF	1986
	#2 Aluminum	175,040	LF	1980
	Duct 2"	20,030	LF	1981
	Duct 3"	4,680	LF	1983
	Duct 3.5"	1,000	LF	1981
	Duct 4"	59,500	LF	1980
	Duct 5"	16,000	LF	1979
	Rigid Galvanized Steel 6" Conduit	600	LF	1974
	Pull Boxes	30	EA	1979
	Manholes	106	EA	1981
	Pad Mounted Disconnect Switches	55	EA	1981
<i>Transformers, Pole Mount</i>	5 kVA, 1 PH	25	EA	1971
	10 kVA 1 PH	220	EA	1976
	15 kVA 1 PH	207	EA	1974
	25 kVA 1 PH	440	EA	1974
	37.5 kVA 1 PH	137	EA	1974
	50 kVA 1 PH	207	EA	1975
	75 kVA 1 PH	71	EA	1976
	100 kVA 1 PH	21	EA	1972
	167 kVA 1 PH	3	EA	1968
	500 kVA 1 PH	3	EA	1980
<i>Transformers, Pad Mount</i>	15 kVA 1 PH	7	EA	1980
	25 kVA 1 PH	4	EA	1995
	37.5 kVA 1 PH	17	EA	1978
	50 kVA 1 PH	36	EA	1978
	75 kVA 1 PH	98	EA	1978
	100 kVA 1 PH	97	EA	1981
	167 kVA 1 PH	168	EA	1984
	333 kVA 1 PH	3	EA	1974
	75 kVA 3 PH	5	EA	1990
	112.5 kVA 3 PH	18	EA	1980
	150 kVA 3 PH	44	EA	1985

Component	Size	Quantity	Unit	Approximate Year of Construction
	225 kVA 3 PH	31	EA	1981
	300 kVA 3 PH	16	EA	1982
	500 kVA 3 PH	20	EA	1981
	750 kVA 3 PH	9	EA	1980
	1000 kVA 3 PH	3	EA	1979
	2500 kVA 3 PH	1	EA	1980
<i>Services, Overhead</i>	#6 Aluminum Duplex	9	EA	1970
	#6 Aluminum Triplex	92	EA	1976
	#4 Aluminum Triplex	72	EA	1972
	#4 Aluminum Quadraplex	47	EA	1976
	#2 Aluminum Triplex	119	EA	1971
	#2 Aluminum Quadraplex	91		1975
	#1/0 Aluminum Triplex	26	EA	1970
	#1/0 Aluminum Quadraplex	63	EA	1975
	#4/0 Aluminum Triplex	30	EA	1973
	#4/0 Aluminum Quadraplex	67	EA	1976
	3-350kcmil Copper	15	EA	1978
	4-350kcmil Copper	9	EA	1975
	3-500kcmil Copper	2	EA	1974
	4-500kcmil Copper	7	EA	1978
<i>Services, Underground</i>	4-#2 Copper	6	EA	1981
	4-#1/0 Copper	19	EA	1980
	4-300kcmil Copper	65	EA	1980
	8-300kcmil Copper	16	EA	1980
	3-350kcmil Copper	3	EA	1981
	4-500kcmil Copper	8	EA	1979
	8-500kcmil Copper	8	EA	1979
	21-1000kcmil Copper	12	EA	1980
<i>Street Lights</i>				
	Mercury Vapor on Steel Poles	517	EA	2001
	Mercury Vapor, Ex. Pole, 1 light fixture	1,051	EA	1975
	Mercury Vapor, Ex. Pole, 2 light fixture	3	EA	1973

Component	Size	Quantity	Unit	Approximate Year of Construction
Flood, Existing Pole, 1 light fixture		134	EA	1992
Flood, Existing Pole, 2 light fixture		8	EA	1970
Flood, Existing Pole, 3 light fixture		2	EA	1968
Mercury Vapor, Wood Pole, 1 light fixture		1,864	EA	1981
Mercury Vapor, Wood Pole, 2 light fixture		410	EA	1980
Flood, Pole Mounted, 1 light fixture		544	EA	1992
Flood, Pole Mounted, 2 light fixture		128	EA	1978
Flood, Pole Mounted, 3 light fixture		17	EA	1979
Flood, Pole Mounted, 4 light fixture		71	EA	1980
Flood, Pole Mounted, 5 light fixture		10	EA	1968
Flood, Pole Mounted, 6 light fixture		36	EA	1980
Flood, Wall Mounted, 1 light fixture		100	EA	1980
UG Conductor Copper	#1/0	4,600	LF	1983
UG Conductor Copper	#2	1,720	LF	1981
UG Conductor Copper	#8	42,860	LF	1980
UG Conductor Copper	#6	29,720	LF	1980
UG Conductor Copper	#10	24,700	LF	1980
UG Conductor Copper	#1	520	LF	1980
UG Conductor Copper	#4	960	LF	1980
OH Conductor Copper Duplex	#6	33,000	LF	1980
OH Conductor 3 Copper	#6	185,120	LF	2002
OH Conductor 2 ACSR	#4	1,700	LF	1979
OH Conductor 3 Copper	#1/0	4,460	LF	1977
PVC Duct	1"	11,980	LF	1980
PVC Duct	1¼"	960	LF	1980
PVC Duct	1½"	500	LF	1980
PVC Duct	2"	7,520	LF	1981

Component	Size	Quantity	Unit	Approximate Year of Construction
RGS Duct	¾"	680	LF	1980
RGS Duct	1"	1,000	LF	1981
<i>Substation Equipment</i>				
Oil Circuit Breakers	15 kV	13	EA	1975
<i>Meters</i>		57	EA	1980
HOUSING				
<i>Overhead</i>	#1/0 Copper	14,746	LF	1981
<i>Poles</i>		49	EA	1981
<i>Underground</i>	#2 Copper	24,317	LF	1981
	#1 Copper	22,686	LF	1981
	#1/0 Copper	61,327	LF	1981
	#4/0 Copper	68,575	LF	1981
<i>Transformers, Pole Mount</i>	10 kVA 1 PH	1	EA	1981
	15 kVA 1 PH	1	EA	1981
	37.5 kVA 1 PH	1	EA	1981
	50 kVA 1 PH	3	EA	1981
<i>Transformers, Pad Mount</i>	15 kVA 1 PH	2	EA	1981
	37.5 kVA 1 PH	8	EA	1981
	50 kVA 1 PH	36	EA	1981
	75 kVA 1 PH	98	EA	1981
	100 kVA 1 PH	75	EA	1981
	100 kVA 1 PH	5	EA	2003
	167 kVA 1 PH	178	EA	1981
<i>Services, Overhead</i>	#2 Aluminum Triplex	18	EA	1981
<i>Services, Underground</i>	3-#2 Copper	14	EA	1981
	3-#1/0 Copper	10	EA	1981
	3-#4/0 Aluminum	59	EA	1981
	3-#4/0 Copper	3	EA	1981
	3-350kcmil Copper	110	EA	1981
	3-500kcmil Copper	182	EA	1981
TOLEDO BEND				
<i>Services, Overhead</i>	#6 Aluminum Duplex	20	EA	1996
<i>Street Lights</i>				
Mercury Vapor, Ex. Pole, 1 light fixture		15	EA	1996
OH Conductor 2-#4 ACSR		1,000	LF	1996

Component	Size	Quantity	Unit	Approximate Year of Construction
PEASON RIDGE				
<i>Underground</i>	#1/0 Copper	19,573	LF	2004
	3-#1/0 Copper	60,383	LF	2004
	Pad Mounted Disconnect Switches	6	EA	2004
<i>Transformers, Pole Mount</i>	10 kVA 1 PH	1	EA	2004
<i>Transformers, Pad Mount</i>	15 kVA 1 PH	7	EA	2004
	25 kVA 1 PH	1	EA	2004
	37.5 kVA 1 PH	1	EA	2004
	75 kVA 3 PH	8	EA	2004
	112.5 kVA 3 PH	1	EA	2004
	150 kVA 3 PH	1	EA	2004

Notes:

The Approximate Year of Construction is an average year covering years 1957 – 2004.

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

Table 5 lists other ancillary equipment (spare parts), and **Table 6** lists specialized vehicles and tools included in the purchase. 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 5
 Spare Parts
Electrical Distribution System, Fort Polk, Louisiana

Quantity	Item	Make/Model	Description	Remarks
Fort Polk maintains an inventory of spare parts for the electrical distribution system. Contents of the inventory vary as items are used and/or purchased. Availability of this inventory to the new owner will be negotiated before or during the transition period.				

TABLE 6
 Specialized Vehicles and Tools
Electrical Distribution System, Fort Polk, Louisiana

Quantity	Item	Make/Model	Description	Remarks
No specialized vehicles or tools are included with the Fort Polk Electrical Distribution System.				

J1.2.3 Electrical Distribution System Manuals, Drawings, and Records

Table 7 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 7
 Manuals, Drawings and Records
Electrical Distribution System, Fort Polk, Louisiana

Quantity	Item	Description	Remarks
1	Drawings	CAD Drawings	Hard Copy
1	Electronic	CAD Drawings	Electronic Copy
1	Electronic Database	GIS Database	Electronic Copy

Note: Available manuals, drawings, records, and reports pertaining to the Fort Polk Electrical Distribution System are included in the Bidders' Library.

J1.3 Specific Service Requirements

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

J1.3.1 Excavation Marking/Digging Process

J1.3.1.1 Contractor Participation in Digging Permit Process

Contractor shall subscribe to the regional process (**Louisiana 1 Call** is the one-call dispatch center) for notification and marking of underground utilities. The Contractor shall mark all utilities in the time windows defined by this process. In some cases, where non-metallic lines do not have tracer wires, it may take longer to locate the lines. In these cases, the Contractor will make necessary notifications about a possible delay in the marking process. Contractor shall be responsible for all repairs, costs, and damages due to excavations by others for which he did not properly mark his utilities as part of the utility marking process. Generally, utility lines will be marked with pin flags or spray paint.

J1.3.1.2 Contractor Excavation Requirements

Contractor shall notify the regional one-call dispatch center of his digging requirement. The Contractor shall also obtain digging permits from Fort Polk in accordance with the AECOM process (see the AECOM Form below) before any drilling, digging, or excavation is undertaken. Permits will identify all underground utilities within five feet of the designated area. Since utility marking is an inherently imprecise process, excavation within five feet of the marked utilities will be done by hand. Contractor shall be responsible for all repairs, costs, and damages due to his excavations that fail to comply with the DPW digging permit process and the requirements listed herein; this includes excavations extending beyond areas that have been cleared for excavation.

AECOM Government Services

FORT POLK UTILITY LOCATION AND DIG PERMIT REQUEST

Location: _____

Date: _____

DIRECTIONS:

1. Mark area to be excavated in white.

2. Louisiana Law requires you to contact **Louisiana 1 Call**, representing all private and public utility companies. Dial 1-800-272-3020 two - seven days in advance and have digging location information available at time of call. Any company with utilities in the area will mark the respective utility. Ticket # _____

3. For Telephone, Data Lines and Fiber Optic line utility locations on Fort Polk:

- Contact DOIM/ATS Contractor (GSTek) at 531-4019
- Request location services seven days prior to digging. Service Order _____
- DOIM/ATS Contractor (GSTek) will issue dig Permit. _____

4. Sprint/ADSS 537-4711 Service Order #: _____

5. For CEG (CE Polk) well locations on Fort Polk, contact DPW Housing at 537-0508 and request a Service Order be generated for locating CEG wells. A two-day notice is required before digging. Co-energy contractor will mark well locations. If this excavation is NOT in Housing, proceed to Para 6.

6. **Water, Sewer, Gas and Exterior Electric.** When you have completed I - 5 above, hand carry this form along with a sketch of the area to be excavated to the Utility Office in Building 3304, Room 3. The Utility Office will initiate service orders to locate water, sewer, gas and exterior electric. Allow 48 hours, after which you may pick up the approved dig permit, and proceed to excavate.

- Natural Gas Service Order #: _____
- Exterior Plumbing Service Order #: _____
- Exterior Electric Service Order # _____
- Thermal Wells: _____

7. Permit to dig on Fort Polk is approved on _____ (date).

Utility Supervisor
AECOM Public Works

J1.3.2 Inspection and Maintenance Program

The Contractor shall develop and implement a system inspection and maintenance program to assure continued operation of the electrical distribution system IAW the National Electrical Safety Code and the National Electrical Code. The Contractor shall determine which switches and protective devices are necessary to control the distribution of electrical energy, respond to outages and emergency situations, isolate the system, restore electrical service, and otherwise as necessary to meet the requirements of this contract. The Government reserves the right to review the Contractor's system maintenance records.

J1.3.3 Supervisory Control and Data Acquisition (SCADA) System

There is no SCADA system currently in use at Fort Polk.

J1.3.4 Emergency Response

Because of the critical nature of many Fort Polk mission requirements, response to utility emergencies must be immediate. The Contractor will respond with a knowledgeable individual to emergency utility problems within 20 minutes of notification during duty hours and within one hour during non-duty hours. Additionally, repair crews must be on scene within one hour during duty hours and within two hours during non-duty hours.

J1.3.5 Fire Control and Safety

The utility system purchased by the Contractor may include facilities and the Contractor may elect to construct additional facilities on Post to support his operation. In all cases, the Contractor shall abide by Fort Polk fire protection requirements. These facilities may or may not include fire alarm systems. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for any facilities owned and operated by the Contractor. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.

J1.3.6 Restricted Access

The Contractor shall coordinate, and obtain approval for restricted area access. The ranges on the Installation are in constant use. Currently the Range Control coordinates and schedules the use of these areas. Any utility work that needs to be done on the ranges has to be coordinated and scheduled with the Range Control to avoid conflicts with the Installation's mission.

J1.3.7 Crisis Situations

IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by Fort Polk DPW or equivalent agency for exercises and crisis situations. Contractor shall submit Emergency Response Plans for approval by the Government for all Exercise and Crisis situations IAW C.9.8.

J1.3.8 Cost of Supporting Utilities

The Contractor may consume reasonable quantities of supporting utilities at no charge. However, Contractor shall fully cooperate with the Government with respect to energy/water conservation measures as described in Section C.3.4.

J1.4 Current Service Arrangement

Entergy provides electrical supply to North Fort Polk and South Fort Polk cantonment areas as well as various points on the ranges. Valley Electric Cooperative provides power to the Peason Ridge and Toledo Bend satellite locations. The respective electric companies meter electric energy consumption and demand at these various delivery points.

J1.5 Secondary Metering

Between the point of delivery and the end-user points of demarcation, the Contractor shall own the existing meters, and shall install additional meters at new and upgraded locations as directed by the Contracting Officer. Contractor shall install or cause to have installed utility meters as requested by the Contracting Officer in keeping with the guidance in Section C.3.3

J1.5.1 Existing Meters

Table 8 lists the existing (at the time of contract award) meters that will be transferred to the Contractor.

The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3.3, *Metering*, and J1.6, *Monthly Submittals*.

TABLE 8
 Existing Secondary Meters
Electrical Distribution System, Fort Polk, Louisiana

Facility	Building No.	Meter Number
Hickory Hut BBQ	1975	70-216-796
Burger King	3224	92-655-496
Health Clinic	3504	78-086-022
Commissary	830	31-018-214
PX Main Service	840	634-82-071
Officers Club	352	648-80-677
LA National Guard	8521, 8505	669-92-981
Corps of Engineers	4740	79-685-871
Cable TV	900 Blk	327-96-277
Cellular One Meter @ CATV	900 Blk	78-404-599
Class 6	752	91-463-753
Barksdale Credit Union (South)	834	720-14-163
Bell Telephone	4921	590-99-972
Shoppette	4919	614-80-607
CG Residence	5670	699-58-788

Facility	Building No.	Meter Number
CG Residence	5672	670-42-406
Shoppette	5890	704-05-894
Service Station Office	1725A	254-68-102
Service Station	1725	332-36-608
Vend-A-Snack	1725	396-14-180
PX	1170	630-85-969
BJACH Boiler Plant	285	701X90G89
BJACH Boiler Plant	285	701X90GG89
Mercury Cellular	1803	74-616-866
PX Office	102	173-89-186
Koch Gateway Pipeline	Texas (between NF & SF)	486-12-095
Hickory Hut BBQ	SW 8023 (North Fort Polk)	44-398-033
Shoppette	7000	840-50-536
Bell Telephone	Chaffee Road (NF)	748-10-381
FH Master Meter 1	6900/5800	700-85-605
FH Master Meter 2	Holmund & 467 (6100/6800)	700-85-615
FH Master Meter 3	5600 Col (Hospital)	700-85-608
FH Master Meter 4	5500 Gens	700-85-611
FH Master Meter 5	5400 (Old Port) 467 & Magnolia	700-85-6614
FH Master Meter 6	5400 Solar	700-85-614
FH Master Meter 7	600,048,004,900	781-85-145
FH Master Meter 8	SFTP	70-085-610
FH Master Meter 11	Woods of Bell Richard	766-40-225
FH Master Meter 12	5200	766-40-226
FH Master Meter 13	5100	777-00-001
FH Master Meter 14	5000 S off 467	
FH Master Meter 15	NF @ Light	730-25-676
FH Master Meter 16	583A North of Meter 15	
FH Master Meter 17	583B off North Road	
FH Master Meter 18	350A Riverton @ Howard	
FH Master Meter 19	350B Pinehurst off Riverton	
Cobro (Contractor)	Louisiana	35-043-962
Priola (Contractor)	Louisiana (Behind Burger King)	

Facility	Building No.	Meter Number
Hunter UAV (Contractor)		55-412-170
MICCS (Contractor)	2391 Service Command Cr.	
Azteca (Contractor)	Louisiana (across from Bldg 4533	25061700
Artillery Road	Ranges	759087
Artillery Road & Eneeginer Lake (for range 45)	Ranges	769508
HWY 467 North JRTC sign	Ranges	801530
Doppler radar site	Ranges	573677
N.F. School 7600 block	Ranges	689693
N.F Classroom 7600 block	Ranges	764574

J1.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 9**. New secondary meters shall be installed IAW Paragraphs C.3.3.1, *Future Meters*, and C.13, *Operational Transition Plan*. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3.3, *Metering*, and J1.6 below.

TABLE 9
 New Secondary Meters
Electrical Distribution System, Fort Polk, Louisiana

Facility	Building No.
122nd ARCOM	
Bldg 7503	7503
Bldg 7504	7504
Bldg 7505	7505
Bldg 7506	7506
Bldg 7507	7507
Bldg 7515	7515
Bldg 7516	7516
Bldg 7517	7517
Bldg 7518	7518
Bldg 7524	7524
Bldg 7526	7526
Bldg 8610	8610
Bayou Theater	930
Laundromat	8251

Facility	Building No.
Carlson Travel	1830
Defense Accounting Office	2524
Desert Storm (Lockheed)	
Bldg 4531	4531
Bldg 4568	4568
Bldg W4508	W4508
Bldg 7727	7727
Bldg 7728	7728
Bldg 7903	7903
Bldg 7906	7906
Defense Printing Service	317
Greyhound Bus	1021
National Guard	8505
Laundry	2375
Meddac	
Bldg 285 (Hospital)	285
Bldg 287 (Cooling Tower)	287
Bldg 289 Power Plant	289
Bldg 665	665
Bldg 1561	1561
Bldg 2157	2157
Bldg 8235	8235
Bldg 293 Co Admin	293
Bldg 667	667
Bldg 4364	4364
Bldg 4372	4372
Bldg 4379	4379
MWR	
Bldg 1457	1457
Sports America	1454
19th Hole	323
Property Disposal Office	4050
Sabine Bank	
Bldg 1815	1815
Bldg 1901	1901
PX / Phone	2380
PX / Hot Dog	8022

Facility	Building No.
Defense Investigative Service	415
Bldg 8553 (National Guard)	8553
Barber Shop	2380
Meddac Bldg 286 Lawn Maint	286
MWR Bldg 324	324
Nage	
2 ATMs (NF)	

J1.6 Monthly Submittals

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

1. **Invoice.** (IAW Paragraph G.2, *Submission and Payment of Invoices*). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. The Contractor shall provide sufficient supporting documentation with each monthly invoice to substantiate all costs included in the invoice for each CLIN as approved by the Contracting officer. The proposed system of accounts shall be made available in electronic format as directed by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name: DIRECTORATE OF PUBLIC WORKS
 ATTN (Mr. Roy Bethel)
Address: 2271 Louisiana Ave, Bldg 3304
 Fort Polk, LA 71459-5440
Phone number: (337) 531-4508

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: DIRECTORATE OF PUBLIC WORKS
 ATTN (Mr. Roy Bethel)
Address: 2271 Louisiana Ave, Bldg 3304
 Fort Polk, LA 71459-5440
Phone number: (337) 531-4508

3. **Meter Reading Report.** The monthly meter reading report shall show the current and previous month's 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: DIRECTORATE OF PUBLIC WORKS
 ATTN (Mr. Roy Bethel)
Address: 2271 Louisiana Ave, Bldg 3304
 Fort Polk, LA 71459-5440
Phone number: (337) 531-4508

J1.7 Energy Saving Projects

IAW Paragraph C.3.4, *Energy and Water Efficiency and Conservation*, the following projects have been implemented by the Government for conservation purposes.

- There are no energy savings projects associated with the utility system being privatized.

J1.8 Service Area

IAW Paragraph C.4, *Service Area*, the service area is defined as all areas within the Fort Polk boundaries including the North Fort Polk and South Fort Polk areas as well as the Peason Ridge and Toledo Bend satellite locations.

J1.9 Off-Installation Sites

The Peason Ridge and Toledo Bend satellite locations have electric distribution system components included in this UP package as described in earlier paragraphs.

J1.10 Specific Transition Requirements

IAW Paragraph C.13, *Operational Transition Plan*, **Table 10** provides a list of service connections and disconnections required upon transfer.

TABLE 10
 Service Connections and Disconnections
Electrical Distribution System, Fort Polk, Louisiana

Location	Description
<p>Although there are no service connections or disconnections required upon transfer of the Fort Polk Electrical Distribution System, a significant transition requirement pertains to obtaining Special Use Permit Agreements (SUPAs) from the U.S. Forrest Service for utility components installed on Forrest Service lands. As suggested in Paragraph J1.1.4 above, the Contractor should expect a recurring fee associated with these SUPAs.</p>	
<p>Prospective contractors must be prepared to negotiate a bi-lateral agreement with Entergy for continuation of the “overbuilt/underbuilt” arrangement with Entergy described in J1.2.1.1.</p>	

J1.11 Government Recognized System Deficiencies

Table 10 provides a list of Government recognized deficiencies. The deficiencies listed may be physical deficiencies, functional deficiencies, or operational in nature. If the utility system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. The

Offeror shall make a determination as to its actual need to accomplish and the timing of any and all such deficiency remedies.

Physical and functional deficiencies may require capital to be invested in the system. If any deficiency remedy requires a capital upgrade project, the capital upgrade project shall be proposed according to the following:

- Capital upgrade projects required to bring the system to standard shall be proposed under Schedule 3 – Initial Capital Upgrade(s)/Connection Charge(s).
- Capital upgrade projects required to replace system components shall be proposed in the first years of Schedule 2 – Renewals and Replacements – 50-Year Schedule, and the cost factored into Schedule 1 – Fixed Monthly Charge, for Renewals and Replacements as part of CLIN AA.
- Transition costs shall be proposed as a one-time cost and shall be treated similar to a capital project and included in Schedule 3 – Initial Capital Upgrade(s)/Connection Charge(s).
- Improvements proposed in the operational component of the work shall be included in Schedule 1 – Fixed Monthly Charge as part of CLIN AA.

TABLE 11
 System Deficiencies
Electrical Distribution System, Fort Polk, Louisiana

This table reflects a series of requirements (not necessarily system deficiencies) that require execution. These requirements have not been quantified, nor are there project numbers assigned. They are provided to generally acquaint the Contractor with system needs, from the Government’s perspective, that should be addressed over the next few years.

System Component	Deficiency Description	To Be Accomplished
Distribution Voltage North Fort	Convert distribution voltage from 4160 to 13800	Year 1
Switch Cabinets	Replace rusty switch cabinets in Cantonment areas	Year 4 & 5
General	Perform load test and balance loads	Year 1
Poles	Replace deteriorated poles on range lines	Year 2
Poles	Test South Fort poles	Year 1
Poles	Replace Housing Area poles	Year 2 & 3
Poles	Replace poles South Fort Circuits D, D, E, F, G, H, & I	Year 2, 3, & 4
Metal Poles	Renumber poles; facilitate streetlight repairs	Year 5
Air Switches	Repair air switches	Year 2