

Attachment J01

Fort Hunter Liggett Electrical Distribution System

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J01 Fort Hunter Liggett Electrical Distribution System

J01.1 Fort Hunter Liggett Area Overview

Fort Hunter Liggett, California, is the largest Reserve Command post in the Army, occupying over 165,000 acres in the San Antonio River valley next to the Los Padres National Forest. The installation is situated approximately 250 miles north of Los Angeles and 150 miles south of San Francisco in California's Central Coast region. The post was established in 1940 and named after Lieutenant General Hunter Liggett (1857–1935), who commanded the 41st National Guard Division, and later, the First Corps of the American Expeditionary Forces during World War I. He also served as Chief of Staff for General Pershing. Today, Fort Hunter Liggett is operated primarily as the Army Reserve Command Western Reserve Training Center serving Active and Reserve components. Fort Hunter Liggett's mission is to maintain and allocate training areas, airspace, facilities and ranges in order to support reserve and active components' field maneuvers, live fire exercises, testing, and institutional training. Additionally, the installation provides quality of life and logistical support to training units.

The Multi-Purpose Range Complex (MPRC) supports live fire and maneuver training for tanks and Bradley Fighting Vehicles. Aviation training takes place at Tusi Army Heliport and Schoonover Tactical Air Strip, with additional aviation training at MPRC and Stony Valley. Several small arm ranges are also provided, from an M16 Qualification Range to a Hand Grenade Range.

The installation's population today is 250 permanent residents and civil servants, with increases up to 4,000 transient active duty personnel when on training rotation. Housing occupancy is typically 98 percent.

J01.2 Electrical Distribution System Description

The Fort Hunter Liggett electrical distribution system consists of all appurtenances physically connected to the system from the points at which the electricity enters the system and/or where the Government ownership currently starts, to the point of demarcation defined by Section J01.10 of this section or the real estate easements that result from negotiations under this contract. The system may include, but is not limited to transformers, underground and overhead circuits, utility poles, switches, and vaults. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the system. The Offeror shall base the proposal on site inspections, information in the technical library, and other pertinent information, and to a lesser degree on the following description. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

The Contractor shall comply with all applicable federal, state, and local regulations governing the operation of the electrical system.

The installation shall retain joint use of all electrical utility poles.

All overhead (pole-mounted) transformers have had all polychlorinated biphenyls (PCB's) removed. All pad-mounted transformers except two have had PCB's removed.

J01.2.1 Electrical Distribution System Fixed Equipment Inventory

J01.2.1.1 Description

Primary power enters the installation at 12 kV from Pacific Gas and Electric (PG&E). There are 21 separate meters servicing cantonment, housing, Ammunition Supply Point, MPRC, Williams Hill, Bald Mountain, 8J, Site Alpha, and Site Bravo repeater station areas. There are no substations on the installation, but the MPRC system has a switching station. Average monthly consumption is approximately 830,000 kilowatt hours with usage peaking in late summer to early fall. Emergency generators will remain under the ownership of the installation.

J01.2.1.2 Inventory

Table 1 provides a general listing of the major fixed assets for the Fort Hunter Liggett electrical distribution system. 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 herein, is considered part of the purchased utility.

Table 1
Fixed Inventory
Electrical Distribution System – Fort Hunter Liggett

Item	Quantity	Unit	Approximate Year of Construction
Overhead Conductors			
3 conductors (c.) #6 (size), 3 phase	4,700	Linear Feet	1956
3 c. #6, copper	450	Linear Feet	1956
3 c. #6	9,250	Linear Feet	1956
3 c. #4, 3 phase	4,550	Linear Feet	1956
3 c. #4, ACSR	3,125	Linear Feet	1956
3 c. #4	550	Linear Feet	1956
3 c. #2	5,850	Linear Feet	1956
3 c. #1, 12.47 KV, 3 phase	1,000	Linear Feet	1956
3 c. #1/0	200	Linear Feet	1956
3 c. #1/0, ACSR	4,035	Linear Feet	1956
3 c. #3/0, ACSR, 12 KV, 3 phase	500	Linear Feet	1956
3 c. #3/0, ACSR	2,450	Linear Feet	1956
2 c. #6, bare copper	500	Linear Feet	1956
2 c. #6	850	Linear Feet	1956
2 c. #6, 1 phase	3,200	Linear Feet	1956
Unknown	50	Linear Feet	1997

Item	Quantity	Unit	Approximate Year of Construction
Underground Conductors – Direct Buried			
3 c. #1	100	Linear Feet	1956
3 c. #1, EPR, #4 ground (MPRC)	60,013	Linear Feet	1988
3 c. #1/0, ACSR	250	Linear Feet	1956
2 c. #6	1,800	Linear Feet	1956
2 c. #10	1,800	Linear Feet	1956
Underground Conductors – In 4-inch Conduit			
3 c. #1/0 15 KV	3,130	Linear Feet	1956
3 c. #3/0 ACSR, 12 KV, 3 phase	200	Linear Feet	1956
3 c. #2 Aluminum, 15 KV	650	Linear Feet	1956
3 c. 15 KV	610	Linear Feet	1956
3 c. 250 MCM, #1/0 Ground, EPR	120	Linear Feet	1988
Unknown	14,915	Linear Feet	1995
Transformers – Pole Mounted			
3.8 kVA	2	Each	1964
5 kVA	7	Each	1964
10 kVA	9	Each	1964
15 kVA	13	Each	1964
25 kVA	46	Each	1964
37.5 kVA	16	Each	1964
50 kVA	20	Each	1964
75 kVA	4	Each	1964
150 kVA	1	Each	1964
225 kVA	1	Each	1964
300 kVA	1	Each	1964
Transformers – Pad Mounted			
75 kVA	1	Each	1964
112.5 kVA	5	Each	1964
150 kVA	1	Each	1964
225 kVA	7	Each	1964
300 kVA	7	Each	1964
500 kVA	1	Each	1964
750 kVA	1	Each	1964
Transformers – Mounting Unknown			
1.0 kVA	1	Each	1990
300 kVA	2	Each	1990
30 kVA	1	Each	2000
15 kVA	1	Each	2000
12 kVA	1	Each	2001

Item	Quantity	Unit	Approximate Year of Construction
Transformers at MPRC			
10 kVA	3	Each	1988
15 kVA	7	Each	1988, 2001
25 kVA	10	Each	1988
73.5 kVA	4	Each	1988, 2001
75 kVA	7	Each	1988
112 kVA	2	Each	2001
Ammunition Supply Point Transformers			
12 kVA	1	Each	2001
25 kVA	1	Each	2001
75 kVA	1	Each	2001
225 kVA	1	Each	2001
Miscellaneous Equipment			
Switching Station at MPRC	1	Each	Unknown
Pole-top Switches	9	Each	Unknown
Auto-reclosure with pole-mounted switch	1	Each	Unknown
Main Meter	21	Each	Unknown

J01.2.2 Electrical Distribution System Non-Fixed Equipment and Specialized Tools Inventory

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

Table 2
Spare Parts
Electrical Distribution System – Fort Hunter Liggett

Qty	Item	Make/Model	Description	Remarks
None.				

Table 3
Specialized Equipment and Vehicles
Electrical Distribution System – Fort Hunter Liggett

Description	Quantity	Location	Maker
None.			

J01.2.3 Electrical System Manuals, Drawings, and Records Inventory

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

Table 4
Manuals, Drawings, and Records
Electrical Distribution System – Fort Hunter Liggett

Qty	Item	Description	Remarks
			The installation maintains a limited collection of manuals, drawings and records on installed components of the electrical system. This information or copies thereof will be transferred during the transition period.

J01.3 Current Service Arrangement

Fort Hunter Liggett currently purchases wholesale electrical power for the cantonment area and several nearby sites at 12 kV from Pacific Gas and Electric Company (PG&E) at a single delivery point near the western edge of the cantonment area. All electrical facilities located on the installation are owned and operated by Fort Hunter Liggett.

J01.4 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 Clause C.3.

J01.4.1 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 Clauses C.3 and J01.5 below.

Table 5
Existing Secondary Meters
Electrical Distribution System – Fort Hunter Liggett

Meter Location	Description
None.	

J01.4.2 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 Clause C.13, Operational Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Clauses C.3 and J01.5 below. Although at the present time, the installation does not require any new meters to be installed, if meters are required in the future, the Contractor shall comply with Clause C.3.3.

Table 6
New Secondary Meters
Electrical Distribution System – Fort Hunter Liggett

Meter Location: Building Number	Meter Description
None.	

J01.5 Monthly Submittals

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

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 the Contracting Officer's designee. (This information will be provided upon award.)

Outage Report. The Contractor's monthly outage report will be prepared 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 and 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 the Contracting Officer's designee. (This information will be provided upon award.)

Meter Reading Report. If required by the Contracting Office, 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 the Contracting Officer's designee. (This information will be provided upon award.)

System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the 25th of each month for the previous month. System efficiency reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

J01.6 Energy Savings Projects

IAW C.3, Utility Service Requirement. No projects have been implemented by the installation for energy conservation purposes.

J01.7 Service Area

IAW Clause C.4, Service Area. The service area is defined as the area within the boundaries of Fort Hunter Liggett.

J01.8 Off-Installation Sites

There are no off-installation sites included in this package.

J01.9 Specific Transition Requirements

IAW Clause C.13, Operational Transition Plan. **Table 7** lists service connections and disconnections required upon transfer, and **Table 8** lists the improvement projects required upon transfer of the Fort Hunter Liggett electrical distribution system.

Table 7
Service Connections and Disconnections
Electrical Distribution System – Fort Hunter Liggett

Location	Description
None.	

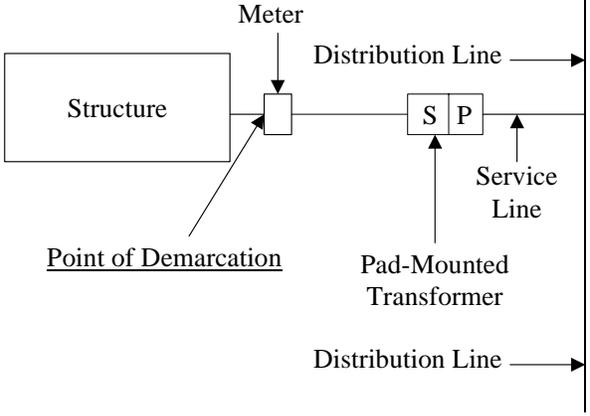
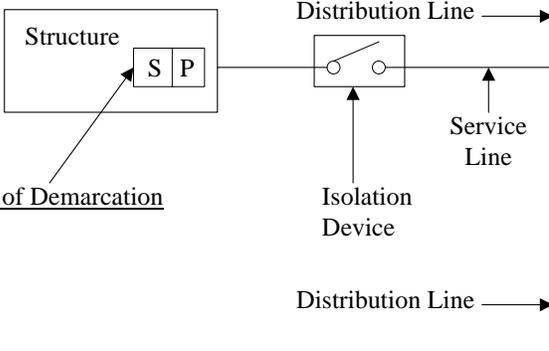
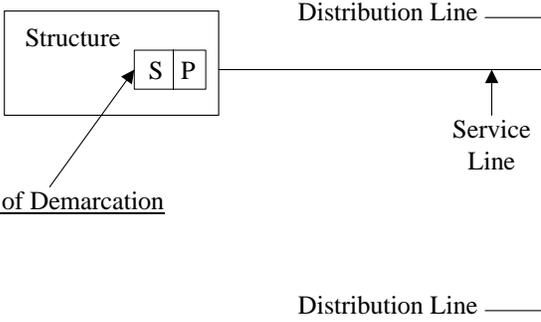
Table 8
System Improvement Projects
Electrical Distribution System – Fort Hunter Liggett

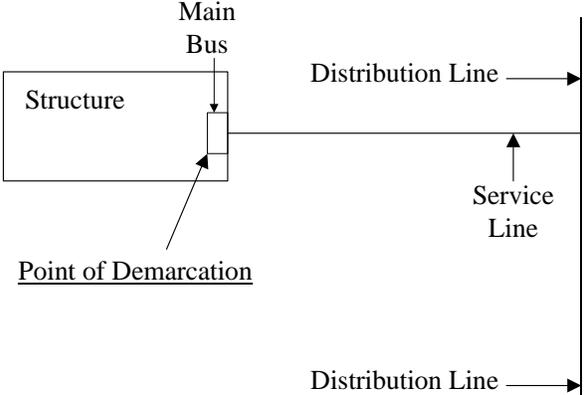
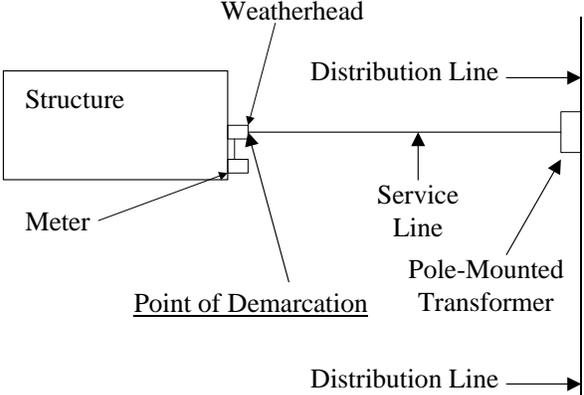
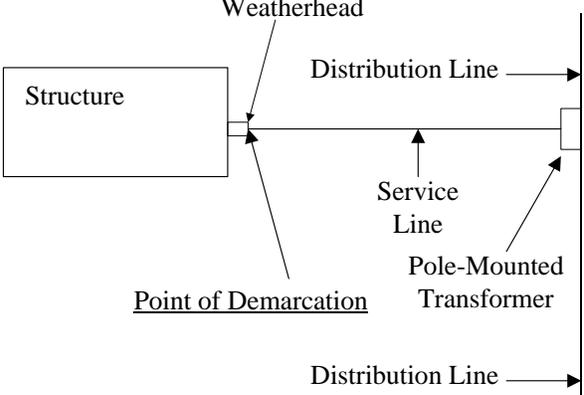
Location	Description
None.	

J01.10 Electrical Distribution System Points of Demarcation

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

Table 9
Points of Demarcation
Electrical Distribution System – Fort Hunter Liggett

Point of Demarcation	Applicable Scenario	Sketch
<p>Point of demarcation is the down-current side of the meter.</p>	<p>Residential service (less than 200 amps and 240V 1-Phase), and 3-phase self-contained meter installations. Electrical meter exists within five feet of the exterior of the building on an underground secondary line.</p>	 <p>The sketch shows a 'Structure' on the left. A 'Meter' is located on the exterior wall of the structure. A 'Distribution Line' runs horizontally from the meter to the right. Below the meter, an arrow points to the structure with the label 'Point of Demarcation'. To the right of the meter, a 'Pad-Mounted Transformer' (labeled 'S P') is connected to the distribution line. A 'Service Line' runs vertically upwards from the transformer to the top of the distribution line. Another 'Distribution Line' runs horizontally from the transformer to the right, below the first one.</p>
<p>Point of demarcation is the secondary terminal of the transformer inside the structure.</p> <p>Note: Contractor will be granted 24-hour access to transformer room.</p>	<p>Transformer located inside of structure and an isolation device is in place with or without a meter.</p> <p>Note: Contractor will be granted 24-hour access to transformer room.</p>	 <p>The sketch shows a 'Structure' on the left containing an 'S P' transformer. An arrow points from the transformer to the label 'Point of Demarcation'. To the right of the structure, an 'Isolation Device' (represented by a switch symbol) is connected to the transformer. A 'Distribution Line' runs horizontally from the isolation device to the right. A 'Service Line' runs vertically upwards from the distribution line to the top of the diagram. Another 'Distribution Line' runs horizontally from the isolation device to the right, below the first one.</p>
<p>Point of demarcation is the secondary terminal of the transformer inside the structure.</p> <p>Note: Contractor will be granted 24-hour access to transformer room.</p>	<p>Transformer located inside of structure with no isolation device in place.</p> <p>Note: Contractor will be granted 24-hour access to transformer room.</p>	 <p>The sketch shows a 'Structure' on the left containing an 'S P' transformer. An arrow points from the transformer to the label 'Point of Demarcation'. A 'Distribution Line' runs horizontally from the transformer to the right. A 'Service Line' runs vertically upwards from the distribution line to the top of the diagram. Another 'Distribution Line' runs horizontally from the transformer to the right, below the first one.</p>

Point of Demarcation	Applicable Scenario	Sketch
<p>Point of demarcation is the main bus of the building electrical panel</p>	<p>Electrical panel located inside of structure with no meter, transformer, or isolation device in place. Note: Contractor will be granted 24-hour access to transformer room.</p>	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. Inside the structure, a vertical line represents the 'Main Bus'. A horizontal line labeled 'Distribution Line' extends from the main bus to the right. A vertical line labeled 'Service Line' connects the distribution line to a vertical line on the far right. An arrow points to the main bus with the label 'Point of Demarcation'.</p>
<p>Point of demarcation is the point where the overhead conductor is connected to the building weatherhead.</p>	<p>Electrical meter is connected to the exterior of the building on an overhead secondary line.</p>	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line labeled 'Distribution Line' extends from the structure to the right. A vertical line labeled 'Service Line' connects the distribution line to a vertical line on the far right. A 'Weatherhead' is shown where the distribution line enters the structure. A 'Meter' is connected to the weatherhead. A 'Pole-Mounted Transformer' is connected to the service line. An arrow points to the weatherhead with the label 'Point of Demarcation'.</p>
<p>Point of demarcation is the point where the overhead conductor is connected to the building weatherhead.</p>	<p>Pole-mounted transformer is located outside of structure with secondary attached to outside of structure with no meter.</p>	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line labeled 'Distribution Line' extends from the structure to the right. A vertical line labeled 'Service Line' connects the distribution line to a vertical line on the far right. A 'Weatherhead' is shown where the distribution line enters the structure. A 'Pole-Mounted Transformer' is connected to the service line. An arrow points to the weatherhead with the label 'Point of Demarcation'.</p>

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the point where the overhead conductor is connected to the building weatherhead.	Service may be overhead or underground. A disconnect switch or junction box is mounted to the exterior of the structure with no meter.	

J01.10.1 Unique Points of Demarcation

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

Table 10
Unique Points of Demarcation
Electrical Distribution System – Fort Hunter Liggett

Building No.	Point of Demarcation Description
None.	

J01.11 Plants and Substations

The following table lists plants and substations that will be transferred as part of the utilities privatization effort.

Table 11
Plants and Substations
Electrical Distribution System – Fort Hunter Liggett

Description	Facility #	State Coordinates	Other Information
None.			