

# Greater Peoria Regional Airport (ANG) Electric Distribution System

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# J4 Greater Peoria Regional Airport (ANG) Electric Distribution System

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## J4.1 Greater Peoria Regional Airport (ANG) Overview

The 182<sup>nd</sup> Airlift Wing (AW) of the Illinois Air National Guard occupies 339 acres of leased land, separated into two parcels of 334 and 5 acres respectively. All utility systems on the 5-acre parcel are already privatized. Both parcels of leased land are on the Greater Peoria Regional Airport, located approximately six miles southwest of Peoria, in north central Illinois. The mission of the 182<sup>nd</sup> AW is to provide air transportation of personnel and equipment to deployed locations. The unit currently flies the C-130E Hercules. The 182<sup>nd</sup> AW occupies five administrative and 30 industrial buildings, totaling approximately 413,406 square feet with 238 full-time personnel. A unit training drill is conducted once a month and results in a surge of up to a total of 1200 personnel.

## J4.2 Electric Distribution System Description

### J4.2.1 Electric Distribution System Fixed Equipment Inventory

The Greater Peoria Regional Airport (ANG) 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, vaults, meters, and ductbanks. 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. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the electric distribution system privatization are:

- ?? Airfield Lighting.
- ?? Parking Lot Lights.
- ?? Street Lights
- ?? Auxiliary generators
- ?? All electrical utility systems on the small 5-acre portion of the base are already privatized and owned by Central Illinois Light Company (CILCO).
- ?? The CILCO owned circuit running in one conduit of the ductbanks. The CILCO circuit enters the ductbank after the meter located 625 feet south of the NE property corner along the eastern perimeter fence. It runs southwest along the East Loop Road to the intersection of East Loop Road and Central Ave. The CILCO owned circuit then continues northwest in the ANG owned ductbank, to the intersection of Central Ave and ILANG Ave. At this intersection, the CILCO

owned circuit follows the ANG owned ductbank southwest to approximately 467 feet south of the northwest corner of the base (alongside Munitions Road adjacent to the perimeter fence). At this point, it connects to the CILCO owned meter and leaves the base owned ductbank and heads off of the installation.

#### J4.2.1.1 Description

Power is provided by Central Illinois Light Company (CILCO) and enters the base and is metered at two locations. It is delivered and distributed at 13.2 (kV) through a branched underground configuration system. The primary distribution system consists of 9,300 linear feet of 3-phase underground circuits rated at 15 kV in multiple conduit ductbanks. The ductbanks are in concrete, cast in place with four to six PVC conduits. All of the conduits in the ductbanks are currently being utilized, with two (when the ductbank has four conduits) to four (when ductbank has six conduits) dedicated to communication lines, one dedicated to a power line owned by CILCO, and one dedicated to the base owned electrical circuits mentioned above. The underground circuits are buried at an average depth of four feet and are marked with tracer wire. Multiple branches feed 18 three-phase, oil-filled, pad mounted transformers ranging from 75 to 1500 kVA and one 25 kVA single-phase, oil-filled, pad mounted transformer. The system includes 19 pre-cast concrete utility vaults, each 10 by 10 by 8 feet in size and 15 electric meters. Base personnel indicate the capacity of the current system is adequate for present and future needs.

#### J4.2.1.2 Inventory

**Table 1** provides a general listing of the major electric distribution system fixed assets for the Greater Peoria Regional Airport (ANG) electric distribution system included in the sale.

**TABLE 1**  
Fixed Inventory  
Electric Distribution System Greater Peoria Regional Airport (ANG)

Item	Size	Quantity	Unit	Approximate Year of Construction
<b>Underground Circuits</b>	AWG			
3ph, 3w, 15000V, in ductbank	#1	462	LF	1990
3ph, 3w, 15000V, in ductbank	#1	1080	LF	1992
3ph, 3w, 15000V, in ductbank	#1	820	LF	1994
3ph, 3w, 15000V, in ductbank	#1	220	LF	2000
3ph, 3w, 15000V, in ductbank	#1	318	LF	1991
3ph, 3w, 15000V, in ductbank	#1	516	LF	1999
3ph, 3w, 15000V, in ductbank	#1	4134	LF	1989
3ph, 3w, 15000V, in ductbank	#2	695	LF	1994
3ph, 3w, 15000V, in ductbank	#2	174	LF	1993
3ph, 3w, 15000V, in ductbank	#2	350	LF	1990
3ph, 3w, 15000V, in ductbank	#2	463	LF	1992
3ph, 3w, 15000V, in ductbank	#2	90	LF	1999

Item	Size	Quantity	Unit	Approximate Year of Construction
<b>Transformers</b>	Nom kVA			
<b>3ph, oil filled, pad mounted</b>	75	1	EA	1990
<b>3ph, oil filled, pad mounted</b>	150	1	EA	1992
<b>3ph, oil filled, pad mounted</b>	225	1	EA	1993
<b>3ph, oil filled, pad mounted</b>	225	1	EA	1990
<b>3ph, oil filled, pad mounted</b>	300	1	EA	1994
<b>3ph, oil filled, pad mounted</b>	300	1	EA	2000
<b>3ph, oil filled, pad mounted</b>	500	3	EA	1990
<b>3ph, oil filled, pad mounted</b>	500	1	EA	1992
<b>3ph, oil filled, pad mounted</b>	500	2	EA	1994
<b>3ph, oil filled, pad mounted</b>	750	2	EA	1992
<b>3ph, oil filled, pad mounted</b>	750	1	EA	1990
<b>3ph, oil filled, pad mounted</b>	750	1	EA	1999
<b>3ph, oil filled, pad mounted</b>	1500	1	EA	1994
<b>3ph, oil filled, pad mounted</b>	1500	1	EA	1990
<b>1ph, oil filled, pad mounted</b>	25	1	EA	1990
<b>Manholes</b>	Size			
<b>Pre-cast concrete</b>	10 ft x 10 ft x 8ft	19	EA	1989
<b>Electric meters (see section J4.5 for more details)</b>				
		5	EA	1990
		4	EA	1992
		1	EA	1993
		3	EA	1994
		1	EA	1999
		1	EA	2000
Notes:				
AWG = American Wire Gauge				
EA = each				
LF = linear feet				
Nom kVA = nominal kilovolt -amperes				
ph – phase				
V = volts				
FT = feet				
w = wire				

### J4.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools

Table 2 lists other ancillary equipment (spare parts) and Table 3 lists specialized vehicles and tools included in the 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 2**  
Spare Parts  
Electric Distribution System Greater Peoria Regional Airport (ANG)

Qty	Item	Make/Model	Description	Remarks
None				

**TABLE 3**  
Specialized Vehicles and Tools  
Electric Distribution System Greater Peoria Regional Airport (ANG)

Description	Quantity	Location	Maker
None			

### J4.2.3 Electric Distribution System Manuals, Drawings, and Records

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

**TABLE 4**  
Manuals, Drawings, and Records  
Electric Distribution System Greater Peoria Regional Airport (ANG)

Qty	Description	Remarks
1	Electrical and Communications Layout	Blueprints

## J4.3 Specific Service Requirements

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

Although the duct banks are being turned over to the successful offeror, those ducts not currently used for electrical lines will be reserved for the exclusive use of the government. Additional ducts may be made available to the successful offeror at the discretion of the Contracting Officer.

## J4.4 Current Service Arrangement

?? **Current Provider:** Central Illinois Light Company (CILCO)

?? **Average Annual Usage (2000):** 4,317,000 kWh

?? **Maximum Monthly Usage:** 492,605 kWh (August)

?? **Minimum Monthly Usage:** 276,511 kWh (September)

?? **Peak Demand:** 1,066 kW

## J4.5 Secondary Metering

### J4.5.1 Existing Secondary Meters

**Table 5** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J4.6 below.

**TABLE 5**  
Existing Secondary Meters  
Electric Distribution System Greater Peoria Regional Airport (ANG)

Meter Location (Building #)	Meter Description
528	Square D 3020 #cm-2050, 1994
530	ABB cl20 type dsb-3fm, 1994
535	Westinghouse cl20 type dsb-8fm, 1992
536	Square D cl20#cm-2050, 1992
620	GE cat#701x018815, 1993
628	Westinghouse fq data plus, 1994
630	Square D 3020 #cm-2350, 2000
632	Cutler hmr fq dd 4000, 1999
636	GE cat#700x25g2, 1990
728	Westinghouse cl20 type dsb-8fm, 1992
730	GE cat#700x67g10, 1990
734	Westinghouse cl20 type dsb-8fm, 1990
830	GE cat#700x25g2, 1990
834	Westinghouse fq data plus, 1990
836	Square D 3020 #cm-150, 1992

### J4.5.2 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 J4.6 below.

**TABLE 6**

New Secondary Meters

Electric Distribution System Greater Peoria Regional Airport (ANG)

Meter Location (building #)	Meter Description
615	3-phase, size and specifications to be determined
820	3-phase, size and specifications to be determined
831	3-phase, size and specifications to be determined
835	3-phase, size and specifications to be determined
Hush House Facility	3-phase, size and specifications to be determined

## J4.6 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 25<sup>th</sup> of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.
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 25<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award.
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 15<sup>th</sup> of each month for the previous month. Meter reading reports shall be submitted to the person identified at time of contract award.
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 25<sup>th</sup> of each month for the previous month. System efficiency reports shall be submitted to the person identified at time of contract award.

## J4.7 Energy Saving Projects

IAW Paragraph C.3 Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes: None.

## J4.8 Service Area

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the Greater Peoria Regional Airport (ANG) boundaries.

## J4.9 Off-Installation Sites

No off-installation sites are included in the sale of the Greater Peoria Regional Airport (ANG) electric distribution system.

## J4.10 Specific Transition Requirements

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

**TABLE 7**  
 Service Connections and Disconnections  
 Electric Distribution System Greater Peoria Regional Airport (ANG)

Location	Description
None	

## J4.11 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 Greater Peoria Regional Airport (ANG) electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewals and Replacements Plan process and will be recovered through Schedule L-3. Renewal and replacement projects will be recovered through Sub-CLIN AB.

**TABLE 8**  
 System Deficiencies  
 Electric Distribution System Greater Peoria Regional Airport (ANG)

Project Location	Project Description
None	