

# Louisville IAP (ANG) Electric Distribution System

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# J14 Louisville IAP (ANG) Electric Distribution System

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## J14.1 Louisville IAP (ANG) Overview

The 123<sup>rd</sup> Airlift Wing (AW) of the Kentucky Air National Guard occupies two parcels of leased land on the Louisville International Airport (IAP); one of 76 acres and the other of 5. The base is located on the northeast side of the airport approximately five miles south of downtown Louisville, Kentucky. The mission of the 123<sup>rd</sup>AW is to provide worldwide theater airlift for U.S. military and to support humanitarian operations. The unit currently flies the C-130H model aircraft and occupies four administrative, six industrial and two services buildings totaling approximately 355,000 square feet. The 123<sup>rd</sup> has 334 full-time personnel, a number that surges once a month to 1,180 personnel during unit training drills.

## J14.2 Electric Distribution System Description

### J14.2.1 Electric Distribution System Fixed Equipment Inventory

The Louisville IAP (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, ductbanks, vaults, and switches. 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

?? A portion of the electrical system on the 76-acre parcel is already privatized and is owned by Louisville Gas & Electric (LG&E). On this parcel, LG&E owns a service feed that enters the base approximately 810 feet west of the northeast corner. This feed continues southward for approximately 32 feet into a LG&E-owned sub-station. LG&E owns a service feed that leaves the sub-station and runs approximately 12 feet to a 3-way switch where base-owned service begins at the input side of the switch.

?? The electrical system on the 5-acre portion of the base is already privatized and is owned by LG&E. This system is independent of the base owned system and does not tie-in with the base owned system.

#### J14.2.1.1 Description

Power is provided by Louisville Gas & Electric (LG&E) and enters the base and is metered at a single location. It is delivered and distributed at 13.8 (kV) through a delta distribution system. The primary distribution system consists of approximately 5,700 linear feet of 15kV rated, 3-phase underground circuits, all in ductbanks. The underground circuits are buried at an average depth of three feet and are marked with tracer wire. Multiple branches feed nine three-phase pad-mounted transformers ranging from 225 to 1,500 kVA and one 25 kVA single-phase transformer. The system includes eight concrete vaults, 15 fuses and 2 switches. Although the peak demand is unknown, base personnel indicate the capacity of the current system is adequate for present and future needs.

#### J14.2.1.2 Inventory

**Table 1** provides a general listing of the major electric distribution system fixed assets for the Louisville IAP (ANG) electric distribution system included in the sale.

**TABLE 1**

Fixed Inventory

Electric Distribution System Louisville IAP (ANG)

Item	Size	Quantity	Unit	Approximate Year of Construction
<b>Underground Circuits</b>	AWG			
<b>3ph, 4w, 15000V, in conduit</b>	#2 CU	4770	LF	1995
<b>3ph, 4w, 15000V, in conduit</b>	350 CU	202	LF	2001
<b>3ph, 4w, 15000V, in conduit</b>	300 CU	460	LF	2001
<b>2w, 15000V, in conduit</b>	#8 CU	306	LF	1995
<b>Ductbanks</b>	Conduit size (in)			
<b>1 conduit ductbank</b>	4	502	LF	1995
<b>2 conduit ductbank</b>	4	821	LF	1995
<b>4 conduit ductbank</b>	4	1166	LF	2001
<b>4 conduit ductbank</b>	4	4205	LF	1995
<b>Transformers, 3-phase</b>	Nom kVA			
<b>Oil-filled, pad-mounted</b>	225	3	EA	1995
<b>Oil-filled, pad-mounted</b>	300	1	EA	1995
<b>Oil-filled, pad-mounted</b>	500	1	EA	1995
<b>Oil-filled, pad-mounted</b>	500	1	EA	2001
<b>Oil-filled, pad-mounted</b>	750	1	EA	1995
<b>Oil-filled, pad-mounted</b>	1500	2	EA	1995

Item	Size	Quantity	Unit	Approximate Year of Construction
<b>Transformers, 1-phase</b>	Nom kVA			
	25	1	EA	1995
<b>Switches</b>	Type			
<b>14.4kV, 600Amp</b>	2-way	1	EA	1995
<b>14.4kV, 600Amp</b>	3-way	1	EA	1995
<b>Line Fuses in Switch Gear</b>	rating			
	150 Amps	15	EA	1995
<b>Vaults</b>	Size			
<b>Pre-cast Concrete</b>	8 ft x 7 ft x 13 ft	8	EA	1995
Notes:				
AWG = American Wire Gauge				
EA = each				
LF = linear feet				
Nom kVA = nominal kilovolt -amperes				
ph – phase				
V = volts				
amps = amperes				
FT = feet				
w = wire				
CU = copper				
In = inches				

### J14.2.2 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 Louisville IAP (ANG)

Qty	Item	Make/Model	Description	Remarks
None				

**TABLE 3**  
Specialized Vehicles and Tools  
Electric Distribution System Louisville IAP (ANG)

Description	Quantity	Location	Maker
None			

### J14.2.3 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 Louisville IAP (ANG)

Qty	Description	Remarks
1	Electrical Utility System Maps (electronic copy)	AutoCAD Release Version 14

### J14.3 Specific Service Requirements

The service requirements for the Louisville IAP (ANG) electric distribution system are as defined in the Section C Description/Specifications/Work Statement. The following requirements are specific to the Louisville IAP (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.

### J14.4 Current Service Arrangement

?? **Current Provider:** Louisville Gas & Electric

?? **Average Annual Usage (2000):** 5147 MWh

?? **Maximum Monthly Usage:** 598 MWh

?? **Minimum Monthly Usage:** 345 MWh

?? **Peak demand:** Unknown

### J14.5 Secondary Metering

#### J14.5.1 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 J14.6 below.

**TABLE 5**

Existing Secondary Meters  
Electric Distribution System Louisville IAP (ANG)

Meter Location	Meter Description
None	

### J14.5.2 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 J14.6 below.

**TABLE 6**

New Secondary Meters  
Electric Distribution System Louisville IAP (ANG)

Meter Location	Meter Description
None	

### J14.6 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 (if any). 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.

### J14.7 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.

### J14.8 Service Area

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the boundaries of the 76-acre parcel of Louisville IAP (ANG).

## J14.9 Off-Installation Sites

No off-installation sites are included in the sale of the Louisville IAP (ANG) electrical distribution system.

## J14.10 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 Louisville IAP (ANG)

Location	Description
None	

## J14.11 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 Louisville IAP (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 Louisville IAP (ANG)

Project Location	Project Description
None	