

# Springfield-Beckley Municipal Airport (ANG) Electric Distribution System

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# **J22 Springfield-Beckley Municipal Airport (ANG) Electric Distribution System**

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## **J22.1 Springfield-Beckley Municipal Airport (ANG) Overview**

The 178<sup>th</sup> Fighter Wing (FW) of the Ohio Air National Guard occupies 113.6 acres of leased land on the Springfield-Beckley Municipal Airport, located in central Ohio, approximately five miles south of the city of Springfield and approximately 50 miles west of Columbus. The mission of the 178<sup>th</sup> FW is to train future fighter pilots. The unit currently flies the F-16 Falcon. The 178<sup>th</sup> FW occupies 8 administrative, 25 industrial, and 6 services buildings totaling approximately 336,330 square feet with 409 full-time personnel. A unit training drill is conducted twice a month and results in a surge of up to a total of 829 personnel. Two projects are currently funded for construction in FY 2002. These include a Hush House and a 30,800 SF Squadron Operations Complex.

## **J22.2 Electric Distribution System Description**

### **J22.2.1 Electric Distribution System Fixed Equipment Inventory**

The Springfield-Beckley Municipal 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, utility poles, manholes, ductbanks, 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
- ?? Ohio Edison owns approximately 13 feet of overhead primary line and one wooden utility pole which supports the utility owned master meter
- ?? The electric circuits that leave the installation and serve the TACAN and Receiver site facilities

### J22.2.1.1 Description

Power is provided by Ohio Edison. It enters the base and is metered at a single location. It is delivered and distributed at 12.47 (kV) utilizing both wye and delta configurations at various portions of the installation. The primary distribution system consists of approximately 1,400 linear feet of 3-phase, four-wire overhead rated at 15 kV and 8,700 linear feet of 3-phase, four-wire underground circuits rated at 15 kV. The underground circuits are in duct-banks or in PVC conduit. All underground circuits are buried at an average depth of four feet and are marked with tracer wire. Multiple branches feed 21 three-phase pad mounted transformers ranging from 112.5 to 500 kVA and 8 single-phase transformers ranging in size from 15 to 167 kVA. The system includes 13 manholes, 13 wood utility poles, two underground switches and 25 overhead switches. Base personnel indicate the capacity of the current system is adequate for present and future needs.

### J22.2.1.2 Inventory

**Table 1** provides a general listing of the major electric distribution system fixed assets for the Springfield-Beckley Municipal Airport (ANG) electric distribution system included in the sale.

**TABLE 1**

Fixed Inventory

Electric Distribution System Springfield-Beckley Municipal Airport (ANG)

Item	Size	Quantity	Unit	Approximate Year of Construction
<b>Ductbanks</b>				
1-conduit, 4-inch		460	LF	1995
2-conduit, 4-inch		1845	LF	1999
1-conduit, 5-inch		325	LF	1994
<b>Underground Circuits</b>				
	AWG			
3 ph, 4 w, 15 kV, in 4-inch direct buried conduit	#2	1555	LF	1979
3 ph, 4 w, 15 kV, in 4-inch direct buried conduit	#2	605	LF	1981
3 ph, 4 w, 15 kV, in 4-inch direct buried conduit	#2	1265	LF	1982
3 ph, 4 w, 15 kV, in 4-inch direct buried conduit	#2	1685	LF	1985
3 ph, 4 w, 15 kV, in 4-inch direct buried conduit	#2	910	LF	1986
3 ph, 4 w, 15 kV, in ductbank	#2	325	LF	1994
3 ph, 4 w, 15 kV, in ductbank	#2	250	LF	1999
3 ph, 4 w, 15 kV, in ductbank	#2	1280	LF	2001
3 ph, 4 w, 15 kV, in ductbank	#2	315	LF	2000
3 ph, 4 w, 15 kV, in ductbank	500 KC mil	460	LF	1995
<b>Overhead Circuits</b>				
	AWG			
3 ph, 4 w, 15 kV	#2	1375	LF	1960
<b>Transformers</b>				
	Nom kVA			

Item	Size	Quantity	Unit	Approximate Year of Construction
3ph, Oil filled, pad mounted	112.5	1	EA	2000
3ph, Oil filled, pad mounted	150	2	EA	1982
3ph, Oil filled, pad mounted	150	3	EA	2000
3ph, Oil filled, pad mounted	150	1	EA	1985
3ph, Oil filled, pad mounted	150	1	EA	1994
3ph, Oil filled, pad mounted	150	1	EA	1986
3ph, Oil filled, pad mounted	225	2	EA	1995
3ph, Oil filled, pad mounted	225	1	EA	1985
3ph, Oil filled, pad mounted	225	1	EA	1981
3ph, Oil filled, pad mounted	225	1	EA	1996
3ph, Oil filled, pad mounted	300	2	EA	2000
3ph, Oil filled, pad mounted	300	2	EA	1978
3ph, Oil filled, pad mounted	300	1	EA	1979
3ph, Oil filled, pad mounted	500	1	EA	2000
3ph, Oil filled, pad mounted	500	1	EA	1999
1ph, Oil filled, pad mounted	15	2	EA	1970
1ph, Oil filled, pad mounted	25	1	EA	1985
1ph, Oil filled, pad mounted	75	3	EA	2000
1ph, Oil filled, pad mounted	100	1	EA	1993
1ph, Oil filled, pad mounted	167	1	EA	1995
<b>Utility Poles</b>	Height (ft)			
Wood	40	1	EA	1965
Wood	40	1	EA	1995
Wood	45	1	EA	1991
Wood	45	8	EA	1970
Wood	45	1	EA	1984
Wood	45	1	EA	2000
<b>Switches, underground</b>	Type			
	2-way	1	EA	1982
	6-way	1	EA	2000
<b>Switches, overhead</b>	Type			
	600A-L	1	EA	1991

Item	Size	Quantity	Unit	Approximate Year of Construction
	600A-L	12	EA	1970
	600A-L	3	EA	1984
	600A-L	3	EA	1965
	600A-L	6	EA	2000
<b>Manholes/handholes</b>	Type			
<b>8 ft deep X 12 ft X 7 ft</b>	Pre-cast	1	EA	2001
<b>4 ft x 4 ft x 4 ft</b>	Pre-cast	4	EA	1982
<b>4 ft x 4 ft x 4 ft</b>	Pre-cast	5	EA	1985
<b>4 ft x 4 ft x 4 ft</b>	Pre-cast	2	EA	2000
<b>4 ft x 4 ft x 4 ft</b>	Fiberglass	1	EA	2000
Notes:				
AWG = American Wire Gauge				
EA = each				
LF = linear feet				
Nom kVA = nominal kilovolt -amperes				
ph – phase				
kV = kilovolts				
KVA = Kilovolt -amperes				
FT = feet				
KC Mil = thousand circular mils				
w = wire				

### J22.2.2 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 Springfield-Beckley Municipal Airport (ANG)

Qty	Item	Make/Model	Description	Remarks
None				

**TABLE 3**  
Specialized Vehicles and Tools  
Electric Distribution System Springfield-Beckley Municipal Airport (ANG)

Description	Quantity	Location	Maker
None			

### J22.2.3 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 Springfield-Beckley Municipal Airport (ANG)

Qty	Description	Remarks
1	Electrical Utility System Maps (electronic copy)	AutoCAD Release Version 2000

## J22.3 Specific Service Requirements

The service requirements for the Springfield-Beckley Municipal Airport (ANG) electric distribution system are as defined in the Section C Description/Specifications/Work Statement. The following requirements are specific to the Springfield-Beckley Municipal 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.

## J22.4 Current Service Arrangement

?? **Current Provider:** Ohio Edison

?? **Average Annual Usage (2000):** 5,800 MWh

?? **Maximum Monthly Usage:** 643.2 MWh (February)

?? **Minimum Monthly Usage:** 373.2 MWh (October)

?? **Peak Demand:** 1.3 kW

## J22.5 Secondary Metering

### J22.5.1 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 J22.6 below.

**TABLE 5**

Existing Secondary Meters

Electric Distribution System Springfield-Beckley Municipal Airport (ANG)

Meter Location	Meter Description
None	

### J22.5.2 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 J22.6 below.

**TABLE 6**

New Secondary Meters

Electric Distribution System Springfield-Beckley Municipal Airport (ANG)

Meter Location	Meter Description
None	

### J22.6 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.

### J22.7 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.

## J22.8 Service Area

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the Springfield-Beckley Municipal Airport (ANG) boundaries.

## J22.9 Off-Installation Sites

No off-installation sites are included in the sale of the Springfield-Beckley Municipal Airport (ANG) electric distribution system.

## J22.10 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 Springfield-Beckley Municipal Airport (ANG)

Location	Description
None	

## J22.11 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 Springfield-Beckley Municipal 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 Springfield-Beckley Municipal Airport (ANG)

Project Location	Project Description
None	