ATTACHMENT J18

Mansfield Lahm Airport (ANG) Electric Distribution System

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J18.1 Mansfield Lahm Airport (ANG) Overview

The 179th Airlift Wing (AW) of the Ohio Air National Guard occupies two separate portions of land (the main base area and the POL area, linked by a road included in the lease) totaling 67 acres of leased land on the Mansfield Lahm Airport. The Mansfield Lahm Airport sits approximately 3 miles north of the city of Mansfield, located in north-central Ohio, halfway between Cleveland and Columbus. The mission of the 179th AW is to develop highly qualified operations, logistics, support, and medical professionals who provide theater airlift and mission support to serve the community, state, and nation. The unit currently flies the C-130 Hercules. The 179th AW occupies 4 administrative and 29 industrial buildings totaling approximately 265,000 square feet with 370 full-time personnel. A unit training drill is conducted once a month and results in a surge of up to a total of 945 personnel. There are two construction projects in progress, which when complete, will add approximately 45,000 square feet of building space. The first involves Buildings 200 and 300 and is titled "Replace Security Forces Complex". This is scheduled for completion in 2001, and as part of this project Building 200 will be demolished after the new building 300 is occupied. The second project is titled "Replace Squadron Operations and Communications Complex" and is funded for contract award by 30 September 2001. Additionally, the city of Mansfield is planning to realign Harrington Memorial Road, which would add six acres to the installation, to be used as an automobile parking lot. The date of implementation of this plan is in 2002.

J18.2 Electric Distribution System Description

J18.2.1 Electric Distribution System Fixed Equipment Inventory

The Mansfield Lahm 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, 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 owned meter station located approximately 200 feet southeast of the southeast corner of Building 416 and 150 feet southwest of the west corner of Building 420.

?? Ohio owned utility pole located in the POL area on the north side of Cairns Road, approximately 185 feet west of the southeast corner of the base.

?? Ohio Edison owned meter station located in the POL area approximately 60 feet southwest of the west corner of the POL operations building

J18.2.1.1 Description

Power is provided by Ohio Edison (aka First Energy) and enters the base and is metered at two locations, one for the main base area and one for the POL area. It is delivered and distributed at 12.47 kV through a wye configuration radial system at both locations. The primary distribution system for both locations consists of approximately 2,600 linear feet 3-phase underground circuits and 2,000 linear feet of 3-phase overhead circuits rated at 15 kV. The underground circuits are buried at an average depth of 2.5 feet and are not marked with tracer wire. Multiple branches feed 14, 3-phase pad mounted transformers ranging from 50 to 750 kVA, nine 1-phase pole mounted transformers, ranging from 25 to 75 kVA, and one single phase pole mounted transformer rated at 15 kVA. The systems include 17 wood utility poles ranging in size from 40 to 45 feet, one 4-way underground switch, 30 electrical knife blade switches, three meters, and 52 electrical lightning arrestors. Although peak demand is unknown, base personnel indicate the capacities of the current systems are adequate for present and future needs.

J18.2.1.2 Inventory

Table 1 provides a general listing of the major electric distribution system fixed assets for the Mansfield Lahm Airport (ANG) electric distribution system included in the sale.

TABLE 1
Fixed Inventory
Electric Distribution System Mansfield Lahm Airport (ANG)

Item	Size	Quantity	Unit	Approximate Year of Construction
Underground Circuits (all in 4-inch PVC conduit)	AWG			
3-phase, 4w, 15 kV, EPR	#2	260	LF	1995
3-phase, 4w, 15 kV, shielded cable	#4/0	467	LF	1997
3-phase, 4w, 15 kV, shielded cable	#4/0	668	LF	1998
3-phase, 4w, 15 kV	#2	130	LF	1979
3-phase, 4w, 15 kV	#2	80	LF	1977
3-phase, 4w, 15 kV	#2	190	LF	1993
3-phase, 4w, 15 kV	#2	280	LF	1972
3-phase, 4w, 15 kV	#2	60	LF	1978
3-phase, 4w, 15 kV	#2	230	LF	1998
3-phase, 4w, 15 kV	#2	130	LF	1984

Item	Size	Quantity	Unit	Approximate Year of Construction
3-phase, 4w, 15 kV	#2	90	LF	1997
Overhead Circuits	AWG			
3-phase, 4w, conductor	#4 CU	1,580	LF	1950
3-phase, 4w, conductor	#4 CU	412	LF	1988
3-phase, 4w, conductor	#4 CU	55	LF	1997
Transformers	Nom kVA			
3-phase, oil filled, pad mounted	50	3	EA	1963
3-phase, oil filled, pad mounted	75	1	EA	1990
3-phase, oil filled, pad mounted	150	1	EA	1984
3-phase, oil filled, pad mounted	225	1	EA	1998
3-phase, oil filled, pad mounted	225	1	EA	1998
3-phase, oil filled, pad mounted	300	1	EA	1998
3-phase, oil filled, pad mounted	500	1	EA	1978
3-phase, oil filled, pad mounted	500	1	EA	1977
3-phase, oil filled, pad mounted	500	2	EA	1998
3-phase, oil filled, pad mounted	500	1	EA	1997
3-phase, oil filled, pad mounted	750	1	EA	1998
1-phase, oil filled, pole mounted	25	3	EA	1950
1-phase, oil filled, pole mounted	50	3	EA	1951
1-phase, oil filled, pole mounted	75	3	EA	1990
1-phase, oil filled, pole mounted	15	1	EA	1977
Utility Poles	Height (ft)			
wood	40	1	EA	1982
wood	40	2	EA	1986
wood	40	1	EA	1956
wood	40	6	EA	1975
wood	40	1	EA	1978
wood	45	2	EA	1981
wood	45	1	EA	1986
wood	45	3	EA	1956
Switches	Type			
type PMH10, 4-600amp, underground	4-way	1	EA	1998

Item	Size	Quantity	Unit	Approximate Year of Construction
Electrical knife blade fuse				
		1	EA	1982
		1	EA	1986
		22	EA	1956
		1	EA	1981
		5	EA	1975
Electrical Lightning Arrestors				
		1	EA	1982
		6	EA	1986
		20	EA	1956
		3	EA	1981
		22	EA	1975
Electric meters (see section J18.5.1 for more details)				
Electric 3-phase meter		1	EA	1991
Electric 3-phase meter		1	EA	2000
Electric 3-phase meter		1	EA	2001

Notes:

AWG = American Wire Gauge
EPR = Ethelynepropylene rubber
Cu = Copper
EA = each
LF = linear feet
Nom kVA = nominal kilovolt -amperes
kV = kilo volts
PVC = Polyvinyl Chloride
FT = feet
Amp = Amphere
w = wire

J18.2.2 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 Mansfield Lahm Airport (ANG)

Qty	Item	Make/Model	Description	Remarks

None				

TABLE 3
Specialized Vehicles and Tools
Electric Distribution System Mansfield Lahm Airport (ANG)

Description	Quantity	Location	Maker
None			

J18.2.3 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 Mansfield Lahm Airport (ANG)

Qty	Description	Remarks
1	Electrical Main Base (electronic copy)	AutoCAD Release Version 14
1	Jet Fuel Storage Main Base Complex	AutoCAD Release 14

J18.3 Specific Service Requirements

The service requirements for the Mansfield Lahm Airport (ANG) electric distribution system are as defined in the Section C Description/Specifications/Work Statement.

J18.4 Current Service Arrangement

?? **Current Provider:** Ohio Edison (aka First Energy)

?? **Average Annual Usage (2000):** : 3,018 MWH

?? **Maximum Monthly Usage**: 300 MWH (February)

?? **Minimum Monthly Usage**: 202 MWH (October)

?? **Peak Demand:** Unknown

J18.5 Secondary Metering

J18.5.1 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 J18.6 below.

TABLE 5
Existing Secondary Meters

Electric Distribution System Mansfield Lahm Airport (ANG)

Meter Location (Building #)	Meter Description
421	Landis and Gyr, type B RS100, 1991
207	GE, CL 200, 2000
403	GE KV, CL 20, 2001

J18.5.2 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 J18.6 below.

TABLE 6
New Secondary Meters
Electric Distribution System Mansfield Lahm Airport (ANG)

Meter Location (Building #)	Meter Description
422	3-phase, size and specifications to be determined
420	3-phase, size and specifications to be determined
416	3-phase, size and specifications to be determined
414	3-phase, size and specifications to be determined
405	3-phase, size and specifications to be determined
407	3-phase, size and specifications to be determined
400	3-phase, size and specifications to be determined
412	3-phase, size and specifications to be determined
108	3-phase, size and specifications to be determined
110	3-phase, size and specifications to be determined
112	3-phase, size and specifications to be determined
106	3-phase, size and specifications to be determined
105	3-phase, size and specifications to be determined
104	3-phase, size and specifications to be determined
103	3-phase, size and specifications to be determined
102	3-phase, size and specifications to be determined
101	3-phase, size and specifications to be determined
200	3-phase, size and specifications to be determined
201	3-phase, size and specifications to be determined
203	3-phase, size and specifications to be determined

305	3-phase, size and specifications to be determined
302	3-phase, size and specifications to be determined
304	3-phase, size and specifications to be determined
500	3-phase, size and specifications to be determined
501	3-phase, size and specifications to be determined
600	3-phase, size and specifications to be determined
601	3-phase, size and specifications to be determined
409	3-phase, size and specifications to be determined

J18.6 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 25th 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 25th 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 15th 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 25th of each month for the previous month. System efficiency reports shall be submitted to the person identified at time of contract award.

J18.7 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.

J18.8 Service Area

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

J18.9 Off-Installation Sites

The Mansfield Lahm Airport (ANG) electric distribution system includes the main base area as well as the POL located southwest of the main base area. A road included under the base lease connects these two areas. The POL area has its own dedicated electric distribution system that is metered by Ohio Edison exclusive of the main base system.

J18.10 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 Mansfield Lahm Airport (ANG)

Location	Description
None	

J18.11 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 Mansfield Lahm 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 Mansfield Lahm Airport (ANG)

Project Location	Project Description
None	