ATTACHMENT J5

McEntire Air National Guard Station Electric Distribution System

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J5.1 McEntire Air National Guard Station Overview

McEntire Air National Guard Station (ANGS) is located approximately 16 miles southwest of Columbia, South Carolina. It is owned by the US Government and is operated by the South Carolina Air National Guard. McEntire ANGS owns 2,344 acres and leases approximately 64 acres from the State of South Carolina. Additionally, there is a small parcel of privately owned land within the base boundary; however, neither the leased land nor the privately owned land contain utilities. The base is home to the 169th Fighter Wing, which flies the F-16 multi-role fighter. An Army National Guard aviation unit is also a tenant on the base. The base has a total 95 buildings: 90 industrial, 4 administrative and one services totaling 263,000 square feet. There is no family or transient housing. New facilities under construction include an addition to the avionics building (2,500 square feet) and replacement of the air traffic control tower and aircraft support equipment facility (14,600 square feet total). Additionally, seven facilities totaling approximately 21,000 square feet are scheduled for demolition in FY 2001. There are 550 full-time ANG personnel on base which increases to 1300 one weekend per month. Additionally, there is a small cadre of Army personnel on base, increasing to 400 every other weekend.

J5.2 Electric Distribution System Description

J5.2.1 Electric Distribution System Fixed Equipment Inventory

The McEntire Air National Guard Station 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, and meters. 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

?? Ballfield Lights

?? Twelve (12) Auxiliary Generators

J5.2.1.1 Description

McEntire ANGS receives its electricity from two providers: South Carolina Electric & Gas Company (SCE&G) and Tri-County Cooperative. SCE&G service enters the base at two locations and is distributed both overhead and underground at 4800/8320 volts. The Tri-County Electric Cooperative service enters the base at two locations and is distributed overhead and under ground at 7200/12,470 volts. The two systems are not inter-connected. The combined primary distribution system consists of approximately 34,000 linear feet of primarily three-phase underground circuits and 26,000 linear feet of overhead circuits. The underground system is both in conduit (some concrete encased) and direct bury at an average depth of three feet without warning tape. There are six electrical manholes. The above ground system contains 23 three-phase pole mounted transformers that range from 15 kVA to 100 kVA, four single-phase pole mounted transformers ranging from 15 kVA to 25 kVA, 27 three-phase oil filled, pad mounted transformers ranging from 50 kVA to 1500 kVA and one single phase, 50 kVA oil filled, pad mounted transformer. The system also has 136 utility poles, 45 feet tall. Base personnel indicate the current capacity is adequate and sufficient to meet the planned expansion of base facilities.

J5.2.1.2 Inventory

Table 1 provides a general listing of the major electric distribution system fixed assets for the McEntire Air National Guard Station electric distribution system included in the sale.

TABLE 1
Fixed Inventory
Electric Distribution System McEntire Air National Guard Station

Item	Size	Quantity	Unit	Approximate Year of Construction
Underground Circuits	AWG			
3 wire,15kV, EPR	1/0AL	7015	LF	1985
3 phase, 4 wire, conduit, direct bury	U#2/0 1w AL	2255	LF	1981
3 phase, 4 wire, conduit, concrete encased	#2AL URD	278	LF	1988
3 phase, 4 wire, conduit, concrete encased	#2AL URD	130	LF	1999
1 phase, 230v, 2" PVC Conduit	#2CU	340	LF	1994
Direct bury, concentric ground, 15kV	#2CU	110	LF	1965
Direct bury, concentric ground, 15kV	#2CU	1025	LF	1994
Direct bury, concentric ground, 15kV	#2CU	2820	LF	1996
Direct bury, 3 phase, 4 wire	#2/0CU	4641	LF	1942
Direct bury, 3 phase, 3 wire, conc grnd	4/0AL	3289	LF	1996
3 phase, 3 wire, conc grnd, 15kV	#2AL	1760	LF	1997
1 wire, 1 phase, Direct bury	#2/0	536	LF	1981

ASCR Neutral	#2	1848	LF	1942
3 phase, 4 wire, 4 inch IP conduit,	#2URD AL	496	LF	2000
3 phase, 4 wire w XLP, 4 inch IP encased	#2	238	LF	1986
15 kV, 4 inch steel conduit, concrete encased	#2 CU URD	220	LF	1985
3 phase, MV105, 25 kV	#2 AL	415	LF	2000
3 phase, 3 wire	#2 URD AL	268	LF	2000
3 phase, 4 wire, direct bury	#2 CU	4510	LF	1989
1 phase, 1 wire, conc grnd, 25 kV, DB	#4/0	1590	LF	1990
Overhead Circuits	AWG			
3 phase, 4 wire, conductor, solid	#4 CU	1848	LF	1942
3 phase, 4 wire conductor	2/0 CU	328	LF	1942
3 phase, 4 wire conductor	2/0 1 w AL	625	LF	2000
3 phase, 4 wire conductor, concentric, URD	2/0 1 w AL	527	LF	1981
3 phase, 4 wire conductor	2/0 ACSR	1590	LF	1990
3 phase, 4 wire conductor	2/0 ACSR	576	LF	1993
3 phase, 4 wire conductor	2/0 ACSR	1292	LF	1984
3 phase, 4 wire conductor	2/0 ACSR	208	LF	1997
3 phase, 4 wire conductor	2/0 ACSR	775	LF	1992
3 phase, 4 wire conductor	2/0 ACSR	1440	LF	1972
3 phase, 4 wire conductor	2/0 ACSR	3328	LF	1995
3 phase, 4 wire conductor	2/0 ACSR	1441	LF	1985
3 phase, 4 wire	#2 ACSR	9531	LF	1996
3 phase, 4 wire	#2 ACSR	1331	LF	1942
1 phase, 2 wire	#2 AL ACSR	1927	LF	1981
3-Phase Transformers	Nom kVA			
Oil filled, pole mounted	15	1	EA	1992
Oil filled, pole mounted	25	3	EA	1984
Oil filled, pole mounted	25	1	EA	1985
Oil filled, pole mounted	25	3	EA	1986
Oil filled, pole mounted	37.5	3	EA	1993

Oil filled, pole mounted	50	3	EA	1993
Oil filled, pole mounted	75	3	EA	1958
Oil filled, pole mounted	100	3	EA	1942
Oil filled, pole mounted	100	3	EA	1942
3-Phase Transformers	Nom kVA			
Oil filled, pad mounted	50	1	EA	2000
Oil filled, pad mounted	50	3	EA	1985
Oil filled, pad mounted	75	2	EA	1995
Oil filled, pad mounted	75	1	EA	1990
Oil filled, pad mounted	75	1	EA	1992
Oil filled, pad mounted	112.5	1	EA	1996
Oil filled, pad mounted	150	1	EA	1999
Oil filled, pad mounted	150	1	EA	1988
Oil filled, pad mounted	225	1	EA	1982
Oil filled, pad mounted	225	1	EA	2000
Oil filled, pad mounted	225	1	EA	1985
Oil filled, pad mounted	225	1	EA	1990
Oil filled, pad mounted	225	2	EA	1992
Oil filled, pad mounted	300	1	EA	1980
Oil filled, pad mounted	300	1	EA	1990
Oil filled, pad mounted	300	1	EA	1994
Oil filled, pad mounted	500	1	EA	1977
Oil filled, pad mounted	500	2	EA	1990
Oil filled, pad mounted	500	1	EA	1997
Oil filled, pad mounted	500	1	EA	1999
Oil filled, pad mounted	7500	1	EA	2000
Oil filled, pad mounted	1500	1	EA	2000
1-Phase Transformers	Nom kVA			
Oil filler, pole mounted	15	1	EA	1980
Oil filler, pole mounted	15	1	EA	1986
Oil filler, pole mounted	25	1	EA	1980
Oil filler, pole mounted	25	1	EA	1986

Oil filler, pad mounted	50	1	EA	1981
Utility Poles	Height (ft)			
	45	7	EA	1992
	45	24	EA	1981
	45	56	EA	1989
	45	9	EA	1988
	45	12	EA	1990
	45	26	EA	1992
	45	1	EA	1960
	45	1	EA	1978
Manholes	Type			
Pre-cast	8'x 8'x 8'	3	EA	1987
Pre-cast	8'x 8'x 8'	3	EA	1994
Meters (see J5.5.1 for description/location)	Type			
Electric Meters	N/A	12	EA	Various

Notes:
KV = kilovolts
EPR = ethylene propylene rubber
AL = aluminum
URD = underground rural distribution
PVC = polyvinyl chloride
CU = copper
ASCR = Aluminum Conductor Reinforced Steel
IP = iron pipe
XLP = cross-link polyethylene
DB = direct bury
AWG = American Wire Gauge
EA = each
LF = linear feet
Nom kVA = nominal kilovolt -amperes
V = volts

J5.2.2 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 McEntire Air National Guard Station

Qty	Item	Make/Model	Description	Remarks
None				

TABLE 3
Specialized Vehicles and Tools
Electric Distribution System McEntire Air National Guard Station

Description	Quantity	Location	Maker
None			

J5.2.3 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 McEntire Air National Guard Station

Qty	Item Description	Remarks
1	Electrical System Master Map	AutoCAD Release Version 2000

J5.3 Specific Service Requirements

The service requirements for the McEntire Air National Guard Station electric distribution system are as defined in the Section C Description/Specifications/Work Statement. The following requirements are specific to the McEntire Air National Guard Station 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.

?? Offeror should address procedures to connect government owned auxiliary power generators during emergencies and exercises

?? Offeror should address procedures to transition from the utility system maintenance contract with SCE &G

J5.4 Current Service Arrangement

?? Provider Name: South Carolina Electric & Gas (SCE&G)

?? Average Annual Usage: 5,784,000 kWh for 2000

?? Maximum Monthly Use: 554,000 kWh for August

?? Minimum Monthly Use: 324,000 kWh for November

?? South Carolina Electric & Gas provides maintenance support for the entire base, to include the Tri-County system via a 20 year requirements maintenance contract.

J5.5 Secondary Metering

J5.5.1 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 J5.6 below.

TABLE 5
Existing Secondary Meters
Electric Distribution System McEntire Air National Guard Station

Meter Location (Building)	Meter Description
84 (building scheduled for demolition in FY 2001)	FM6S, installation date unavailable
157	SV4SD (inside), installation date unavailable
175	SV4SD (inside), installation date unavailable
212	M-30, 1985
220	FM-15S, 1984
243 (building scheduled for demolition in FY 2001)	S6S, 1958
979	EV-5, 2000
1046	D55-8M, 1990
1053	M-90, 1992
1057	M-90, 1994
1070	M-90 (located inside building), 1993
1071	D55-3M, 1990

J5.5.2 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 J5.6 below.

TABLE 6
New Secondary Meters
Electric Distribution System McEntire Air National Guard Station

Meter Location	Meter Description
Bldg 62	As required
Bldg 157	As required
Bldg 210	As required
Bldg 216	As required
Bldg 245	As required
Bldg 249	As required
Bldg 251	As required
Bldg 252	As required
Bldg 253	As required
Bldg 258	As required
Bldg 260	As required
Bldg 261	As required
Bldg 269	As required
Bldg 310	As required
Bldg 958	As required
Bldg 1040 (replaces Bldg 257-Weapons Release)	As required
Bldg 1046	As required

J5.6 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.

J5.7 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

J5.8 Service Area

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the McEntire Air National Guard Station boundaries.

J5.9 Off-Installation Sites

No off-installation sites are included in the sale of the McEntire Air National Guard Station electric distribution system.

J5.10 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 McEntire Air National Guard Station

Location	Description
None	

J5.11 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 McEntire Air National Guard Station 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 McEntire Air National Guard Station

Project Location	Project Description
None	