

ATTACHMENT J2

Altus AFB Natural Gas Distribution System

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J2 Altus AFB Natural Gas Distribution System

J2.1 Altus AFB Overview

Altus Air Force Base (AFB), located within the Altus city limits in Jackson County, Oklahoma, is an Air Education and Training Command (AETC) installation that operates AETC's strategic airlift and aerial refueling flying training schools. Altus AFB is the Air Force's primary Air Mobility Training Center for pilots, navigators, flight engineers, loadmasters, and boom operators. The host command is the 97th Air Mobility Wing (97 AMW). The Wing is the nation's only C-5, C-17, and KC-135 strategic airlift, aerial delivery, and aerial refueling training school.

Altus AFB occupies 4,698 acres, including 338 acres in Military Family Housing, (acquired circa 1941). The Base contains approximately 1,000 buildings totaling over 3.6 million square feet (msf) comprised of the following major functional categories: Industrial: 744,000 square feet (SF); Administrative: 246,000 SF; Military Family Housing (MFH): 1,330,000 SF; Unaccompanied Housing: 430,000 SF; Transient Quarters: 16,000 SF; and Other Community/Support: 834,000 SF. Altus AFB has two runways and one assault strip. The primary runway measures 13,440 feet by 300 feet; the parallel runway measures 9,000 feet by 225 feet; and the assault strip measures 3,500 feet by 150 feet. Authorized aircraft for this Installation are C-5As, KC-135Rs, and C-17s.

There are no known factors that would effect any significant changes in total Altus building space and the consequent increase or decrease of utility requirements.

The Base has a total population of approximately 5,000, including military personnel, civilian employees and support personnel, students, and dependents. Based on payroll, construction, and operational expenditures, it is estimated that Altus AFB has a profound economic impact on the local community of over \$345 million annually.

J2.2 Natural Gas Distribution System Description

J2.2.1 Natural Gas Distribution System Fixed Equipment Inventory

The Altus AFB natural gas 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, pipelines, valves, regulators, meters, and cathodic protection. 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.

There are no components specifically excluded from the natural gas distribution system privatization.

J2.2.1.1 Description

CenterPoint Energy supplies natural gas, purchased directly by Altus AFB, through a single regulator and metering station located on the west side of the Base near the Main Gate. The supply pipe is an eight-inch coated and wrapped steel line owned and operated by Arkansas and Louisiana Gas and Utilities Corporation (Arkla). The gas is delivered at a pressure of 50-52 pounds per square inch gauge (psig). At the Arkla Gas regulator and metering/odorization station, the gas is reduced to normal Base distribution pressure of 29-30 psig. The natural gas is supplied to the Base at a non-interruptible rate. The Base has never experienced a gas shortage. After passing through the Arkla master meter, the gas line splits into two lines that serve the Military Family Housing (MFH) areas and the Main Base.

Gas mains are relatively new and are almost exclusively polyethylene with locator wires at most locations. The gas lines between the Main Base and the MFH areas are in separate looped configurations. Average depth of burial is 36 inches. The two systems are interconnected through two valves, normally closed, located at the east side of Capehart MFH and the west side of the Main Base, along Altus Road. The gas lines vary between 6 and 8 inches near the meter to 2 inches near the services. Gas is delivered to the MFH areas through a 6-inch polyethylene pipe at the gate master meter and utilizes a 4-inch bypass at the southwest corner of Building 46 to service the Capehart Housing area. The rest of the MFH area is comprised mostly of 2-, 3-, and 4-inch mains, while the Main Base utilizes 2-through 6-inch mains. To date, 100 percent of the steel mains on the Main Base and 85 percent of the service lines on the Main Base (including MFH) have been replaced with polyethylene pipe. Valves throughout the natural gas system are steel valves.

Fragments of a cathodic protection system remain in some locations for remaining metallic service lines and valves. However, the cathodic protection system is not an important feature in maintenance of the gas system and can be virtually discounted. The inventory reflects no cathodic protection components.

There are no natural gas assets to be privatized at the satellite operating locations (NEXRAD Radar Site, ILS Middle Marker Site, and Drop Zone).

J2.2.1.2 Inventory

Table 1 lists the major natural gas distribution components included in the privatization package. Drawings used to develop the inventory were the Altus AFB Master Plan (1968) Tab G-5, Sheet 1 and the U.S. Corps of Engineers Utility Plan (1997) Great Plains Family Housing Area C-15 Sheet 17, C-16 Sheet 18, and C-17 Sheet 19. A list of the existing utility meters and isolation valves for the natural gas system was provided by the Installation and was also used in the development of the inventory components.

TABLE 1
 Fixed Inventory
 Natural Gas Distribution System - Altus AFB

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
MAIN BASE				
Pipe				
PE Pipe	2.0	25,560	LF	1997
PE Pipe	3.0	1,220	LF	1997
PE Pipe	4.0	44	LF	1997
PE Pipe	6.0	10	LF	1997
Service Lines	2.0	11,200	LF	1997
Valves				
Valves	2.0	21	EA	1997
Valves	4.0	135	EA	1997
Valves	6.0	35	EA	1997
Plug Valves (Services)	2.0	224	EA	1997
Regulators				
Regulators (Services)	2.0	112	EA	1997
Meters				
Secondary Meters	2.5	93	EA	1997
Notes:				
PE = polyethylene		PSI = pounds per square inch		
LF = linear feet		EA = each		
IN = inches				

J2.2.2 Natural Gas Distribution System Non-Fixed Equipment and Specialized Tools

Generally, **Table 2** would list other ancillary equipment (spare parts) and **Table 3** would list specialized vehicles and tools included in the purchase. However, there are no significant spares nor or their vehicles or special purpose equipment items available for release.

TABLE 2
 Spare Parts
 Natural Gas Distribution System - Altus AFB

Quantity	Item	Make/Model	Description	Remarks
None				

TABLE 3
 Specialized Vehicles and Tools
Natural Gas Distribution System - Altus AFB

Description	Quantity	Location	Maker
None			

J2.2.3 Natural Gas 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
Natural Gas Distribution System - Altus AFB

Quantity	Item	Description	Remarks
1	Drawing	Master Plan (1968), Tab G-5	Sheet 1
1	Drawing	COE Utility Plans, Great Plains Housing (1997)	C-15 Sheet 17, C-16 Sheet 18, and C-17 Sheet 19
1	Listing	Utility Meters	Reflects facility function and building number
1	Reference Manual	Isolation Valves	Reflects precise location of valves

J2.3 Specific Service Requirements

The service requirements for the Altus AFB natural gas distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Altus AFB natural gas 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.

- The Contractor will be required to mark his own utilities and will be responsible for initiating, officiating, and tracking digging permits for his own utilities. The Contractor will provide not less than two(2) and not more than five (5) working days notice (emergencies being excepted) of any needed excavations to 97 CES and to said Utilities Privatization Administrative Contracting Officer so the location of underground utilities may be located and marked by the applicable utility owner. The applicable utility owner must mark their utilities as requested within forty-eight (48) hours of receipt of request for non-emergency work.

- The Contractor shall enter into a Memorandum of Understanding (MOU) with the Base Fire Department for fire protection of all facilities included in the purchase of the utility. The MOU shall be completed during the transition period and a copy provided to the Contracting Officer.

J2.4 Current Service Arrangement

- **Provider Name:** CenterPoint Energy
- **Usage:** Total annual consumption for the Base is approximately 250,000 MCF.
- **Usage Fluctuations:** While annual fluctuations are negligible, monthly variance is significant. Since most of the natural gas is used for facility heating, the peak month is usually January with consumption at nearly 50,000 MCF while during the hottest summer months gas consumption is usually under 3,000 MCF.
- There do not appear to be any contentious regulatory issues associated with privatization of the gas system.

J2.5 Secondary Metering

J2.5.1 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.3.3 and J2.6 below.

TABLE 5
 Existing Secondary Meters
 Natural Gas Distribution System - Altus AFB

Meter Count	Facility Function	Building Number
1	MOTOR POOL	353
2	COLD STORAGE	373
3	MOBILITY CENTER	370
4	SUPPLY B369	369C
5	SUPPLY B369	369A
6	SUPPLY B369	369B
7	CORROSION CONTROL	402
8	RECYCLE CENTER	400
9	SOCIAL ACTION	418
10	AIRCRAFT GENERAL PURPOSE	424
11	HANGER	509
12	ORGANIZATION BUILDING	928
13	HANGER	514
14	HANGER	517B
15	HANGER	517
16	SUPPLY	394A
17	SUPPLY	394B
18	BASE SUPPLY ADMIN	395

Meter Count	Facility Function	Building Number
19	AUTO HOBBY SHOP (MWR)	343A
20	ARTS & CRAFTS (MWR)	342
21	ARTS & CRAFTS (MWR)	343B
22	NEW BASE HOUSING - METER A**	MFH
23	COMMISSARY (AFCOMS)	16
24	BASE HOUSING (MFH) MASTER**	MULTI
25	BX (AAFES)	18
26	HOUSING MAINTENANCE	2002
27	YOUTH CENTER (MWR)	1866
28	NEW HOUSING METER B**	JASMINE
29	NEW HOUSING METER C**	ALFA STREET
30	HOSPITAL WAREHOUSE	51
31	HOSPITAL	46B
32	HOSPITAL	46C
33	HOSPITAL	46A
34	VET CLINIC	48
35	NEW CHILD CARE	53
36	DENTAL CLINIC	47
37	OFFICERS CLUB (MWR)	39B
38	OFFICERS POOL	43
39	OFFICERS CLUB (MWR)	39A
40	CONSOLIDATED SUPPORT	52
41	SAC ALERT FACILITY	570
42	SAC	566A
43	SAC	566B
44	GOLF COURSE (MWR)	35
45	AERIAL DEL FACILITY	171C
46	C-17 CARGO COMP TRAIN	189
47	TANKER MAINTENANCE	188
48	C-17 TRAINING	172
49	KC-135 CARGO TRAINER	190
50	KC-135 FLYING TRAINING	191
51	SAC OPS	193
52	KC-135 AIRCREW TRAINING	179
53	POST OFFICE	129
54	COMMUNITY ACT CENTER	148
55	TTS	164
56	VOQ	81
57	VOQ	83
58	VOQ	84
59	LAUNDRY	78
60	VOQ	85
61	VOQ	75
62	VOQ	76
63	VOQ	79
64	BILLETING OFFICE	82
65	POOL	162
66	BASE GYM	156C
67	BASE GYM	156B
68	BASE GYM	156D

Meter Count	Facility Function	Building Number
69	SAC HQ	72
70	PKG STORE (AAFES)	63
71	TOYLAND (AAFES)	68
72	CHILD CARE	65A
73	CHILD CARE	65B
74	NCO CLUB	307
75	NCO POOL (MWR)	300
76	LIBRARY (MWR)	302
77	BOWLING ALLEY	106A
78	BOWLING ALLEY	106B
79	CHAPEL ED CENTER	116
80	THEATER	114A
81	THEATER	114B
82	DATA AUTO BOILER	218A
83	DATA AUTO BOILER	218B
84	COMMUCATION FACILITY	215
85	BARRACKS	213
86	DINING HALL	317
87	GAS STATION (AFFES)	303
88	CONTRACTING	318
89	443 SERVICES SQ	326
90	BARRACKS	331
91	BARRACKS	333
92	BARRACKS	335
93	FTD	225
94	NEW AGE FACILITY	278
95	443 MAINTENANCE	228
96	HANGAR	285
97	PMEL SHOP	323

Notes:
 **Primary meter

J2.5.2 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.3.3 and J2.6 below.

TABLE 6
 New Secondary Meters
Natural Gas Distribution System - Altus AFB

Facility Function	Building Number
Corps of Engineers	214
Lighthouse for the Blind	398
GOQ	1205

MFH Backfeed **

N/A

Notes:
**Primary meter

J2.6 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 3rd of each month for the previous month. Invoices shall be submitted to:

Name: Clare Lundgren
Address: 97 CES/CEOE
401 L Avenue
Altus AFB, OK 73523
Phone number: (580) 481-7172

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 3rd of each month for the previous month. Outage reports shall be submitted to:

Name: Clare Lundgren
Address: 97 CES/CEOE
401 L Avenue
Altus AFB, OK 73523
Phone number: (580) 481-7172

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 3rd of each month for the previous month. Meter reading reports shall be submitted to:

Name: Clare Lundgren
Address: 97 CES/CEOE
401 L Avenue
Altus AFB, OK 73523
Phone number: (580) 481-7172

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 3rd of each month for the previous month. System efficiency reports shall be submitted to:

Name: Clare Lundgren
Address: 97 CES/CEOE
401 L Avenue

Altus AFB, OK 73523
 Phone number: (580) 481-7172

J2.7 Energy Saving Projects

IAW Paragraph C.3, Requirement, there are currently no demand side management (DSM) or energy-saving performance contract (ESPC) arrangements that would materially affect the natural gas distribution system.

J2.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Altus AFB boundaries.

J2.9 Off-Installation Sites

No off-Installation sites have gas components included in the sale of the Altus AFB natural gas distribution system.

J2.10 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
Natural Gas Distribution System - Altus AFB

Location	Description
None	

J2.11 Government Recognized System Deficiencies

Although there are some unfunded future O&M projects programmed for Altus AFB, there are no significant system deficiencies. Hence there are no deficiencies listed in **Table 8**.

TABLE 8
 System Deficiencies
Natural Gas Distribution System - Altus AFB

Project Location	Project Description
None	