

Tucson IAP (ANG) Natural Gas Distribution System

Table of Contents

TUCSON IAP (ANG) NATURAL GAS DISTRIBUTION SYSTEM	1
J6 TUCSON IAP (ANG) NATURAL GAS DISTRIBUTION SYSTEM	2
J6.1 TUCSON IAP (ANG) OVERVIEW	2
J6.2 NATURAL GAS DISTRIBUTION SYSTEM DESCRIPTION	2
J6.2.1 Natural Gas Distribution System Fixed Equipment Inventory	2
J6.2.1.1 Description	2
J6.2.1.2 Inventory	2
J6.2.2 Natural Gas Distribution System Non-Fixed Equipment and Specialized Tools	5
J6.2.3 Natural Gas Distribution System Manuals, Drawings, and Records	5
J6.3 SPECIFIC SERVICE REQUIREMENTS	5
J6.4 CURRENT SERVICE ARRANGEMENT	5
J6.5 SECONDARY METERING	6
J6.5.1 Existing Secondary Meters	6
J6.5.2 Required New Secondary Meters	7
J6.6 MONTHLY SUBMITTALS	7
J6.7 ENERGY SAVING PROJECTS	7
J6.8 SERVICE AREA	7
J6.9 OFF-INSTALLATION SITES	8
J6.10 SPECIFIC TRANSITION REQUIREMENTS	8
J6.11 GOVERNMENT RECOGNIZED SYSTEM DEFICIENCIES	8

List of Tables

Fixed Inventory	3
Spare Parts	5
Specialized Vehicles and Tools	5
Manuals, Drawings, and Records	5
Existing Secondary Meters	6
New Secondary Meters	7
Service Connections and Disconnections	8
System Deficiencies	8

J6 Tucson IAP (ANG) Natural Gas Distribution System

J6.1 Tucson IAP (ANG) Overview

Tucson IAP (ANG) is located in the southern part of Tucson, Arizona wedged between Interstates 10 and 19. It's home to the 162nd Fighter Wing whose mission in peacetime is to provide F-16 training for Air Force, Air National Guard, Air Force Reserve, and foreign aircrews and in wartime to continue combat aircrew training and provide filler forces in direct support of war operations. The base encompasses 94 acres and contains 36 buildings; 35 industrial and 1 administrative with a total of approximately 530,000 square feet. There is no family or transient housing. The day-to-day base population is approximately 1000 personnel; however, one weekend each month the population surges to 1600 in response to Air National Guard drills.

J6.2 Natural Gas Distribution System Description

J6.2.1 Natural Gas Distribution System Fixed Equipment Inventory

The Tucson IAP (ANG) 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, regulators, valves, 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.

J6.2.1.1 Description

The Tucson IAP (ANG) natural gas distribution system was constructed from 1985 to 1999. It enters the base at a single point and is supplied and distributed at 10 psig. The system is a dead end configuration and consists of approximately 8,500 LF of pipe buried at an average depth of 2.5 feet along with 25 regulators, 4 PCV valves, and 25 meters. There are no odorizers, cathodic protection systems, compressed natural gas systems, or propane air systems on base. Base personnel indicate the capacity of the current system is adequate for present and future needs. No known warning/tracer tape is used.

J6.2.1.2 Inventory

Table 1 provides a general listing of the major natural gas distribution system fixed assets for the Tucson IAP (ANG) natural gas distribution system included in the sale.

TABLE 1
Fixed Inventory
Natural Gas Distribution System Tucson IAP (ANG)

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
PE Gas Pipe	.75	213	LF	1985
	.75	117	LF	1988
	1	99	LF	1985
	1	293	LF	1992
	1	44	LF	1988
	1.25	383	LF	1985
	1.5	407	LF	1988
	2	4252	LF	1985
	2	892	LF	1988
	2	765	LF	1990
	2	1008	LF	1994
Regulator Assemblies				
- American Meter, 1700 cfh @ 2", 800 cfh @ .5"--American Meter regulator, 1/4" orifice (Bldg 34)		1	EA	1988
- Meter, 3000 cfh @ 2", 1400 cfh @ .5"--Regulator – no brand name or specs available, 1/4" orifice (Bldg 35)		1	EA	1988
Meter, 400cfh @ .5"--no regulator (Paint Shop – no bldg. #)		1	EA	1989
-Rockwell meter, 5000cfh @ 2", 2500 cfh @ .5"--Fisher Controls regulator, 25 psig inlet, 5-9" w.c. spring, (Bldg 12)		1	EA	1990
- American Meter, AL-800, 1700 cfh @ 2", 800 cfh @ .5"--American Meter regulator, 9/16 orifice, 6-15" w.c. spring, (Bldg 10)		1	EA	1994
- Rockwell Meter, 2200 cfh @ 2", 1000 cfh @ .5"--American Meter regulator, 9/16" orifice, 6-15" w.c. spring, (Bldg 32)		1	EA	1988
- American Meter, 250 cfh @ .5"--American Meter regulator, 9/16" orifice, 6-15" w.c. spring, (Bldg 31)		1	EA	1992
- American Meter, 900 cfh @ 2", 425 cfh @ .5"--Rockwell regulator, 3/16" orifice, 6-14" w.c. spring, (Bldg 28)		1	EA	1988
- American Meter, 900 cfh @ 2", 425 cfh @ .5"--Rockwell regulator, 1/4" orifice, 4-10" w.c. spring, (Bldg 21)		1	EA	1985
- American Meter, GT-3 meter, 10000 cfh @ 2"--Invensys regulator, 3/4" orifice, 6-10" w.c. spring, (Bldg 9E)		1	EA	1985
- No meter—1" pipe to Maxitrol regulator, 10 psig max, 1 1/4" inlet and outlet (Bldg 25)		1	EA	1999

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
- American Meter AL-800 meter 1700 cfh @ .5"--American Meter regulator, 9/16 orifice, 6-15" w.c. spring, (Bldg 15)		1	EA	1985
- American Meter AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"—American Meter regulator, 9/16" orifice 6-15" w.c. spring, (Bldg 6)		1	EA	1986
- Singer AL-1400 meter, 3000 cfh @ 2", 1400 cfh @ .5"--Singer Model 1803 regulator, 3/8" orifice (Bldg 9W)		1	EA	1985
- Singer AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"--Singer regulator, 9/16 orifice, 6-15" w.c. spring, (Bldg 15)		1	EA	1985
- Singer AL-800 meter, 1700 cfh @ 2", 800 cfh @ .5"--Singer regulator, 3/8" orifice, 3.5-6" w.c. spring, (Bldg 1N)		1	EA	1985
- American AL-425 meter, 900 cfh @ 2", 425 cfh @ .5--Singer regulator 6-15" w.c. spring, (Bldg 49N)		1	EA	1985
- Singer AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"--Singer regulator, 5/16" orifice, 6-15" w.c. spring, (Bldg 49E)		1	EA	1985
- American AL.425 meter, 900 cfh @ 2", 425 cfh @ .5"--Singer regulator, 1/2" orifice, 6-15" w.c. spring, (Bldg 44W)		1	EA	1985
- American AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"--Singer regulator, 1/2" orifice, 6-15" w.c. spring, (Bldg 44E)		1	EA	1985
- Singer AL-425 meter, 900 cfh @ 2", 425 @ .5"--Rockwell regulator, 3/8" orifice, 6-15" w.c. spring, (Bldg 5)		1	EA	1985
- Singer AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"--Singer regulator, 5/16" orifice, 6-15" w.c. spring, (Bldg 27)		1	EA	1985
- Singer AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"--Singer regulator, 5/16" orifice, 6-15" w.c. spring, (Bldg 33L)		1	EA	1985
- Singer AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"--Rockwell regulator, 3/16" orifice, 6-14" w.c. spring, (Bldg 33R)		1	EA	1985
- Singer AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"--Singer regulator, 1/4" orifice, 6-15" w.c. spring, (Bldg 41)		1	EA	1985
- Singer AL-425 meter, 900 cfh @ 2", 425 cfh @ .5"--Singer regulator, 1/4" orifice, 6-15" w.c. spring, (Bldg 9A)		1	EA	1985
PVC Valves	1	1	EA	1986
	1 1/4	1	EA	1986
	1 1/2	1	EA	1986
	2	1	EA	1986

Notes:

PE = Polyethylene

LF = Linear Feet

EA = Each

in = Inches

Psig = Pounds per Square Inch Gage

No known warning/tracer tape used

J6.2.2 Natural Gas 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
Natural Gas Distribution System Tucson IAP (ANG)

Qty	Item	Make/Model	Description	Remarks
None				

TABLE 3
Specialized Vehicles and Tools
Natural Gas Distribution System Tucson IAP (ANG)

Description	Quantity	Location	Maker
None			

J6.2.3 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 Tucson IAP (ANG)

Item Description	Remarks
Natural Gas Master Plan, dated March 1986	No AutoCAD Drawings

J6.3 Specific Service Requirements

The service requirements for the Tucson IAP (ANG) natural gas distribution system are as defined in the Section C Description/Specifications/Work Statement

J6.4 Current Service Arrangement

- Current Provider: Southwest Gas Company
- Average Annual Usage: 6,103 Mcf
- Maximum Monthly Use: 1,327 Mcf (Jan)
- Minimum Monthly Use: 207 Mcf (Jun)

J6.5 Secondary Metering

J6.5.1 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 J6.6 below.

TABLE 5
Existing Secondary Meters
Natural Gas Distribution System Tucson IAP (ANG)

Meter Location	Meter Description
Bldg 34	American Meter, 1700 cfh @ 2", 800 cfh @ 0.5"
Bldg 35	Meter, 3000 cfh @ 2", 1400 cfh @ 0.5"
Paint Shop (No Bldg Number)	Meter, 400 cfh @ 0.5"
Bldg 12	Rockwell Meter, 5000 cfh @ 2", 2500 cfh @ 0.5"
Bldg 10	American Meter, AL-800, 1700 cfh @ 2", 800 cfh @ 0.5"
Bldg 32	Rockwell Meter, 2200 cfh @ 2", 1000 cfh @ 0.5"
Bldg 31	American Meter, 250 cfh @ 0.5"
Bldg 28	American Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 21	American Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 9E	American Meter GT-3, 10000 cfh @ 2"
Bldg 15	American Meter AL-800, 1700 cfh @ 2", 800 cfh @ 0.5"
Bldg 6	American Meter AL-425, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 9W	Singer AL-1400 Meter, 3000 cfh @ 2", 1400 cfh @ 0.5"
Bldg 15	Singer AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 1N	Singer AL-800 Meter, 1700 cfh @ 2", 800 cfh @ 0.5"
Bldg 49N	American AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 49E	Singer AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 44W	American AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 44E	American AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 5	Singer AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 27	Singer AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 33L	Singer AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 33R	Singer AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 41	Singer AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"
Bldg 9A	Singer AL-425 Meter, 900 cfh @ 2", 425 cfh @ 0.5"

J6.5.2 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 J6.6 below.

TABLE 6
New Secondary Meters
Natural Gas Distribution System Tucson IAP (ANG)

Meter Location	Meter Description
Bldg 25	Building 25 has gas service but does not presently have a meter. Contractor shall provide meter.

J6.6 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.

J6.7 Energy Saving Projects

IAW Paragraph C.3 Requirement, the following projects have been implemented by the Government for conservation purposes: None.

J6.8 Service Area

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

J6.9 Off-Installation Sites

No off-installation sites are included in the sale of the Tucson IAP (ANG) natural gas distribution system.

J6.10 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 Tucson IAP (ANG)

Location	Description
Bldg 9	Presently gas service is routed through Bldg 9 from the east side to a regulator on the west side. The contractor will be required reroute the gas main around Bldg 9.
Bldg 27/33	Gas service to Bldg 27 is routed from the northeast corner of Bldg 33. Contractor shall reroute the gas line so it travels outdoors (rather than traveling inside Bldg 33) and reconnect to the existing regulator and meter at Bldg 27.

J6.11 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 Tucson IAP (ANG) natural gas distribution system. If the utility 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 through Schedule L-3. Renewal and replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Deficiencies
Natural Gas Distribution System Tucson IAP (ANG)

Project Location	Project Description
None	