

ATTACHMENT J2

# Tyndall AFB Natural Gas Distribution System

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# J2 Tyndall AFB Natural Gas Distribution System

## J2.1 Tyndall AFB Overview

The Tyndall AFB is located in Bay County near Panama City in northwestern Florida. The main base and ancillary sites cover about 29,109 acres of land. The property is situated on a peninsula and is connected to the Panama City community area via the Dupont Bridge.

Named after Lt. Frank B. Tyndall, a World War I ace who was killed on active duty in 1930, construction began on the Army Air Corp's Tyndall Field in May 1941. The base was officially opened on December 6, 1941. As a member of the Air Education and Training (AETC) command, the primary mission of Tyndall AFB is the training of Air Force pilots. Over the years many of the original facilities have been renovated to accommodate the changes in mission requirements and increased population. Facilities range from original 1941 construction to modern energy efficient office and industrial complexes.

Tyndall AFB hosts many tenant organizations with diversified functions and missions: HQ Air Force Civil Engineer Service Agency; HQ 1<sup>st</sup> Air Force; HQ Southeast Area Defense Sector; Air Force Research Laboratories (Armstrong and Wright Labs); 53<sup>rd</sup> Weapons Evaluation Group; 84<sup>th</sup> Radar Evaluation Squadron; and Detachments of the Minnesota Air National Guard, and Air Force Operations Test and Evaluation Group.

Tyndall AFB and its ancillary sites cover over 29,000 acres. The Tyndall AFB land and ownership are summarized in the following table.

Location	Type	Acres
Main Base	Public Domain	2,101
Main Base	Fee Condemned	26,661
Main Base	Fee Purchased	5
Main Base	Easement	57
Cove Gardens (N.I.C.)	Fee Condemned	33
Apalachicola (N.I.C.)	Lease	7
Carrabelle (N.I.C.)	Fee Purchased	33
Lynn Haven (N.I.C.)	Fee Purchased	203
Samatra (N.I.C.)	Permit	1
St. George Island (N.I.C.)	Fee Purchased	1
<b>Total =</b>		<b>29,102</b>

*N.I.C. - Not In Contract*

Tyndall AFB is similar in scale to a small community. There are approximately 655 facilities consisting of administration, commercial, schools and training, hospital and clinics, recreational, airfield support, fire protection, and transient living that total more than 3,680,000 square feet. In addition, there are six distinctive housing areas containing single and multi-family units. There are more than 560 facilities containing approximately 1085 individual units totaling more than 1,400,000 square feet.

The airfield consists of two paralleled runways and associated taxiway system. The outside (13L-31R) runway is 200 feet wide and 10,000 feet long. It has high intensity edge lights, high intensity threshold lights at both ends, lighted distance marker on both sides of the runway, and aircraft arresting barrier on both ends of the runway., with one end raised at a time. The outside runway has high intensity approach lighting system with sequenced flashers (ALSF-1) on both ends and pre-threshold light bars and terminating light bars on both ends. The inside runway (13R-31L) is 150 feet wide and 8075 feet long. It has high intensity edge lights, runway end lights on the 31L end and lighted distance markers on both sides of the runway. All airfield lighting is connected to a computer control system located at the Airfield Light Vault (Building 206). A new modern computer control system will be installed at AF vault this year. The outside and the inside runways are served by precision approach path indicators (PAPI) on both ends of the runways. The airfield also has one identification beacon mounted on existing elevated water tank, Facility No. 733 and four non-illuminated wind cones.

Tyndall AFB military personnel total 3951 and are primarily permanent party with some Air National Guard and transient students. Civilian support staff consists of 1210 government employees and 1510 contractors. In addition to actual employees, military and civilian, there are 5339 dependants (wives, husbands, and children).

Tyndall AFB is the largest employer in Bay County and the surrounding area. The economic impact on the surrounding communities and counties is estimated to be over \$422 million.

Many of the facilities on Tyndall AFB, which were built in the 1940's, are still occupied and many are being renovated to meet the ever-changing occupancy requirements. Several facilities are being torn down and replaced with newer, larger, more efficient facilities. In addition, new facilities are being built to meet the changing mission requirements. New contractor will be required to provide utilities as required to support any new construction.

## J2.2 Natural Gas Distribution System Description

### J2.2.1 Natural Gas Distribution System Fixed Equipment Inventory

The Tyndall 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, 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. Housing Privatization is projected for Tyndall AFB in FY 05. A rough order of magnitude of the extent of the inventory that supports MFH is 25%.

Specifically excluded from the natural gas distribution system privatization are:

- All propane storage tanks and distribution systems
- Cogeneration plant located in Bldg. 1469
- Compressed natural gas systems. (Scheduled to be removed)
- Natural Gas system located in Military Family Housing
- Cove Gardens
- Apalachicola
- Carrabelle
- Lynn Haven
- Samatra
- St. George Island

#### J2.2.1.1 Description

Natural gas is supplied to the base via the Defense Energy Supply Center (DESC) contract and delivered to the base via Florida Gas Transmission (FGT) pipelines with local transmission by TECO Peoples Gas. A single six-inch pipeline enters the base near the south side of the Dupont Bridge across the bay from Panama City and provides gas service for the entire base. Service is supplied to the base at a pressure of 120 pounds per square inch gauge (psig), and distributed at approximately 55 psig. The gas main passes through a regulator and valve station at the south end of the Dupont Bridge and all equipment after the regulator is owned, operated and maintained by Tyndall, AFB.

The gas is distributed to the main base and two family housing areas (Wood Manor, and Felix Lake) on base through approximately 31 miles of underground pipelines. These lines are the property of the Air Force. Most of these lines are steel (approximately 70 % of base total). In some areas where it was necessary to replace lines due to new construction or repair, polyethylene pipe has been installed in place of steel (approximately 30% of base total). The steel system average age is 40 to 45 years. There is no tracer wire, marker tape or cathodic protection installed. The average depth of burial is 36". The commodity supplier provides and maintains odorization for the system.

TECO Peoples Gas meters the natural gas to the base at the fenced regulator station in front of building 5013 (Dupont Bridge). There are approximately fifty five additional secondary meters on base that are read, maintained and owned by the Air Force. The contractor is responsible for monitoring, repairing and maintaining all gas meters.

#### J2.2.1.2 Inventory

**Table 1** provides a general listing of the major natural gas distribution system fixed assets for the Tyndall AFB natural gas distribution system included in the sale.

**TABLE 1**  
Fixed Inventory  
Natural Gas Distribution System Tyndall AFB

<b>Component Description</b>	<b>Size</b>	<b>Quantity</b>	<b>Unit of Measure</b>	<b>Material Type</b>	<b>Approximate Year Installed</b>
Valves, brass,gas cocks	3/4"	150	EA	Brass	1959
Valves	1"	2	EA	Steel	1959
Valves	1-1/4"	10	EA	Steel	1959
Valves	1-1/2"	2	EA	Steel	1959
Valves	2"	5	EA	Steel	1959
Valves	2-1/2"	10	EA	Steel	1959
Valves	2-1/2"	7	EA	PE	2002
Valves	3"	3	EA	Steel	1959
Valves	3"	3	EA	PE	2002
Valves	4"	11	EA	Steel	1959
Valves	4"	3	EA	PE	2002
Valves	6"	2	EA	Steel	1959
Valves	6"	4	EA	CI	2002
Gas service piping	3/4"	6,000	LF	Steel	1959
Gas service piping	1"	750	LF	Steel	1959
Gas service piping	1-1/4"	9,600	LF	Steel	1959
Gas service piping	1-1/2"	700	LF	Steel	1959
Gas service piping	2"	17,788	LF	Steel	1959
Gas service piping	2"	7,920	LF	PE	1994
Gas service piping	2"	1,980	LF	PE	2002
Gas service piping	2-1/2"	12,200	LF	Steel	1959
Gas service piping	2-1/2"	730	LF	PE	2002
Gas service piping	3"	14,300	LF	Steel	1959
Gas service piping	3"	856	LF	PE	2002
Gas service piping	4"	45,000	LF	Steel	1959
Gas service piping	4"	11,800	LF	PE	1995
Gas service piping	4"	21,100	LF	PE	2002
Gas service piping	6"	13,000	LF	Steel	1959
Gas service piping	6"	780	LF	PE	2002
Pressure regulators	1"	150	EA		1974
Gas meters	1-1/4"	51	EA		1974
Gas meters	4"	4	EA		1959

**Legend:**

EA – Each

LF - Linear Feet

PE - Polyethylene

## J2.2.2 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 Tyndall AFB

Qty	Item	Make/Model	Description	Remarks
NONE				

TABLE 3  
Specialized Vehicles and Tools  
Natural Gas Distribution System Tyndall 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 Tyndall AFB

Qty	Item	Description	Remarks
1	Gas Leak Survey	Annual Gas Leak Survey for past several years	Located in Library
1	Meter readings	Monthly Gas Meter readings for past four years	Electronic version (EXCEL format) also available
1	Drawings	A1U.dwg through G7U.dwg	AutoCAD 2000 format

## J2.3 Specific Service Requirements

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

1. The contractor will be required to support and assist in disaster recovery or emergency situations that require system shut-off or temporary connection or disconnects. Emergency operation and disaster recovery requirements are described in Tyndall Air Force Base Contingency Response Plan 702. The contractor's interruption and contingency plans shall reflect the requirements of the base 702 plan.
2. The contractor shall instruct employees in utilities conservation practices IAW TAFBPAM 32-1001, and TAFBOI 32-1003. The contractor shall be responsible for operating under conditions that preclude the waste of utilities.
3. Contractor shall provide leak surveys and include corrective actions taken to correct the deficiencies.
4. Contractor is required to get prior approval of all radio frequencies before using any communications devices on Tyndall. No narrow band communications may be used or amplified RF equipment. Certain areas of the base have cell phone dead zones.
5. The contractor must coordinate all capital improvement planning and design efforts with the installation.
6. Should the contract provider not be able to perform utility service due to business problems the government reserves the right to perform work with its own resources to maintain the system for continuation of service. Contractor business problems may consist of but is not limited to: bankruptcy, receivership, employee strike, etc. Contractor is required to notify the government with-in 24 hours of such occurrence. Further details can be found in paragraph H.6 of this contract.
7. All hazardous materials used by the utility contractor will be handled as required by law and /or base safety. Contractor will be held liable for any miss use or handling of hazardous materials.
8. Lightning arrestors, grounding and cathodic protection shall be used on specific utilities as required by industry standards.
9. The government will be notified of all scheduled utility outages 48 hours in advance. The government reserves the right to have the scheduled outage postponed should the outage interfere with mission critical operations.

## J2.4 Current Service Arrangement

Commodity purchased through DESC service contract. Contract changes annually. Transportation of the commodity to Tyndall AFB and Cove Gardens MFH is provided by :

TECO-Peoples Gas  
Caller Box 1460  
Panama City FL 32402

(850) 872-6100

- Average Annual Usage is approximately 110,000,000 Mcf
- Annual Usage Fluctuations: +/- 8%
- High Month: 21,639,000 Mcf – January 03
- Low Month: 4,421,000 Mcf – July 03
- Parking and lending services provided by TECO-Peoples Gas
- Tyndall is subject to alert day penalties set by Florida Gas Transmission (primary gas line owner) and disseminated by Teco-Peoples Gas Co.

## 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 and J2.6 below.

TABLE 5  
Existing Secondary Meters  
Natural Gas Distribution System Tyndall AFB

Facility ID	Facility Name/Description	Meter Number	Facility ID	Facility Name/Description	Meter Number
126	Egress Shop	51	1137	MWR Warehouse	40
153	Eagle Quick Trn	50	1153	Quad Dorm	35
166	Wash Rack	52	1230	Education Office	3
249	Cold Storage	43	1270	Contract School	4
400	Fuels	57	1317	TLF Complex	5
421	CE	55	1317	TLF Complex	14
425	Prime Beef	53	1360	VOQ	6
453	Ext Elec	54	1360	VOQ	15
476	SOCC	56	1361	VOQ	7
503	ACMI	47	1361	VOQ	16
522	Eagle Repair	48	1410	Child Care	22
549	FTD	49	1454	O'Club	58
647	1st Air Force/CONS	45	1465	Main Hospital	8
837	NCO Academy	23	1465	Main Hospital Small	18
845	Academy Dorm	21	1467	Hospital Supply	19
909	Disaster Prep	30	1470	Chapel II	9
914	Bowling Ally	29	1470	Co Gen	20
928	Car Wash	32	1506	Class Six	59
934	Hobby Shop	28	1550	NCO Club	33
939	Gym	27	1615	VAQ	36

Facility ID	Facility Name/Description	Meter Number	Facility ID	Facility Name/Description	Meter Number
950	BX - Right	25	1616	VOQ	37
950	Commissary - Left	26	1617	VOQ	38
960	Burger King	24	1690	Dining Hall	34
1003	Post Office	44	3223	Youth Center	10
1060	VAQ	31	3304	DGR	11
1117	Armstrong Lab	41	3350	Wood Manor Shoppette	12
1120	AFCESA	42	5013	Bonita Bay	13
1134	CEMIRT	39			

## 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 and J2.6 below.

New secondary meters will be installed as a part of any new construction on Tyndall. Contractor may be requested to provide support during the installation of said meters. These new meters will be incorporated into table 5 above.

**TABLE 6**  
New Secondary Meters  
Natural Gas Distribution System Tyndall AFB

Meter Location	Meter Description
Building 1027 Recreation Center	Reimbursable Customer – American Meter Company, AE6000 Series Metretek
Building 968 Service Station	Reimbursable Customer – American Meter Company, AE6000 Series Metretek
Building 470 US Army Corps of Engineers	Reimbursable Customer – American Meter Company, AE6000 Series Metretek

## 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 15<sup>th</sup> of each month for the previous month. Invoices shall be submitted to:

Name: 325 CES/CERF  
Address: 119 Alabama Ave. Stop 42  
Tyndall AFB 32403-5005  
Phone number: (850) 283-2177

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 15<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to:

Name: 325 CES/CEOE  
Address: 119 Alabama Ave. Stop 42  
TYNDALL AFB 32403-5005  
Phone number: (850)-283-4611

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 7<sup>th</sup> of each month for the previous month. Meter reading reports shall be submitted to:

Name: 325 CES/CEOE  
Address: 119 Alabama Ave. Stop 42  
TYNDALL AFB 32403-5005  
Phone number: (850)-283-4611

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:

Name: 325 CES/CEOE  
Address: 119 Alabama Ave. Stop 42  
TYNDALL AFB 32403-5005  
Phone number: (850)-283-4611

5. **Annual Leak Detection Survey and Report.** The Contractor shall complete an annual leak detection survey and submit detection report in a format proposed by the Contractor and accepted by the Contracting Officer. Leak detection surveys shall be completed by March of each year and reports submitted no later than May of each year. Leak detection reports shall be submitted to:

Name: 325 CES/CEOE  
Address: 119 Alabama Ave. Stop 42  
TYNDALL AFB 32403-5005  
Phone number: (850)-283-4611

## J2.7 Energy Saving Projects

IAW Paragraph C.3, Requirement, the following projects have been implemented by the Government for conservation purposes.

Tyndall has two ongoing contracts to install more energy efficient equipment to reduce Tyndall energy consumption. A portion of these contracts is to include natural gas reductions as part of each task orders. The two contracts are with Gulf Power and TECO-Peoples Gas as part of the governments GSA area wide service contracts. Under these contracts, Tyndall is installing ground source heat pump systems that eliminate the need for natural gas for heat. These heat pumps will provide waste heat which can be recovered and eliminate gas requirements for boilers. It is conceivable that natural gas requirements at Tyndall will be reduced by 25% over the next several years.

## J2.8 Service Area

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

## J2.9 Off-Installation Sites

No off-installation sites are included in the sale of the Tyndall 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 Tyndall AFB

Location	Description
NONE	

## J2.11 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 Tyndall AFB 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 Renewal and Replacement Plan process and will be recovered through [Schedule L-3](#). Renewal and Replacement projects will be recovered through [Sub-CLIN AB](#).

Current deficiencies in the gas distribution system include gas leaks at several locations, no trace wires on gas system, no cathodic protection on gas lines, and several old meters will need replacement or repair.

**TABLE 8**  
System Deficiencies  
Natural Gas Distribution System Tyndall AFB

<b>Project Location</b>	<b>Project Description</b>
All piping	Tracer wires for locating pipe distribution system
All Piping	Cathodic protection on any piping