

Sky Harbor IAP (ANG), Phoenix, AZ Electric Distribution System

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J1 Sky Harbor IAP (ANG), Phoenix, AZ Electric Distribution System

J1.1 Sky Harbor IAP (ANG), Phoenix, AZ Overview

Sky Harbor International Airport is located in Maricopa County in central Arizona, approximately 120 miles northwest of Tucson and 10 miles southeast of Phoenix. Phoenix Sky Harbor International Airport is owned and operated by the City of Phoenix and is home to the 161st Air Refueling Wing. The base is located on the southern end of the airport on a 50 acre parcel with a total of 16 buildings; 2 administrative, and 14 industrial, amounting to approximately 236,000 square feet. Day-to-day activities are managed by a force of 287 full-time personnel. One weekend per month this population swells to more than 879 members during military training assemblies. The base has no residential or transient housing facilities. The mission of the 161st Air Refueling Wing is to train, equip, and maintain units and individuals to meet worldwide requirements for federal day-to-day and mobilization missions and state emergencies.

J1.2 Electric Distribution System Description

J1.2.1 Electric Distribution System Fixed Equipment Inventory

The Sky Harbor IAP (ANG), Phoenix, AZ 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, ductbanks, switches, electrical vaults, and power distribution panels. 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
- Ball field Lights
- Transformers which are located inside mechanical rooms.

J1.2.1.1 Description

The Sky Harbor IAP (ANG) electrical distribution system was constructed in 1999. Electrical power enters the base underground at a single location at 12 kV. The configuration is an underground "Y" configuration and services 16 facilities. The system consists of approximately 6000 LF of underground distribution lines; 2 three-phase 75 kVA transformers, 9 pad mounted medium voltage switches, and 8 pre-cast concrete manholes. Base personnel indicate the system capacity is adequate to meet current and future demands.

J1.2.1.2 Inventory

Table 1 provides a general listing of the major electric distribution system fixed assets for the Sky Harbor IAP (ANG), Phoenix, AZ electric distribution system included in the sale.

TABLE 1
Fixed Inventory
Electric Distribution System Sky Harbor IAP (ANG), Phoenix, AZ

| Item | Size | Quantity | Unit | Approximate Year of Construction |
|------------------------------------|-----------|-------------|------|----------------------------------|
| Underground Circuits | | Length (ft) | | |
| 3 Phase, 3 Wire, 15 kv, #2 grnd | 350 kcmil | 5980 | LF | 1999 |
| Underground Ductbanks | | Length (ft) | | |
| (Concrete encased) | | | | |
| PVC: 5 SP, 2 T, 5 L, 1 F, 1 P | 4 inch | 255 | LF | 1999 |
| PVC: 5 SP, 2 T, 4 L, 1 F, 1 P | 4 inch | 755 | LF | 1999 |
| PVC: 5 SP, 3 T, 2 L, 3 F, 1 S, 1 P | 4 inch | 275 | LF | 1999 |
| PVC: 5 SP, 3 T, 1 L, 3 F, 1 S, 1 P | 4 inch | 75 | LF | 1999 |
| PVC: 5 SP, 3 T, 1 L, 1 F, 1 P | 4 inch | 233 | LF | 1999 |
| PVC: 5 SP, 2 T, 1 F, 1 P | 4 inch | 486 | LF | 1999 |
| PVC: 5 SP, 1 T, 1 F, 1 P | 4 inch | 1303 | LF | 1999 |
| PVC: 6 SP, 1 T, 3 L, 2 P | 4 inch | 223 | LF | 1999 |
| PVC: 1 SP, 2 L, 1 P | 4 inch | 1670 | LF | 1999 |
| PVC: 1 SP, 2 L, 1 P | 4 inch | 297 | LF | 1999 |
| PVC: 1 SP, 1 P | 4 inch | 191 | LF | 1999 |
| Transformers | | Nom kVA | | |
| Oil filled, pad mount | 75 | 1 | EA | 1999 |
| Oil filled, pad mount | 75 | 1 | EA | 1989 |

| | | | | | |
|---|-------------------|---|----|------|--|
| Power Distribution Panel | Nom kVA | | | | |
| 3 phase, 3 wire, 600amp, | 12,470v | 1 | EA | 1999 | |
| Switches | Type | | | | |
| Medium voltage, pad mount, 600 amp | 12.4kv | 9 | EA | 1999 | |
| Electric Meter | GE-.73 multiplier | 1 | EA | 1999 | |
| Vaults | Type | | | | |
| Manholes, pre-cast | 6'x6'x8' | 8 | EA | 1999 | |

Notes:

Kcmil – 1000 circular mils
 EA = each
 LF = linear feet
 Nom kVA = nominal kilovolt-amperes
 v = volts
 w = wire
 Ductbank: SP -Spare, T-Telephone, L-Lighting,
 F-Fibre Optics, S-Surveillance, P-Power.
 No known tracer wire or warning tape was used
 this system

J1.2.2 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 Sky Harbor IAP (ANG), Phoenix, AZ

| Qty | Item | Make/Model | Description | Remarks |
|------|------|------------|-------------|---------|
| None | | | | |

TABLE 3

Specialized Vehicles and Tools
 Electric Distribution System Sky Harbor IAP (ANG), Phoenix, AZ

| Description | Quantity | Location | Maker |
|-------------|----------|----------|-------|
| None | | | |

J1.2.3 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 Sky Harbor IAP (ANG), Phoenix, AZ

| Qty | Item | Description | Remarks |
|-----|-----------------------|---|--|
| | Construction Drawings | Drawings were prepared by Rust Engineering for the City of Phoenix, AZ, Title "AZ Air National Guard Base Relocation" dated April 90, Nov 96. | These drawings are not available in AUTOCAD. |

J1.3 Specific Service Requirements

The service requirements for the Sky Harbor IAP (ANG), Phoenix, AZ electric distribution system are as defined in the Section C *Description/Specifications/Work Statement*. The following requirements are specific to the Sky Harbor IAP (ANG), Phoenix, AZ 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.

- Although the ductbanks are being turned over to the successful offeror, those ducts not currently used for electrical lines will be reserved for the exclusive use of the government. Additional ducts may be made available to the successful offeror at the discretion of the Contracting Officer.

J1.4 Current Service Arrangement

- Provider Name: Arizona Public Service Co
- Average Annual Usage: 3,082,147 kWh in 1999 (Note: Electricity consumption for 2000 will be higher due to newly constructed facilities in 1999)
- Maximum Monthly Use: 365,913 kWh (October)
- Minimum Monthly Use: 187,381 kWh (February)

J1.5 Secondary Metering

J1.5.1 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 J1.6 below.

TABLE 5
Existing Secondary Meters
Electric Distribution System Sky Harbor IAP (ANG), Phoenix, AZ

| Meter Location | Meter Description |
|----------------|-------------------------|
| Bldg 6 | GE-.73 multiplier, 1999 |

J1.5.2 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 J1.6 below.

TABLE 6
New Secondary Meters
Electric Distribution System Sky Harbor IAP (ANG), Phoenix, AZ

| Meter Location | Meter Description |
|----------------|-------------------|
| None | |

J1.6 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 (if any). 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.

J1.7 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.

Note: A Barber Coleman Energy Management System is now being installed but is not included in the privatization effort.

J1.8 Service Area

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

J1.9 Off-Installation Sites

No off-installation sites are included in the sale of the Sky Harbor IAP (ANG), Phoenix, AZ electric distribution system.

J1.10 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 Sky Harbor IAP (ANG), Phoenix, AZ

| Location | Description |
|----------|-------------|
| None | |

J1.11 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 Sky Harbor IAP (ANG), Phoenix, AZ 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 Sky Harbor IAP (ANG), Phoenix, AZ

| Project Location | Project Description |
|-------------------------|----------------------------|
| None | |