ATTACHMENT JA1

Fort Buchanan Electric Distribution System

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JA1.1 Fort Buchanan Overview

Fort Buchanan is a U.S. Army installation which covers approximately 746 acres located southwest of San Juan, Puerto Rico. As the Army's only active installation in Puerto Rico and the Antilles, Fort Buchanan provides mobilization to all active-duty and reserve elements on the island of Puerto Rico.

The Installation's primary mission is to provide base support services to all U.S. Army Reserve (USAR) units in Puerto Rico and the U.S. Virgin Islands. In addition to its primary mission, Fort Buchanan also is a Power Support Platform (PSP) that plans, prepares, develops and executes contingency plans; supports U.S. Forces operating in the Caribbean, Central and South America; executes oversight for the Army's Anti-Terrorism / Force Protection (AT/FP) program; and when ordered, serves as a Base Support Installation (BSI) for the conduct of Military Support to Civil Authorities (MSCA) operations.

Fort Buchanan has more than 1,300 Army Reserve duty soldiers and civilian workers, and supports over 11,000 National Guard / USAR soldiers, 25,000 retirees and more than 15,000 family members living both on and off Post. The Installation's day-time population is estimated to include between 8,000 and 10,000 active duty military personnel, civilians, family members and retirees. Fort Buchanan has approximately 119 sets of family quarters, ranging from two- to four-bedroom multiple apartments to single family houses.

JA1.1.1 Family Housing

Existing family housing on Fort Buchanan consists of three government housing areas. Neighborhoods such as Coconut Grove, Las Colinas, and Coquí Gardens support full time service personnel and their families with on-post living quarters. The Las Colinas housing area is for senior officer housing. The Coconut Grove family housing provides quarters for junior officer and senior enlisted personnel with many of the units close together. Coquí Gardens supports lower enlisted personnel. The unaccompanied personnel housing barracks are located in the 1300 series area of Fort Buchanan.

JA1.2 Electric Distribution System Description

JA1.2.1 Fixed Equipment Inventory

The Fort Buchanan electric distribution system consists of all appurtenances physically connected to the electric distribution system between the points of demarcation separating Government-ownership of the system from the supplier and separating the system from end-users.

The Government reserves the right to connect to the electrical distribution system and use the distribution system for any future cogeneration system that may be built / installed within the Installation's boundaries. The Contractor shall not impose any commodity transportation charges for electricity that is generated within the Installation boundaries and connected to the electrical distribution system, regardless of the source.

The actual inventory of items sold will be in the Bill of Sale (sample shown at Attachment JR1) 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 the inventory listed in **Tables 3** and **4**. The Contractor should use the site inspections as well as information included in the Technical Library as reference points for developing other aspects of its proposal. As described in the Request for Proposal (RFP) Section C, *Operational Transition Plan*, if during the joint inventory that takes place during the Transition Period between contract award and contract start, the Contractor identifies additional inventory not listed in Paragraph JA1.2.4, the Contractor may submit a request for an equitable adjustment to the Contracting Officer. If the Contractor determines the inventory listed in Paragraph JA1.2.4 is overstated, the Contractor shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment as appropriate.

Specifically excluded from privatization of the electric distribution system are:

- Individual building emergency / back-up generators, and
- Photovoltaic and wind turbine energy sources.

The Government uses the following useful lives to determine the value of the electrical distribution system to be privatized. The design lives are not mandated to be used in the Offeror's proposal. However, the Offeror's proposal must clearly explain the use of any system component design life that significantly differs from the Government's assumed design life noted in the following table.

Component	Useful Life
Overhead Conductor	40 years
Underground Conductor	25 years
Utility Poles - wood	30 years
Utility Poles - concrete	50 years
Manholes	50 years
Transformers – pad and pole-mounted	35 years
Disconnect Switches / Sectionalizing Switches	35 years
Street Lights – fixtures	20 years
Meters	20 years
Substation – Structure/Buswork	35 years
Substation – Transformers/Regulators	35 years
Substation – Circuit Breakers	35 years

JA1.2.2 System Description

Fort Buchanan owns its electrical distribution system located within the boundaries of the Installation. The Puerto Rico Electric Power Authority (PREPA) supplies electrical power to the Installation from PREPA's Puerto Nuevo Steam Plant via its 38 kilovolt (kV) sub-transmission line, designated as line No. 3900. PREPA can also supply Fort Buchanan through its main transmission grid via Fort Buchanan's Caparra 38 kV Substation through designated power lines No. 3500 and No. 4300, as well as No. 3900, feeding into it.

Within the premise of Fort Buchanan boundary, the Installation provides electrical power services through the Caparra Substation (redundant system installed in 2011) located at Building 142 near the Installation's southern boundary, along the South Gate Road. This is an outdoor substation that consists of one 38 kV line termination, three 38 kV SF_6 gas circuit breakers, two 20.0 megavolt ampere (MVA) power transformers at 38-13.2 kV, and nine 13.2 kV metal-clad circuit breakers arranged in two outdoor switchgear assemblies. The substation provides voltage regulation, control, and over current protection for three 13.2 kV distribution feeders at present, with provisions for one future feeder. PREPA owns the 38 kV metering structures and metering equipment located next to the substation's boundary fence.

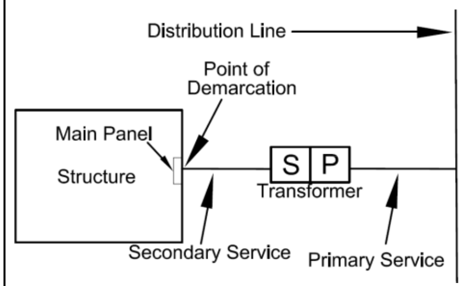
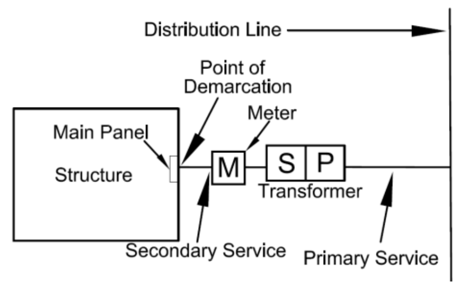
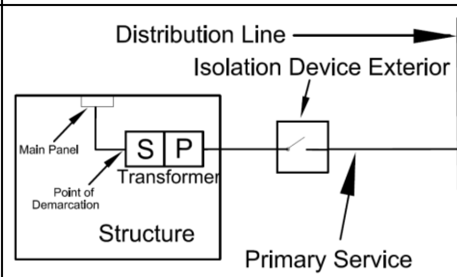
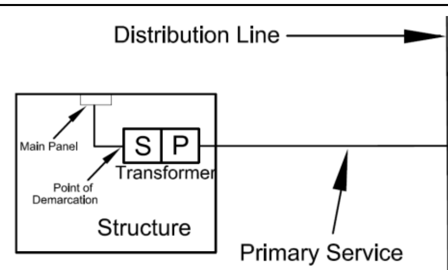
In addition to the Main Substation, Fort Buchanan's electrical distribution system consists of three 13.2 kV three-phase feeder lines (designated black, brown and red) that provide primary distribution to the Installation. The distribution system is primarily an overhead (OH) system, supported on concrete primary poles and wood secondary poles; however, there is some underground (UG) primary and secondary distribution, primarily for the housing areas (Las Colinas and Coconut Grove Housing Areas) and street lighting. The OH pole-line is conventional open wire grid. The existing system uses pole-mounted and pad-mounted transformers with a large portion of these having reached the end of their design lives. The UG primary facilities consist of both duct type and direct burial construction practices and pad-mounted transformers.

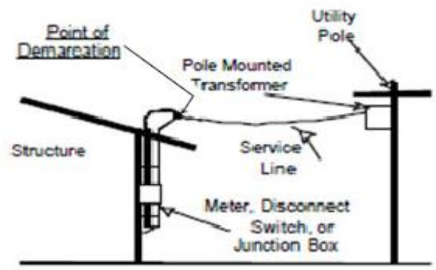
In addition to the primary source of energy, Fort Buchanan has four ground-mounted photovoltaic (PV) sites, four canopy PV sites, three roof-mounted PV sites, and two wind generators for a total renewable installed capacity (maximum rated) of 6.4 megawatts (MW). These facilities are interconnected to the distribution grid (13.2 kV) of the Installation excluding the roof-mounted PV at Buildings 689 (AAFES Main Store and Commissary) and 606 (AAFES PX-Tra), and the ground-mounted PV at Building 37 (DPW O&M Shops) that are connected to their respective distribution panels (480 V). These facilities are not included in this action; the point of demarcation is included in **Table 2**.

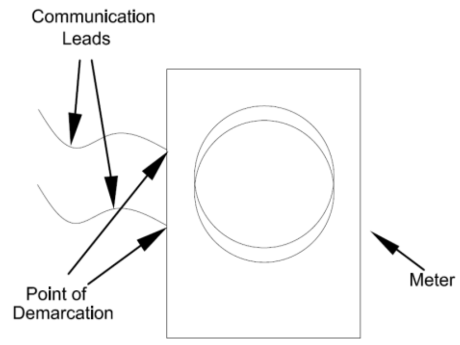
JA1.2.3 Points of Demarcation

The point of demarcation is defined as the point on the distribution system where ownership changes from the utility owner to the building owner. **Table 1** identifies the type of service and location of the points of demarcation with respect to each building served by the distribution system.

TABLE 1
Points of Demarcation
Electric Distribution System, Fort Buchanan, Puerto Rico

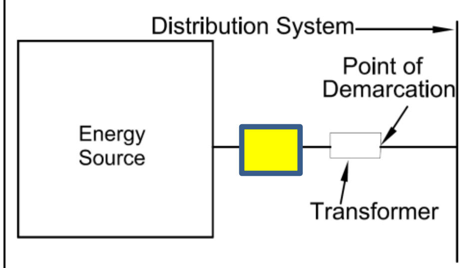
Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the exterior of the building. *Note: Disconnect switch may be installed at the structure at any time. The load side of the disconnect switch will become the point of demarcation.*	Pad-mount transformer located outside of structure with underground service to the structure and no meter exists.	
Point of demarcation is the exterior of the building. *Note: Disconnect switch may be installed at the structure at any time. The load side of the disconnect switch will become the point of demarcation.*	Three-phase metered service.	
Point of demarcation is the load side of the secondary terminals on the transformer.	Transformer located inside of structure and an isolation device is in place with or without a meter. *Note: Utility owner must be granted 24-hour access to transformer room.*	
Point of demarcation is the load side of the secondary terminals on the transformer.	Transformer located inside of structure with no isolation device in place. *Note: Utility owner must be granted 24-hour access to transformer room.*	

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the point at which the secondary conductor is connected to the weatherhead.	Overhead service connected to overhead secondary line. *Government will retain ownership of the mast.*	
Point of demarcation is where the overhead conductor is connected to the service entrance mast.	Electric power is provided to a water facility via an overhead service drop. This configuration could be found at facilities dedicated to the water utility such as a water well, pump station, or storage facility.	None
Point of demarcation is at the secondary terminal of the transformer.	Electric power is provided to a water facility via an underground service connection. This configuration could be found at facilities dedicated to the water utility such as a water well, pump station, or storage facility.	None
Point of demarcation is where the overhead conductor is connected to the service entrance mast.	Electric power is provided to a wastewater facility via an overhead service drop. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station.	None
Point of demarcation is the secondary terminal of the transformer.	Electric power is provided to a wastewater facility via an underground service connection. This configuration could be found at facilities dedicated to the wastewater utility such as a lift station.	None

Point of Demarcation	Applicable Scenario	Sketch
POD is the connection point to the meter for the communication leads.	Service with a meter. Smart meter with communication capabilities.	

Unique points of demarcation are identified in **Table 2**.

TABLE 2
Unique Points of Demarcation
Electric Distribution System, Fort Buchanan, Puerto Rico

Points of Demarcation	Applicable Scenario	Sketch
The supply side of the Army-owned 38 kV SF_6 gas circuit breakers.	Caparra Substation	None.
Point of demarcation is the terminals on the load side of the transformer feeding into the power grid.	Photovoltaic and wind turbine energy sources. Inverter Location:	

JA1.2.4 Inventory

Table 3 identifies the inventory of the Government-owned electrical distribution system serving Fort Buchanan. When the year of construction was not known, it was estimated based on the age of the surrounding system components or the age of the facility served. Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

The system will be sold in an “as is, where is” condition without any warranties, representations, or obligations on the part of the Government to make any alterations, repairs, or improvements.

Any proposal that offers an alternative description of the property being sold may be deemed technically unacceptable.

TABLE 3
Fixed Inventory – Main Cantonment
Electric Distribution System, Fort Buchanan, Puerto Rico

Item	Size	Quantity	Unit	Approximate Year of Construction
Overhead Primary				
3-Phase, ACSR	556 MCM	28,036	Circuit Feet	2009
	266 MCM	10,743	Circuit Feet	2009
	3/0	575	Circuit Feet	2009
	2/0	2,896	Circuit Feet	2009
2-Phase, ACSR	2/0	1,280	Circuit Feet	1973
	#2	3,848	Circuit Feet	2009
1-Phase, ACSR	266 MCM	461	Circuit Feet	2009
Gang Operated Air Break Switches		2	Each	1965
		11	Each	1973
Poles				
Concrete	40-foot, Class 4	81	Each	2006
		14	Each	2009
	45- foot, Class 5	222	Each	2009
Wood	35- foot, Class 3	3	Each	1973
Underground Primary				
3-Phase, Aluminum	556 MCM	458	Circuit Feet	2009
	2/0	6,405	Circuit Feet	2009
2-Phase, Aluminum	266 MCM	2,870	Circuit Feet	2009
Duct – Polyvinyl Chloride	2-inch x 4-inch	9,733	Linear Feet	2009
Manholes		2	Each	1950
		3	Each	1965
		1	Each	1991
		2	Each	1997
		1	Each	2013
Pad-Mount Sectionalizing Switches		1	Each	1991
		2	Each	2009
Transformers – Pole-Mount				
1-Phase	15 kVA	4	Each	1945
		2	Each	1965

Item	Size	Quantity	Unit	Approximate Year of Construction
		5	Each	1973
	25 kVA	3	Each	1945
		1	Each	1965
		16	Each	1973
		1	Each	1984
		1	Each	1987
	37.5 kVA	4	Each	1945
		3	Each	1950
		7	Each	1965
		15	Each	1973
	50 kVA	1	Each	1945
		2	Each	1965
		42	Each	1973
		8	Each	1984
		1	Each	1987
	75 kVA	25	Each	1973
		3	Each	1982
	100 kVA	3	Each	1945
Transformers – Pad-Mount				
1-Phase	25 kVA	3	Each	2009
	75 kVA	1	Each	2009
	167 kVA	1	Each	1984
3-Phase	112.5 kVA	1	Each	1973
	150 kVA	1	Each	1984
		1	Each	2006
		1	Each	2009
	225 kVA	1	Each	1965
		1	Each	1987
		1	Each	1994
		3	Each	2009
	300 kVA	1	Each	1965
		1	Each	1984
		2	Each	1991
		1	Each	1994
		1	Each	2009
	500 kVA	2	Each	1965
		1	Each	1984

Item	Size	Quantity	Unit	Approximate Year of Construction
		6	Each	2009
	750 kVA	1	Each	1965
		1	Each	2009
	1000 kVA	1	Each	2009
	1500 kVA	1	Each	1991
Street Light Circuits				
Overhead, ACSR – 3 phase	#8	16,376	Circuit Feet	1965
		62,234	Circuit Feet	1973
		937	Circuit Feet	1984
		444	Circuit Feet	1991
		599	Circuit Feet	1994
Underground, Aluminum – 3 phase	#2	97	Circuit Feet	1984
		1,029	Circuit Feet	2009
Light Fixtures				
LED		530	Each	2009
Poles - concrete	30-foot	530	Each	2009
Photovoltaic Panel & Battery Box (Solar Lighting)		85	Each	2009
Overhead Services – 600V				
3-Phase, Copper Quadraplex	1/0	7	Each	1945
		7	Each	1955
		5	Each	1965
		103	Each	1975
3-Phase, Aluminum Quadraplex	1/0	9	Each	1985
		13	Each	1995
		7	Each	2005
1-Phase, Copper Triplex	1/0	5	Each	1945
		5	Each	1955
		3	Each	1965
1-Phase, Aluminum Triplex	1/0	7	Each	1985
		10	Each	1995
		5	Each	2005
Underground Services				
3-Phase, Copper Quadraplex	1/0	1	Each	1945
		1	Each	1955
		1	Each	1965
		21	Each	1975

Item	Size	Quantity	Unit	Approximate Year of Construction
3-Phase, Aluminum Quadraplex	1/0	2	Each	1985
		3	Each	1995
		1	Each	2005
1-Phase, Copper Triplex	1/0	1	Each	1945
		1	Each	1955
		1	Each	1965
1-Phase, Aluminum Triplex	1/0	2	Each	1985
		2	Each	1995
		1	Each	2005
Meters - Advanced		61	Each	2015
Caparra Substation				
Structure/Buswork	38 kV	2	Bays	2011
Circuit Breakers - SF6	38 kV	3	Each	2011
Power Transformers	20 MVA	2	Each	2011
Vacuum Circuit Breakers	13.2 kV	9	Each	2011
Service Pad-Mount Transformer	3-Phase, 75 kVA	1	Each	2011

Table 4 identifies the inventory of the Fort Buchanan electric distribution utility system located in the family housing area.

TABLE 4
Fixed Inventory – Housing
Electric Distribution System, Fort Buchanan, Puerto Rico

Item	Size	Quantity	Unit	Approximate Year of Construction
Overhead Primary				
3-Phase, ACSR	266 MCM	7,151	Circuit Feet	2009
1-Phase, ACSR	266 MCM	1,158	Circuit Feet	2009
Gang Operated Air Break Switches		1	Each	1973
Poles				
Concrete	40-foot, Class 4	51	Each	2009
Transformers - Pole Mount				
1-Phase	25 kVA	1	Each	1973
	37.5 kVA	3	Each	1973
	50 kVA	5	Each	1973
	75 kVA	10	Each	1973
Overhead Services – 600V				

Item	Size	Quantity	Unit	Approximate Year of Construction
1-Phase, Copper Triplex (at 125 feet each)	1/0	95	Each	1973
Street Light Circuits				
Overhead, ACSR – 3 phase	#8	3,869	Circuit Feet	2009
Light Fixtures				
LED		162	Each	2012
Poles - aluminum	30-foot	162	Each	2012

Existing fences and bollards around electric system assets and facilities (such as substations) are included in this privatization package. The Contractor shall maintain these fences and bollards so as to ensure proper physical security of these facilities and to prevent unauthorized entry into these facilities. Additionally, the Contractor shall be responsible for proper maintenance of the grounds within the fenced area and within 5-feet outside of the fenced area. Ground maintenance includes, but is not limited to, mowing/trimming/weed control and tree trimming. The Contractor shall ensure that employees who have access to these areas are in compliance with the provisions of RFP Section C, *Controlled Access Areas*.

JA1.2.5 Non-Fixed Equipment and Specialized Tools

Table 5 lists other ancillary equipment (spare parts), and **Table 6** lists specialized vehicles and tools included in the purchase. Contractors shall field-verify all equipment, vehicles, and tools prior to submitting a proposal. Contractors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 5
Spare Parts
Electric Distribution System, Fort Buchanan, Puerto Rico

Quantity	Item	Make / Model	Description	Remarks
Spare parts may be available at the time of system transfer. For any spare parts available, the Government and the Contractor will negotiate the value, if any, and include in the bill of sale at the time of system transfer.				

TABLE 6
Specialized Vehicles and Tools
Electric Distribution System, Fort Buchanan, Puerto Rico

Quantity	Item	Make / Model	Description	Remarks
No specialized vehicles or tools are included with the electric distribution system.				

JA1.2.6 Manuals, Drawings, and Records

Available manuals, drawings, records, and reports included in the Technical Library will be transferred with the utility system.

JA1.3 Specific Service Requirements

The service requirements for Fort Buchanan's electric distribution system are as defined in RFP Section C, *Description / Specifications / Work Statement*. The following requirements are specific to Fort Buchanan's electrical distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and those described in Section C, the requirements listed below take precedence over those found in Section C.

JA1.3.1 On-Site Contractor Facility

To facilitate response times, Fort Buchanan will provide an approximately 2.5 acre on-site area to be used for Contractor offices, shops and storage. The exact location of this area will be determined by Fort Buchanan at a later date. Should the Contractor opt to use this area, the Contractor shall include a Transition Project showing the size of the area required and the proposed layout of all facilities within the area. Should the Contractor opt to construct a structure or structures on this area, the Contractor is advised that temporary structures may be used; however, they must be replaced by permanent, Installation Design Guide (IDG) compatible facilities within 24 months.

The Contractor shall be responsible for maintaining the grounds around the facility and around all areas throughout Fort Buchanan that are fenced in for Contractor use only, to include, but not limited to, mowing/trimming/weed control and tree trimming. The Contractor shall be responsible for all repair and maintenance of any structure within their assigned footprint, whether temporary or permanent.

If the Contractor opts not to use the on-site area, the Contractor must explain in its proposal how they will meet Fort Buchanan's response time requirements.

JA1.3.2 Temporary Contractor Facilities

Temporary facilities may be placed on post for construction projects. Approval from the Contracting Officer's Representative (COR) is required prior to the Contractor locating a temporary facility on the Installation. The approval will be for a term commensurate with the construction period and will provide for termination of the approval upon completion of the work. Construction, use, duration of use, removal, and clean-up associated with these temporary facilities will be negotiated with the Government on a project-specific basis.

JA1.3.3 Restricted Access Areas

Contractor access will be restricted in secure areas and during times when the Installation is secured due to threat or alert. The Government may limit or restrict the right to access granted for any reason considered to be necessary (e.g., national security, public safety).

JA1.3.4 Limited Access

Fort Buchanan is an open installation, however, access may be limited at times with controlled gate openings and closures. Gate operating times and procedures are published by the Provost Marshal's

Office. Unscheduled gate closures by the Military Police may occur at any time, and personnel entering or exiting the Installation may experience a delay due to vehicle inspection, registrations, wearing of seat belts, etc. If an unforeseen closure of the Installation prohibits Contractor access to a work site, the Contractor shall reschedule the work. The exact date and time shall be coordinated with the COR. If the Contractor cannot gain access to Fort Buchanan, the Contractor shall notify the COR within one hour via telephone, text message, or e-mail.

JA1.3.5 Vehicles

The Contractor and its employees shall comply with vehicle registration requirements of the Installation. Currently, Contractor-owned and employee-owned vehicles shall be registered with Fort Buchanan's Vehicle Registration Office within 5 working days from date of employment and renew registrations annually thereafter. Personnel operating vehicles on Government property shall possess a valid Puerto Rico or other state driver's license. This registration procedure is established to facilitate access to the Installation. The Contractor shall not conduct re-fueling and/or maintenance operation (i.e., changing oil) on personal or Contractor-owned vehicles on the Installation.

RAPIDGate®

Fort Buchanan utilizes an installation entry program known as RAPIDGate® (an outsourced program administered by Eid Passport, Inc. (Eid) for fast entry for non-military personnel who regularly require access to the Installations. Before issuance of a RAPIDGate® pass, Eid performs background checks to include a 10-year felony background check, a check against terrorist and sexual offender watch lists, and a social security cross reference to validate a person's identity. Qualified applicants are issued a pass that enables them to bypass inspection pits and use any of the facilities gates for access. Businesses whose employees would benefit by this are required to contact the program provider and have point of contact persons who can validate an applicant's employment. The pass for employees expires after a year, when a new background check is required by the program. Additional information and the costs associated with the RAPIDGate® program is available at http://eidpassport.com/government-products/rapid-gate. The Contractor shall coordinate with the RAPIDGate® point-of-contact to acquire access.

Contractor Vehicle/Equipment Markings

The Contractor shall maintain legible (easily readable from 20 feet by a person with 20/20 vision) markings (logo) conspicuously located on both sides of Contractor-furnished vehicles and/or equipment. Exceptions to this requirement may be granted by the COR for vehicles that are readily identifiable (e.g., refuse disposal trucks, tractors, etc.) as special use vehicles as opposed to general transportation vehicles. Exceptions may also be granted to subcontractors and Contractor-owned vehicles brought on post to perform emergency activities or to restore utility service during times of major utility outage.

JA1.3.6 Coordination Requirements Prior to Performing Work

The COR and the Contractor shall coordinate in writing with the appropriate Installation staff personnel regarding vehicle parking areas, work staging areas, vegetative disturbance, landscaping disturbance and customer notification prior to the installation of new infrastructure or major renewals/replacements.

JA1.3.7 Planning and Programming

The Contractor shall be fully engaged with Fort Buchanan's Directorate of Public Works (DPW) in planning and programming activities for projects possibly impacting the utility system(s). Costs associated with planning / programming shall be included in the Contractor's operations and maintenance (O&M) costs as part of normal operations. The following list generally describes activities in which the Contractor may be asked to assist the DPW:

- The Contractor shall assist in the development of Requests for Action (RFA) (see Section JA1.3.8). This may include providing detailed information to support scopes of work, budget estimates, etc., for any necessary changes to the utility system(s) and/or services provided.
- The Contractor shall be invited and is required to participate in meetings for projects impacting the utility system(s) such as, but not limited to, DD1391s development of the Statement of Work (SOW) for Military Construction (MILCON) projects, Planning Charrette for MILCON projects, Real Property Master Planning Boards, Fort Buchanan and SOW Line Item Reviews. As required by the Government Project Manager, the Contractor shall attend the pre-design meeting, design charrettes, pre-construction meetings, site visits, partnering meetings, etc. The Contractor shall plan to attend an average of four (4) of these types of meetings per month.
- The Installation anticipates that it will experience growth and expansion during the contract period necessitating new and/or upgraded facilities. Therefore, as part of its regular utility services under the monthly utility service charge, the Contractor must maintain capability to prepare and provide in a timely manner complete designs for connecting such facilities to the Contractor's infrastructure including site maps, sketches, and/or drawings.
- The Contractor shall respond to requests from the Government for new/upgraded facilities and/or demolition of existing facilities. The Contractor shall coordinate the design and construction of such connections/disconnections with the Government, Architect/Engineer, and construction contractors.
- The Contractor shall identify future project requirements as well as system deficiencies. The Contractor shall identify the specific utility requirements for each project and prepare designs and project cost proposals.
- The Contractor shall participate in strategic planning and propose long-term initiatives.
- The Contractor shall provide supporting information to assist the Government in developing budget estimates for unfunded projects.
- The Contractor shall maintain open dialog with the DPW and respond to questions within a timely manner.

JA1.3.8 Request for Action Process

The following language GENERALLY describes the process for a RFA and may not be all inclusive. It is provided for informational purposes only, and the Government is not binding itself to follow these steps. Nonetheless, the current process is as follows: (*Abbreviations: PM – DPW Project*

Manager; KO – Contracting Officer; COR - Contracting Officer's Representative; UP – Utility Privatization Contractor.)

STEP 1: The PM prepares a SOW and provides to the COR. The COR then forwards to the KO and the KO contacts the UP Contractor regarding the potential project.

STEP 2: The PM develops an Independent Government Estimate (IGE) and provides to the COR and KO.

STEP 3: The UP Contractor identifies specific utility system requirements for the project, develops a scope of work, detailed cost estimate, sketch, period of performance, and project schedule. The UP Contractor shall also identify any applicable increase/decrease to the O&M / Renewals & Replacements (R&R).

STEP 4: The KO, COR, and PM review the UP Contractor's proposal.

STEP 5: The UP Contractor, KO, COR, and PM will review the proposal, negotiate, and determine if an agreement can be reached.

STEP 6: If an agreement is reached, the PM provides the COR with funds and work order.

STEP 7: Funds are provided to the KO.

STEP 8: The KO issues a modification.

STEP 9: The PM and/or general contractor coordinates with the UP Contractor regarding the schedule.

STEP 10: The UP Contractor completes the Quality Control (QC) and Inspections.

STEP 11: The UP Contractor invoices for the project.

STEP 12: Modify the UP contract to include O&M and R&R for the added assets**.**

JA1.3.9 Mapping Requirements

Maps shall be prepared according to the following specifications:

a. All maps and associated data must comply with the latest version of Spatial Data Standards for Facilities, Infrastructure and Environment (SDSFIE) available at http://www.sdsfieonline.org/.

b. Due north on the maps shall be as viewed from the bottom of the maps. Rotation and translation of coordinate systems will not be allowed nor will orientation to Magnetic North. The Magnetic North orientation view may be rotated for plotting purposes but the orientation of the maps must be geographically correct when selecting 'top view'.

c. The maps shall contain a labeled coordinate grid with spacing appropriate to the map extents. For instance, a map scale of 1"=30' will have coordinates labeled at 100' intervals north/south and east/west.

d. All electrical distribution system components shall be clearly labeled as to size and material on the maps. The component data must be attributed in the Geographic Information System (GIS) data.

JA1.3.10 Updated Utility Maps

The Contractor is required to provide electronically (GIS format) an updated set of utility maps (complete) annually. Additionally, the Contractor shall update his utility maps within 30 days for any major system changes to include new construction or demolition of system components and provide those updates in GIS format to the COR. (See also RFP *Section C , Record Drawings & Utility System Maps.*) The Contractor shall coordinate with the COR to notify the DPW Real Estate Office of the number of components (including linear feet of conductor) removed from or added to service, as well as the capacity changes concurrent with the annual map update submittal.

JA1.3.11 Disposition of Removed or Salvaged Materials

Disposition of facilities and material removed from a system shall be the responsibility of the Contractor. If the cost structure of this contract is dependent upon in-place value, the salvage value of equipment removed from service prior to the end of its useful life shall be deducted from the in-place value of the system.

JA1.3.12 Component Replacement

Infrastructure not used after construction can be abandoned in place, provided the abandoned infrastructure poses no immediate or future health, safety, operational, or environmental risks in compliance with industry standards and provided written approval is received from the COR. However, unsightly abandoned infrastructure may be required to be removed and disposed of properly as may be practical or common practice. Generally, aboveground infrastructure will require demolition and removal. Abandoned infrastructure must be clearly marked on the utility maps.

JA1.3.13 Excavation Marking / Digging Process

JA1.3.13.1 Contractor-Provided Markings

The Contractor shall adhere to the Installation's "Dig Safe" policy. The Contractor shall endeavor to mark all utilities in the time windows defined by this process. In some cases, where non-metallic lines do not have tracer wires, it may take longer to locate the lines. In these instances, the Contractor shall make necessary notifications about a possible delay in the marking process. The Contractor shall be responsible for all repairs, costs, and damages due to excavations by others for which he did not properly mark his utilities as part of the utility marking process. The Dig Safe policy may be periodically revised by the Fort Buchanan DPW. Compliance is required. There are an average of 240 line locates per year.

JA1.3.13.2 Contractor Excavation Requirements

The Contractor shall obtain digging permits from Fort Buchanan's DPW before any drilling, digging, or excavation is undertaken. The Contractor shall provide a completed request for permit to the Fort Buchanan DPW, including Engineering, Environmental and NEC approvals, for each permit not earlier than 21 days and not later than 10 days prior to the requested digging date. (Expedited permit procedures will be employed for legitimate emergencies.) Permits shall identify all underground utilities within 5 feet of the designated area. Since utility marking is an inherently imprecise process, excavation within 2.5 feet on either side of the marked utilities shall be done by hand. The Contractor shall be responsible for all repairs, costs, and damages due to his excavations that fail to comply with the DPW digging permit process and the requirements listed herein; this includes excavations extending beyond areas that have been cleared for excavation.

The Contractor shall be responsible for re-establishing vegetative turf at all disturbed locations within 30 days of work completion. If the project work is performed during a non-growing season, the Contractor shall provide erosion control measures until permanent vegetation growth can be established. Permanent vegetative growth shall be considered growth that matches or exceeds the quality and density of the immediate surrounding grounds. The Contractor shall inform the COR within 14 calendar days of the completion of work.

JA1.3.14 System Survey and Assessment / Utility Record Drawings

The Contractor shall initiate a comprehensive survey of the system to identify components not shown on record drawings and identify errors on existing record drawings. Production and maintenance of record drawings shall be in accordance with RFP Section C, *Record Drawings & Utility System Maps*, and all work shall conform to the latest release of the software the Government is using compatible with the latest versions of SDSFIE (see JA1.3.9). The Contractor shall provide geo-referenced data in a format that can be readily used in GIS (widely used by DoD and external agencies). This effort shall include a comprehensive record search, physical survey work, and may include some excavation to ascertain line location, type, and condition. The project to survey and update record drawings must be completed no later than one year after the contract start date.

In addition to the System Survey and Assessment, the Contractor shall conduct a Short Circuit and Protective Device Coordination Study in accordance with the National Electric Code (NEC) Articles 110-9, 110-10, 240, and 517.17. The Short Circuit Study will help to ensure that personnel and equipment are protected by establishing proper interrupting ratings. The Protective Device Coordination Study will maximize power system selectivity by isolating faults to the nearest protective device, as well as helping to avoid nuisance operations that are due to transformer inrush or motor starting operations. The study shall be completed within one year after the contract start date.

Additionally, every 5 years or whenever there is a major modification or renovation to the electric system, the Contractor shall conduct an Arc Flash Hazard Analysis Study per National Fire Protection Association (NFPA) 70E – Standard for Electrical Safety in the Workplace, Article 130.5 and Annex D. The study shall be completed within one year after the contract start date.

JA1.3.15 Computerized Model

The Contractor shall develop and maintain an accurate computerized model of the utility system. The model shall reflect major system components and attributes. This model shall be of sufficient accuracy and detail to be used by the Contractor to support the Installation's engineering assessments and planning activities, contingency applications, long-range plans, analyzing system faults, and addition or deletion of new services. The Contractor shall provide both a computerized copy and hardcopy of the model with the annual Capital Plan. The project to develop the model shall be completed no later than two years after the contract start date.

JA1.3.16 Installation Design Guide

The purpose of the Army Installation Design Guide (IDG) is to provide Army standards and serve as a tool for implementing those standards. The design standards for site planning, buildings, vehicular and pedestrian circulation, landscaping, site elements (e.g. signage, utilities), force protection, and sustainable design are provided for incorporation at each Army installation. Force protection and security measures are required for every critical facility/infrastructure regardless of ownership in support of the Army mission in accordance with the memo from Army Deputy Assistant Chief of Staff for Installation Management (DACSIM); Subject: *Designation of Utilities as Mission Essential and Vulnerable Assets*, dated 1 March 2012, as included in the Technical Library and as may be updated throughout the life of the contract.

The Government's intention is for the Contractor to set their system design standards, consistent with industry standards. However, the Contractor shall follow the IDG for all work, where appropriate for consistency in architectural appearance and functionality. The Contractor shall provide any suggested updates, to include a summary of its unique specifications, to the COR for inclusion in the IDG with its applicable construction standards and specifications before the end of the contract transition period.

JA1.3.17 Supervisory Control and Data Acquisition (SCADA) System

The current SCADA system covers the wind turbines, photovoltaic system, and building HVACs. The SCADA system does not control the substation. The Contractor shall install a SCADA system within two years of the contract start date. See JA1.10, **Table 7** for details of what the SCADA system shall monitor and control.

JA1.3.18 Fire Control and Safety

In all cases, the Contractor shall abide by Fort Buchanan's fire protection requirements. Should the Contractor choose to construct an on-site facility to locate office space, warehouse, etc., the Contractor shall permit Fire Department personnel access to its facilities to perform fire inspections and emergency response. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. The Contractor shall comply with all local, state, National Fire Protection Association (NFPA) and Occupational Safety and Health Administration (OSHA) safety requirements and regulations.

Changes in O&M processes and procedures affecting fire protection shall be coordinated through the DPW and the Fire Department prior to initiation.

JA1.3.19 Environmental Issues

The Contractor shall follow all environmental rules and regulations in accordance with RFP Section C, *Environmental Compliance.*

JA1.3.19.1 Endangered Species

U.S. Department of the Army Regulation (AR) 200-1, "Environmental Protection and Enhancement" implements federal, state, and local environmental laws and DOD policies for preserving, protecting, conserving, and restoring the quality of the environment. All Army organizations and activities comply with applicable federal, state, and local environmental laws, regulations, and executive orders (EOs) pertaining to environmental aspects. All Contractor personnel and activities shall comply with the applicable federal, state, and local environmental laws, regulations, and EOs pertaining to environmental aspects. Environmental aspects are elements of products, activities, or services that interact with the environment. Important environmental aspects are those that result in mission or environmental impacts including natural resource alteration, i.e. consumption or conservation, and ecological resource alteration, including wetland and endangered species protection or destruction.

Protection and recovery of imperiled species and the ecosystems upon which they depend is the purpose of the Endangered Species Act (ESA) (16 USC 35). The term ‘species’ refers to animals and/or plants. The ESA is concerned with whether the species will be harmed, whether the habitat will be harmed and/or if the action / activity / project will aid or hinder the recovery of the listed species. The Fort Buchanan Environmental Division has developed Endangered Species Management Plans (ESMP) as part of the Installation’s Integrated Natural Resources Management Plan to address the ESA species and species of concern found within the Installation. Inventories have documented the presence of federally-listed endangered species the *Puerto Rican boa* and a small tree called *Palo de Rosa*. These species are managed according to the ESMP. Section JA1.319.1 applies to current identified species as well as those species which may be identified in the future.

Should the Contractor encounter (or suspect an encounter with) any of the listed species identified (or any species identified in the future) in the ESMP, the Contractor shall immediately stop work and notify the Fort Buchanan Public Works Environmental Division.

JA1.3.20 Required Regulatory Reports

The Contractor shall be responsible for any reporting required by local, state and federal regulatory bodies. The Contractor shall provide the COR with timely information as requested to support reports required by the Department of the Army and other appropriate agencies.

JA1.3.21 Official Inspections

When the U.S. Environmental Protection Agency (EPA), Department of Natural and Environmental Resources of Puerto Rico, Environmental Quality Board (EQB), Department of Health of Puerto Rico, or OSHA notifies the Contractor of any scheduled or unscheduled inspector visits to the Installation, the Contractor shall within one hour of notification inform the COR via e-mail or phone with subsequent e-mail confirmation.

JA1.3.22 First Response Investigation

Restoration of utility service is extremely important to DoD installations and expectations are generally covered well throughout this RFP. However, occasions do arise where it may not be immediately apparent who the responsible repair agency is. This frequently occurs where an apparent fault (e.g., line break, etc.) is located near a point of demarcation. In these situations, the first responder may have to excavate to the actual fault to determine the precise location of the fault and who the appropriate repair agency is. The Contractor must plan to perform this type of “first response investigation” which may involve excavation. In these situations, the Contractor shall proceed toward fixing the problem until it is determined repair responsibility lies with another entity. The Contractor shall within one business day inform the COR of the status of the investigation via e-mail or phone with subsequent e-mail confirmation.

JA1.3.23 Response to Demand Maintenance Orders

The Contractor shall respond to demand maintenance orders, also known as service requests or service calls, issued by the Government. The Contractor shall have a telephone manned 24 hours/day, 365 days/year where the Government may call to report utility system problems. There shall be only one active phone number during duty hours and non-duty hours for the Government to call to report system problems. For all response times, the Contractor shall respond within the allotted time, take necessary corrective actions, order necessary materials, and schedule additional repairs. The Contractor's proposal shall include procedures for notifications of utility outages to the COR and the person(s) responsible for any buildings/facilities whose operations may be affected.

Additionally, the Contractor shall turn on and turn off electric services on the Contractor's side of the POD as requested by the Government at no additional cost to support new construction or maintenance activities. There shall be a number of this type of request for turn on / turn offs over the life of the contract associated with new construction activity. Currently, there are an estimated four (4) turn on / turn offs each month.

JA1.3.24 Utility Outage

Because of the critical nature of many Fort Buchanan's mission requirements, response to utility emergencies in and around the Installation area must be immediate. The Contractor shall respond with a knowledgeable individual to Priority 1 – Emergency – Not Life or Death utility problems within 30 minutes of notification during duty hours (7:00 am – 4:00 pm, Monday – Friday) and within 1 hour during non-duty hours. Additionally, repair crews must be on scene within 1½ hours during duty and 2 hours during non-duty hours. Work shall be continued until the problem is corrected or downgraded. The above response times do not apply to conditions where inclement weather (hurricanes, tornadoes, major lightning storms, floods, etc.) prevents normal operation. It is recognized that extraordinary conditions will cause the response times to vary proportionally to the number and expanse of system outages, and the priority of service restoration. Extraordinary conditions that warrant a variation from established response timelines shall be coordinated with the COR.

The type of service request, priority and minimum response time for various service requests are furnished below.

EMERGENCY:

Emergency – Life or Death

"Life or Death" emergencies will typically be handled by Fort Buchanan Emergency Response agencies, like the Military Police or Fire Department. These agencies or DPW will contact the Contractor. The Contractor shall respond immediately upon notification. Work shall be continued until the problem is corrected or downgraded.

Priority 1 –- Emergency – Not Life or Death

Priority 1 requests arise due to situations that, if left uncorrected, will cause significant damage to a facility, or compromise security or safety, or negatively affect productivity. The Contractor shall respond to Priority 1 requests within 30 minutes of notification during duty hours and within 1 hour of notification during non-duty hours. Work shall be continued until the problem is corrected or downgraded.

URGENT:

Priority 2 – Health & Welfare

Priority 2 requests arise due to situations that, if left uncorrected will measurably reduce productivity, cause discomfort or inconvenience to the customer, waste resources, or create the need for additional minor repairs. The Contractor shall respond to Priority 2 requests within 24 hours. The Contractor shall complete the service orders within 5 calendar days unless there is a delay from the Government or the Contractor cannot procure the material.

ROUTINE:

Priority 3 – Productivity Inhibitor

Priority 3 requests arise due to situations that, if left uncorrected, will cause measurable discomfort or inconvenience to the customer, waste resources or create the need for additional minor repairs, is esthetically unpleasant or inconvenient. The Contractor shall respond to Priority 3 requests within 5 calendar days. The Contractor shall complete the service orders within 30 calendar days unless there is a delay from the Government or the Contractor cannot procure the material.

JA1.3.25 Emergency Operations

The Contractor's proposal shall include its restoration priority listing for response to widespread disaster/contingency operations for all of its customers (including Fort Buchanan and non-Fort Buchanan customers). Restoration priorities for Fort Buchanan customers shall be in accordance with Fort Buchanan's emergency restoration plan. In no case will equipment and/or personnel normally dedicated to Fort Buchanan's utility system be pulled to serve the Contractor's external customers if utility service to Fort Buchanan is experiencing an outage or outages that require their service. Some personnel dedicated to Fort Buchanan may be pulled to assist in the restoration of service to customers external to Fort Buchanan if Fort Buchanan's systems are not experiencing outages. A minimal staff shall remain in service at Fort Buchanan at all times.

JA1.3.26 Planned Outages

The Contractor must coordinate in writing any planned outages for construction or maintenance with the DPW and affected customers a minimum of 14 calendar days prior to any outage. For outages requiring four or more hours of interruption to service, work should be planned during off hours, such as, in the evening, weekends or holidays depending on the customers affected.

JA1.3.27 Crisis Situations / Exercise Situations

Fort Buchanan is subject to unannounced inspections and exercises that require practice evacuations of certain and/or all areas. Evacuation practices will be temporary in nature. The Contractor will be required to participate in these practice evacuation exercises as necessary. Participation in such exercises will be at no additional cost to the Government. The Contractor shall respond to these events as emergency service calls and respond to the emergency situation with qualified personnel and as soon as possible after notification during normal duty hours. In no case will response be longer than those requirements listed in Paragraph JA1.3.24. The Contractor shall advise and assist the on-scene commander until the event is terminated. The Contractor will receive advance notice of scheduled exercises. The Contractor shall expect to be involved in an estimate of one (2) exercises per year.

JA1.3.28 Cost of Supporting Utilities

The Contractor may consume reasonable quantities of supporting utilities at no charge to include the Contractor's privatized infrastructure and administrative facilities. However, the Contractor shall fully support the Government with respect to energy / water conservation measures as described in RFP Section C, *Energy and/or Water Efficiencies and Conservation and Renewable Energy Generation*. The Contractor's usage may be separately metered by the Government to provide the Army with the capability to monitor the Contractor's use of these services and to ensure the Contractor is practicing energy conservation measures as prescribed by the Army through the U.S. Army Energy and Water Campaign Plan (AEWCP) (located at http://army-energy.hqda.pentagon.mil/programs/plan.asp).

JA1.3.29 Cultural Resources

Transfer of ownership of certain historic properties necessitates Government compliance with federal laws and regulations to meet historic preservation requirements. The final transfer documents will include an easement or covenant that includes adequate and legally enforceable restrictions or conditions to ensure long-term preservation of historic properties to meet these preservation requirements. As a result of this easement or covenant, the Contractor will likely be required to preserve and maintain transferred historic properties in accordance with Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68).

Activities involving ground disturbance, construction, demolition, landscape modification, or alteration of the exterior or interior of a historic building have the potential to adversely affect cultural resources. Historic districts, buildings, landscape features, or archaeological sites considered eligible for the National Register of Historic Places that may be identified in the future shall be subject to the terms of this section.

The COR shall coordinate with Fort Buchanan's Cultural Resources Program to determine if consultation with the State Historical Preservation Office (SHPO) is required per 36 CFR 800. Fort Buchanan has entered into a Programmatic Agreement with the SHPO. For non-emergency work, the COR will respond to the Contractor within 10 working days. Initial SHPO review requires 30 days and additional consultation may be required to avoid, minimize or mitigate any adverse effect. The Contractor shall not start work until notified by the COR.

In emergency situations, the Contractor is not required to consult with the COR in advance of actions to repair the utility distribution system. The Contractor shall notify the COR, who will notify SHPO, following execution of all emergency measures affecting historic properties. For emergency work, the Contractor may take steps to safeguard life and property, and restore service, but shall minimize impact to the site.

In the event archaeological materials are inadvertently encountered during construction or excavation activities, the activity must stop and the Contractor shall immediately notify the COR who will notify Fort Buchanan's Cultural Resources Program.

Costs for mitigation of damage to cultural resources (restoration, repair, or replacement) due to the Contractor's failure to comply with historical and cultural preservation laws, regulations, or programs that relate or may arise under performance of this contract may be deducted or offset by the Government from any monies due to the Contractor, and with respect to the nature and severity of the damage. The Contractor shall take any corrective or remedial actions as directed by the Contracting Officer.

JA1.3.30 Standards and Regulations

The Contractor shall provide Fort Buchanan with one electronic copy of the Contractor's standards and regulations within 45 days after contract start date. Any updates to the standards and regulations shall be provided to Fort Buchanan in electronic format within 45 days of the update.

JA1.3.31 Network Access Requirements

- Information Assurance (IA): Contractor personnel requiring access to U.S. Government Information Systems to fulfill their duties shall possess the required favorable security investigation, security clearance, formal access approval, and "need-to-know" prior to being granted access to any Government computer or computer network.

- Information Technology (IT)-I Level of Security Access is required for Contractor personnel in IA positions working with infrastructure devices, IDSs, routers, System Administration or Network Administration, with privileged-level access to control, manage, or configure IA tools or devices, individual information systems, networks, and enclaves. At a minimum, such Contractor personnel shall require a favorably completed National Agency Check (NAC), initiation of Single Scope Background Investigation (SSBI), completion of Standard Forms SF85P, SF86, and Supplemental Questionnaire.

- IT-II Level of Security Access is required for Contractor personnel in IA positions required to work with operating systems administration of common applications or enclaves, or back-up operators with limited privileged-level access to control, manage, or configure information systems or devices. At a minimum, such Contractor personnel shall require a favorable review of local personnel, installation / military, medical, and other security records as appropriate, initiation of a National Agency Check with Local Agency and Credit Check (NACLC), and completion of Standard Forms SF85P or SF86 and Supplemental Questionnaire.

- IT-III Level of Security Access is required for Contractor personnel in positions as normal users, power user on individual systems for configuration with non-privileged-level access to information systems and devices. At a minimum, such contractor personnel shall require a favorable review of local personnel, installation / military, medical, and other security records as appropriate, initiation of a NAC, and completion of Standard Form SF85P and the Supplemental Questionnaire.

- Contractor personnel shall not be granted access to any Government computer systems or networks until proof of compliance to the IA clearance requirements.

- Once Contractor personnel have complied with the IA requirements as reflected above, they will be granted the appropriate IT level of security access.

- Contractor personnel shall personally pick-up and sign for Government network user identification and password at the Information Assurance Office.
- Contractor employee(s) shall be solely responsible for the safeguarding of user passwords and shall immediately report any suspected compromise or loss of the password to the Information Assurance Office.
- The Contractor is responsible for notifying the COR and also the Information Assurance Office of any changes to their status or the status of their personnel.

JA1.3.32 Commercial Use

The Contractor shall obtain approval from the Government before using any utility system component and / or structure for commercial use.

JA1.4 Secondary Metering

Between the supply point of delivery of power and the end-user points of demarcation, the Contractor shall own, operate and maintain the existing meters at locations throughout the Installation, as directed by the Contracting Officer in keeping with the guidance in RFP Section C, *Sub-Metering*. The Contractor shall provide the Army with monthly meter readings of advanced meters not connected to the Meter Data Management System (MDMS). The Contractor shall manually read all meters each month that fail to be read by the MDMS. Fort Buchanan will submit to the Contractor routine service requests to read those meters not read by the MDMS.

In accordance with Energy Policy Act 2005, Executive Order 13423, and EISA 2007, the Army has implemented the Army Metering Program (AMP). The Contractor shall work closely with the ongoing AMP and its contractors to facilitate the installation of advanced metering equipment on existing meters with connectivity to the Installation's Meter Data Control Center (MDCC) via existing fiber and wireless network. Any meters not completed by the AMP (by award time) will subsequently be transferred upon work completion. The Contractor shall be responsible for installing new meters (per the Contracting Officer's request). The Contractor shall own, maintain, and replace all meters (existing and new installs). Subject to the change provisions of the contract, an equitable adjustment will be negotiated between the Government and the Contractor for the ownership, maintenance and replacement of the new meters (installed by Contractor or other methods of installation). After award, any installation of new meters by other than the Contractor shall be coordinated with the Contractor and the Government.

JA1.4.1 Meter Removal

Prior to the removal of an existing metering component, coordination shall be made with the DPW Engineering Division to ensure proper disconnection (and reconnection) of the communication equipment connected to the metering components. Only under emergency condition shall any disconnection action occur without this coordination; notification shall be made to the COR within 5 calendar days in advance of disconnection.

JA1.4.2 Existing Meters

Table 3 lists the existing (at the time of contract award) meters to be transferred to the Contractor. The Contractor shall provide operation, maintenance, and replacement for all meters (advanced and non-advanced) listed and all newly installed advanced meters. Operation and maintenance of advanced meters shall allow communication and data collection by the MDMS. In addition, the Contractor shall provide monthly meter readings for all non-advanced-type secondary meters and all advance meters that fail to be read by the MDMS in accordance with RFP Section C, *Sub-Metering*, and Paragraph JA1.5, *Monthly Submittals*. If the Government suspects that any meter readings are erroneous, the Contractor shall assist the Government in determining the cause and take corrective action to resolve the problem where appropriate.

JA1.4.3 Required New Secondary Meters

At the present time, Fort Buchanan does not require the installation of any new meters. All new secondary meters required in the future shall be compatible with the existing communication system for automatic meter reading and shall be installed in accordance with RFP Section C, *Future Meters*, and Fort Buchanan's IDG. After installation, the Contractor shall maintain and read these meters in accordance with RFP Section C, *Sub-Metering*, and Paragraph JA1.5 below.

For new installation, the Contractor shall adhere to the Government's specifications and installation instructions. For communication connection, coordinate with the Energy Management Branch. The Government is responsible for the equipment upstream and for the land connectivity of the system to the network.

JA1.5 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. **Invoice:** Monthly invoices shall be submitted in accordance with the instructions in Section G.2 of the contract.

2. **Outage Report.** The Contractor's monthly outage report shall be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 15th of each month for the previous month. Outage reports shall be submitted to the COR, as identified in Section G.1 of the contract.

3. **Meter Reading Report.** The monthly meter reading report shall show the current and previous month's readings for all non-advanced-type secondary meters and all advance-type secondary meters that fail to be read by the MDMS. The Contractor's monthly meter reading report shall be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 10th workday of each month for the previous month. Meter reading reports shall be submitted to the Installation POC listed below:

   Name: Mr. Anibal Negron, Installation Energy Manager
   Address: DPW Environmental Division
   Fort Buchanan, Puerto Rico
   Phone: 787.707.3575 / 787.354.1861
   E-mail: anibal.negron1.civ@mail.mil

JA1.6 Energy Saving Projects

There are currently no energy/water conservation projects underway affecting this utility privatization initiative in accordance with RFP Section C, *Energy and/or Water Efficiencies and Conservation and Renewable Energy Generation*. The Contractor may be asked to participate or support the following future projects:

- Installation of photocells on street lighting and parking lot lighting.
- Use of LED lamps when replacement of light fixtures is necessary.
- Installation of occupancy sensors on parking lot lighting away from entrances.
- The Contractor shall be an active participant in Fort Buchanan's future energy security and micro-grid initiatives.

JA1.7 Service Area

In accordance with RFP Section C, *Service Area*, the service area is defined as all areas within the Fort Buchanan boundary.

JA1.8 Off-Installation Sites

There are no off-site installations / facilities included in this privatization action.

JA1.9 Specific Transition Requirements

There are no known new connection/disconnection requirements at this time.

JA1.10 Government Recognized System Deficiencies

Table 7 provides a list of Government recognized deficiencies, the Government's approach to remedy the deficiency, and the time frame in which the deficiency should be remedied. The deficiencies listed may be physical, functional, or operational in nature. If the utility system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. In some cases, these requirements have not been quantified, nor are there project numbers assigned. They are provided to generally acquaint the Contractor with system needs, from the Government's perspective, that should be addressed over the next few years. The Contractor shall propose his approach to correct the recognized deficiencies, which may or may not be similar to the Government's approach.

TABLE 7
Recognized System Deficiencies
Electric Distribution System, Fort Buchanan, Puerto Rico

Deficiency No.	System Component	Recognized Deficiencies and the Government's Approach to Remedy	Year to be Completed
1	System Survey and Assessment / Utility Record Drawings (JA1.3.14)	Conduct a comprehensive survey of the system to identify components not shown on record drawings and identify errors on existing record drawings. Provide a report of any additional system deficiencies and recommended projects as a result of the survey. The project shall include updating of one-line diagrams.	Within one year after contract start date
2	Short Circuit & Protective Device Coordination Study (JA1.3.14)	Conduct a Short Circuit and Protective Device Coordination Study in accordance with the NEC to ensure that personnel and equipment are protected by establishing proper interrupting ratings.	Within one year after contract start date
3	Arc Flash Hazard Analysis Study (JA1.3.14)	Conduct an Arc Flash Hazard Analysis Study per NFPA standard for electrical safety in the workplace.	Within one year after contract start date
4	Computerized Model (JA1.3.15)	Develop and maintain an accurate computerized model of the system to implement contingency studies, reliability, and load analysis.	Within two years after contract start date
5	SCADA (JA1.3.17)	Add SCADA at the substation to include transformers, totalizers, and feeders. Data expected to be available for read-only access by the COR and Energy Manager: - Real metering of all breakers in each substation to include totalizer and transformers. - Current reading - Voltage - Trips setting - Trip fault logs - Power Quality reading - Power Factor - Year trending on metering and faults - Year trending of alerts on peaks and faults The SCADA control system shall be capable of accommodating energy security and micro-grid initiatives to include the addition of generation, storage and electrical dispatch.	Within two years after contract start date