

**APPENDIX H – PRICE WORKSHEETS, REVISED 12/26/15**

**BIDDER INSTRUCTIONS:**

*All Bidder pricing must be based on the Sample Product provided in Appendix H Mandatory Requirements. Any category in Appendix H that Bidder has chosen not to submit a bid, must also indicate **NO BID** in the Manufacturer section of the pricing worksheet below.*

<b>1. BATTERIES, MODULAR FLOODED LEAD-ACID</b>	
Category Definition: Low-maintenance, long life-lead acid battery cells and assemblies, along with all associated installation and maintenance hardware, supplies, and tools.	
Example Product: Quantity One (1) 48 volt / 1000 Amp-Hour battery assembly in floor-mount rack.	
Manufacturer:	NO BID
Product Model Name/Number:	
Published List Price:	
Percentage Discount:	
Net price:	
<b>Other Products/Services:</b>	

<b>2. BATTERIES, MODULAR VALVE REGULATED LEAD ACID</b>	
Category Definition: Low-maintenance, long life, Absorbed Glass Mat (AGM) battery cells and assemblies, along with all associated installation and maintenance hardware and tools.	
Example Product: Quantity One (1) 48 volt / 1000 Amp-Hour battery assembly in floor-mount rack.	
Manufacturer:	NO BID
Product Model Name/Number:	
Published List Price:	
Percentage Discount:	
Net price:	
<b>Other Products/Services:</b>	

**3. BATTERIES, MONO-BLOCK VALVE REGULATED LEAD ACID**

**Category Definition:** Low-maintenance, long life, Absorbed Glass Mat (AGM) battery cells and assemblies, along with all associated installation and maintenance hardware and tools.

**Example Product:** Quantity One (1) 48 volt / 1000 Amp-Hour battery assembly in floor-mount rack.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**4. BATTERIES, PORTABLE RADIO**

**Category Definition:** High-capacity rechargeable batteries for public safety grade radios, along with single and multi-unit chargers, and all associated accessories and supplies.

**Example Product:** Quantity One (1) 3000 – 4500 mAh, 7.4 volt battery.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**5. EQUIPMENT SHELTERS, BALLASTED**

**Category Definition:** Equipment shelters of various sizes specifically designed and constructed for extreme installation locations and to be installed with minimal soil disruption and without site-build foundation; along with necessary accessories and appurtenances, including antenna mast, RF shielding, and grounding systems.

**Example Product:** Quantity One (1) 40 ft.<sup>2</sup> equipment shelter equipped for helicopter transport.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**6. EQUIPMENT SHELTERS, CONCRETE**

**Category Definition:** Equipment shelters of various sizes constructed of precast concrete, specifically designed and constructed for extreme installation locations.

**Example Product:** Quantity One (1) 40 ft.<sup>2</sup> equipment shelter.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**7. EQUIPMENT SHELTERS, FIBERGLASS**

**Category Definition:** Equipment shelters of molded fiberglass construction, specifically designed and constructed for extreme installation locations.

**Example Product:** Quantity One (1) 40 ft.<sup>2</sup> equipment shelter equipped for helicopter transport.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**8. EQUIPMENT SHELTERS, FRAMED LIGHT-WEIGHT**

**Category Definition:** Equipment shelters of framed construction; with metal, cement board, or other composite exterior; specifically designed and constructed for extreme installation locations.

**Example Product:** Quantity One (1) 40 ft.<sup>2</sup> equipment shelter.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**9. EQUIPMENT SHELTERS, OUTDOOR CABINET**

**Category Definition:** Equipment cabinets of single and multiple widths of EIA standard 19” and 23” rack, in various depths and heights; , specifically designed and constructed for extreme installation locations; providing protection conforming to NEMA-3R, UL50, and UL50E standards, along with associated components and hardware.

**Example Product:** Quantity One (1) Single width, 19” - 84 RU cabinet of 25 inch depth.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**10. FURNITURE, DISPATCH CONSOLE**

**Category Definition:** Specialized dispatch center workstations, CPU enclosures, and auxiliary furniture such as storage units, printer cabinets, files, and tables.

**Example Product:** Quantity One (1) 911-Center Dispatch Workstation with partitioned screens.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**11. INTEROPERABILITY GATEWAY DEVICES**

**Category Definition:** Devices that interface multiple radios, of multiple makes and models, to analog telephones, to IP telephone networks, and to other devices; allowing multiple simultaneous voice communications to facilitate incident interoperability between respondents equipped with otherwise incompatible technologies; fixed, mobile, and portable devices; analog, digital, or IP-based devices; along with associated firmware and software, interface devices, connecting cables, and accessories.

**Example Product:** Quantity One (1) IP Gateway Device Configured to Support a Mobile Command Post.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**12. MICROWAVE RADIO, CARRIER GRADE, PACKET DATA**

**Category:** Microwave Radios, Mission Critical — includes: Point-to-Point digital microwave radio equipment to operate on Part 101 licensed frequencies above 5 GHz; available in all-indoor or split system , capable of space diversity, fix or adaptive modulation, RF power above +30 dBm; providing native IP, capable of transporting TDM, with high throughput capacity; supporting 1+1 hot standby and/or ring redundancy; along with required bandwidth management / routing equipment and software; and with antennas, feedline systems, hardware (which may be from other manufacturers) to provide a complete system.

**Example Product:** 6 GHz microwave radio, all-indoor installation, space diversity, providing 150 Mbps data throughput, and 1+1 hot-standby. All antenna system components and hardware, and routing equipment provided by the customer.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**13. MICROWAVE RADIO, CARRIER GRADE, NATIVE TIME DIVISION MULTIPLEX (TDM)**

**Category: Microwave Radios, Carrier Grade, TDM — includes: Point-to-Point digital microwave radio equipment to operate on Part 101 licensed frequencies above 5925 MHz; available in all-indoor or split system , capable of space diversity, fix or adaptive modulation; providing native TDM interface with high throughput capacity; supporting N+1 hot standby, and/or XPIC, and/or ring redundancy; along with required bandwidth management / routing equipment and software; and with antennas, feedline systems, hardware (which may be from other manufacturers) to provide a complete system.**

**Example Product: Lower 6 GHz microwave radio, all-indoor installation, space diversity, providing three (3) DS-3 throughput, and 1+1 hot-standby. All antenna system components and hardware, and routing equipment provided by the customer.**

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**14. MICROWAVE RADIO, NETWORK GRADE**

**Category: Microwave Radios, Network Grade— includes: Point-to-Point digital microwave radio equipment to operate on Part 101 licensed frequencies above 5925 MHz; capable of fix or adaptive modulation, RF power above +15 dBm; providing native packet data with high throughput capacity supporting emulated TDM over packet data; minimum MTU size of 2048; integrated or non-integrated antenna systems ; along with required bandwidth management / routing equipment and software; and with antennas, feedline systems, hardware (which may be from other manufacturers) to provide a complete system.**

**Example Product: 11 GHz microwave radio, split indoor-outdoor installation, providing 100 Mbps raw data throughput, non-integrated antenna system. All antenna system components and hardware, and routing equipment provided by the customer.**

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**15. MICROWAVE RADIO, NATIVE IP, SUB 5.9 GHz**

**Category Definition:** Point-to-Point digital microwave radio equipment to operate on Part 15 unlicensed frequencies and on Part 90 and Part 101 licensed frequencies above 1 GHz and below 5.9 GHz; capable of RF power above +20 dBm; providing native packet data and analog interfaces; with mid to high throughput capacity; minimum MTU size of 2048; along with required bandwidth management / routing equipment and software.

**Example Product:** Quantity one (1) Terminal – 4.9 GHz microwave radio, providing 20 Mbps data throughput.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**16. MICROWAVE RADIO, NATIVE IP, 900 Mhz**

**Category Definition:** Point-to-Point digital microwave radio equipment to operate on Part 15 unlicensed frequencies and on Part 90 and Part 101 licensed frequencies above 1 GHz and below 5.9 GHz; capable of RF power above +20 dBm; providing native packet data and analog interfaces; with mid to high throughput capacity; minimum MTU size of 2048; along with required bandwidth management / routing equipment and software.

**Example Product:** Quantity one (1) Terminal – 4.9 GHz microwave radio, providing 20 Mbps data throughput.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	



**17. MONITORING & ALARM, ENVIRONMENTAL**

**Category Definition:** Automated communication systems for collecting and transmitting environmental data for emergency notification (fire, flood, volcanic eruption, tsunamis, etc.), along with all associated hardware, software, and accessories to complete and maintain the system.

**Example Product:** Quantity One (1) Remote Automated Weather Station (RAWS) per NFDRS Standards.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**18. MONITORING & ALARM, RADIO NETWORK**

**Category Definition:** IP and analog radio network monitoring software & hardware, SCADA software & hardware, SNMP manager and agent software & hardware, remote terminal units (RTU), RF and radio site sensors.

**Example Product:** Quantity One (1) A hypothetical radio system monitoring configuration.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**19. POWER SYSTEMS, DC CONVERSION**

**Category Definition:** AC/DC converters, battery chargers, DC/DC converters, along with low voltage disconnect, DC breakers, power distribution panels, and associated hardware and software.

**Example Product:** Quantity One (1) 12VDC 75 AMP Battery Charger.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**20. POWER SYSTEMS, FUEL CELL**

**Category Definition:** fuel-cell generators using either gaseous hydrogen or methanol fuel, along with specialized racks and/or cabinets, fuel storage subsystems, and installation materials.

**Example Product:** Quantity One (1) 2.5 Kw Fuel Cell Backup DC Power Generator.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**21. POWER SYSTEMS, ELECTRO-MECHANICAL GENERATORS**

**Category Definition:** AC and DC power generators operating with diesel, gasoline or propane fuel. Indoor or Outdoor installation systems to include transfer switches, panels, monitoring, and controlling accessories including timing and sensing functions with related hardware and software.

**Example Product:** Quantity One (1) 45KW propane fueled outdoor cabinet with automatic transfer switch, remote monitoring and control.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**22. POWER SYSTEMS, UNINTERRUPTABLE POWER SUPPLY (UPS)**

**Category Definition:** Uninterruptible Power Systems, AC to AC, AC to DC double conversion on line, with associated installation wiring components, hardware and software, rack mount, vertical tower, free standing.

**Example Product:** Quantity One (1) Uninterruptible Power System Double Conversion on line 120 VAC input 120VAC output 2100 watts/ 3000 VA.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**23. TEST EQUIPMENT, MULTIFUNCTION RADIO TEST SET**

**Category Definition:** Specialized high-accuracy multi-function test instrument for the testing of two way radios. Includes: portable instruments, rugged field service instruments, laboratory instruments, along with related test adapters and accessories.

**Example Product:** Quantity One (1) Compact multifunction instrument for testing and alignment of two-way radios (AKA: Radio Service Monitor).

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**24. TEST EQUIPMENT, SPECIALIZED RF INSTRUMENTS**

**Category Definition:** Specialized high-accuracy radio frequency instrument for the analysis of radio systems. Includes: Signal generators, signal analyzers, spectrum analyzers, power meters, antenna measurement instruments; configured as portable instruments, rugged field service instruments, laboratory instruments; along with related test adapters and required accessories.

**Example Product:** Quantity One (1) Portable, 2-Port Vector Network Analyzer & Spectrum Analyzer — a field instrument for the analysis of RF antenna systems, filters, and cables.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**25. TOWERS, OVERALL SPECIFICATION**

This is a placeholder ONLY. No PRICING IS REQUIRED FOR THIS NUMBER

**26. TOWERS, ACCESSORIES & APPURTENANCES**

**Category Definition:** Radio tower accessories, antenna stand-offs, antenna array mounts, ice shields, cable bridges, grounding materials, cable entry-panels, non-penetrating and ballasted antenna mounts, anti-climb panels, and related products.

**Example Product:** Quantity One (1) One - non-penetrating/ballasted antenna mount.

**For Bidding Purposes:** vendor shall assume that (1) customer will resolve all the building structural capacity issues, (2) manage all permits, (3) provide ballast material, and (4) contract for erection services.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**27. TOWERS, DEPLOYABLE / TEMPORARY**

**Category Definition:** Deployable radio towers designed and constructed for temporary installation, fixed or transportable configurations, along with specially configured transport vehicles, accessories and appurtenances.

**Example Product:** Quantity One (1) 40-foot extendable tower mounted on 16 foot enclosed cargo trailer for rapid deployment to tactical events.

<b>Manufacturer:</b>	Aluma Tower Company, Inc.
<b>Product Model Name/Number:</b>	Cargo Trailer Tower ECT-16/DD-50HD (Aluma Part Number 900614)
<b>Published List Price:</b>	\$28,100.00
<b>Percentage Discount:</b>	5%
<b>Net price:</b>	\$26,695.00
<b>Other Products/Services:</b>	Customer Site Training- \$3,000 plus accommodations
	Extended Warranty (year 2-5) 2.5% total cost per each extended year

**28. TOWERS, GUYED**

**Category Definition:** Guy wire supported type towers, tower engineering and design, foundation engineering and design, along with associated components and hardware.

**Example Product:** Quantity One (1) 140-foot guy-wire-supported communications tower.

**For Bidding Purposes:** Vendor shall assume that (1) customer will supply geotechnical report, (2) manage all permits, and (3) contract for foundation and tower erection services. Note: (4) antenna mounts, stand-offs, ice-shields, and waveguide bridges are be specified and priced under a separate sub-category.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**29. TOWERS, GUYED, LIGHT**

**Category Definition:** Light duty lattice type towers, tower engineering and design, foundation engineering and design, and associated components and hardware.

**Example Product:** Quantity One (1) Light duty 60-foot self-supported communications tower.

**For Bidding Purposes:** Vendor shall assume that (1) customer will supply geotechnical report, (2) manage all permits, and (3) contract for foundation and tower erection services. Note: (4) antenna mounts, stand-offs, ice-shields, and waveguide bridges are be specified and priced under a separate sub-category.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**30. TOWERS, LATTICE**

**Category Definition:** Self-supporting type towers (3-leg and 4 leg), tower engineering and design, foundation engineering and design, and associated components and hardware.

**Example Product:** Quantity One (1) 140-foot self-supporting communications tower.

**For Bidding Purposes:** Vendor shall assume that (1) customer will supply geotechnical report, (2) manage all permits, and (3) contract for foundation and tower erection services. Note: (4) antenna mounts, stand-offs, ice-shields, and waveguide bridges are be specified and priced under a separate sub-category.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**31. TOWERS, LATTICE, LIGHT**

**Category Definition:** Light duty lattice type towers, tower engineering and design, foundation engineering and design, and associated components and hardware.

**Example Product:** Quantity One (1) Light duty 60-foot self-supported communications tower.

**For Bidding Purposes:** Vendor shall assume that (1) customer will supply geotechnical report, (2) manage all permits, and (3) contract for foundation and tower erection services. Note: (4) antenna mounts, stand-offs, ice-shields, and waveguide bridges are be specified and priced under a separate sub-category.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**32. TOWERS, MONOPOLE**

**Category Definition:** Monopole type towers, tower engineering and design, foundation engineering and design, and associated components and hardware.

**Example Product:** Quantity One (1) 140-foot monopole communications tower.

**For Bidding Purposes:** Vendor shall assume that (1) customer will supply geotechnical report, (2) manage all permits, and (3) contract for foundation and tower erection services. Note: (4) antenna mounts, stand-offs, ice-shields, and waveguide bridges are be specified and priced under a separate sub-category.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	

**33. TOWERS, PASSIVE MICROWAVE REPEATER**

**Category Definition:** Passive microwave repeater (reflector) structures, structure engineering and design, foundation engineering and design, and associated components and hardware.

**Example Product:** Quantity One (1) 20 foot by 32 foot passive microwave repeater.

**For Bidding Purposes:** Vendor shall assume that (1) customer will supply geotechnical report, (2) manage all permits, and (3) contract for foundation and tower erection services.

<b>Manufacturer:</b>	NO BID
<b>Product Model Name/Number:</b>	
<b>Published List Price:</b>	
<b>Percentage Discount:</b>	
<b>Net price:</b>	
<b>Other Products/Services:</b>	