



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
EBA136

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
**SHELLY MURRAY
 304-558-8801**

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE

SHIP TO

**EDUCATIONAL BROADCASTING
 AUTHORITY
 VARIOUS LOCALES AS INDICATED
 BY ORDER**

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
12/20/2007				

BID OPENING DATE: **01/30/2008** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>THE PURCHASING DIVISION IS SOLICITING BIDS FOR THE WEST VIRGINIA EDUCATIONAL BROADCASTING AUTHORITY TO PROVIDE A 4.0 KILOWATT ATSC SOLID STATE 8-VSB DIGITAL VHF CHANNEL 10 TELEVISION TRANSMITTER SYSTEM.</p> <p>ATTACHMENTS: SPECIFICATIONS PURCHASING AFFIDAVIT</p> <p>INQUIRIES: WRITTEN QUESTIONS SHALL BE ACCEPTED THROUGH CLOSE OF BUSINESS ON 01/16/2008. QUESTIONS MAY BE SENT VIA USPS, FAX, COURIER, OR EMAIL. IN ORDER TO ASSURE NO VENDOR RECEIVES AN UNFAIR ADVANTAGE, NO SUBSTANTIVE QUESTIONS WILL BE ANSWERED ORALLY. IF POSSIBLE, EMAIL QUESTIONS ARE PREFERRED. ADDRESS INQUIRES TO:</p> <p style="text-align: right;">SHELLY MURRAY DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25311 FAX: 304-558-4115 EMAIL: SHELLY.L.MURRAY@WV.GOV</p>						
0001	1	LS		840-65		
TELEVISION TRANSMITTERS						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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**GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)**

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125.00 registration fee.
5. All services performed or goods delivered under State Purchase Orders/Contracts are to be continued for the term of the Purchase Order/Contract, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA Business Associate Addendum** - The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Covered Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in cases of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications.

SIGNED BID TO:

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130



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DATE PRINTED 12/20/2007	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
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<p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.</p> <p style="text-align: center;">VENDOR PREFERENCE CERTIFICATE</p> <p>CERTIFICATION AND APPLICATION* IS HEREBY MADE FOR PREFERENCE IN ACCORDANCE WITH WEST VIRGINIA CODE, 5A-3-37 (DOES NOT APPLY TO CONSTRUCTION CONTRACTS).</p> <p>A. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:</p> <p>() BIDDER IS AN INDIVIDUAL RESIDENT VENDOR AND HAS RESIDED CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR</p> <p>() BIDDER IS A PARTNERSHIP, ASSOCIATION OR CORPORATION RESIDENT VENDOR AND HAS MAINTAINED ITS HEAD-QUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR 80% OF THE OWNERSHIP INTEREST OF BIDDER IS HELD BY ANOTHER INDIVIDUAL, PARTNERSHIP, ASSOCIATION OR CORPORATION RESIDENT VENDOR WHO HAS MAINTAINED ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR</p>						

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<p>() BIDDER IS A CORPORATION NONRESIDENT VENDOR WHICH HAS AN AFFILIATE OR SUBSIDIARY WHICH EMPLOYS A MINIMUM OF ONE HUNDRED STATE RESIDENTS AND WHICH HAS MAINTAINED ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS WITHIN WEST VIRGINIA CONTINUOUSLY FOR THE FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION.</p> <p>B. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:</p> <p>() BIDDER IS A RESIDENT VENDOR WHO CERTIFIES THAT, DURING THE LIFE OF THE CONTRACT, ON AVERAGE AT LEAST 75% OF THE EMPLOYEES WORKING ON THE PROJECT BEING BID ARE RESIDENTS OF WEST VIRGINIA WHO HAVE RESIDED IN THE STATE CONTINUOUSLY FOR THE TWO YEARS IMMEDIATELY PRECEDING SUBMISSION OF THIS BID;</p> <p>OR</p> <p>() BIDDER IS A NONRESIDENT VENDOR EMPLOYING A MINIMUM OF ONE HUNDRED STATE RESIDENTS OR IS A NONRESIDENT VENDOR WITH AN AFFILIATE OR SUBSIDIARY WHICH MAINTAINS ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS WITHIN WEST VIRGINIA EMPLOYING A MINIMUM OF ONE HUNDRED STATE RESIDENTS WHO CERTIFIES THAT, DURING THE LIFE OF THE CONTRACT, ON AVERAGE AT LEAST 75% OF THE EMPLOYEES OR BIDDERS' AFFILIATE'S OR SUBSIDIARY'S EMPLOYEES ARE RESIDENTS OF WEST VIRGINIA WHO HAVE RESIDED IN THE STATE CONTINUOUSLY FOR THE TWO YEARS IMMEDIATELY PRECEDING SUBMISSION OF THIS BID.</p> <p>BIDDER UNDERSTANDS IF THE SECRETARY OF TAX & REVENUE DETERMINES THAT A BIDDER RECEIVING PREFERENCE HAS FAILED TO CONTINUE TO MEET THE REQUIREMENTS FOR SUCH PREFERENCE, THE SECRETARY MAY ORDER THE DIRECTOR OF PURCHASING TO: (A) RESCIND THE CONTRACT OR PURCHASE</p>						

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<p>ORDER ISSUED; OR (B) ASSESS A PENALTY AGAINST SUCH BIDDER IN AN AMOUNT NOT TO EXCEED 5% OF THE BID AMOUNT AND THAT SUCH PENALTY WILL BE PAID TO THE CONTRACTING AGENCY OR DEDUCTED FROM ANY UNPAID BALANCE ON THE CONTRACT OR PURCHASE ORDER.</p> <p>BY SUBMISSION OF THIS CERTIFICATE, BIDDER AGREES TO DISCLOSE ANY REASONABLY REQUESTED INFORMATION TO THE PURCHASING DIVISION AND AUTHORIZES THE DEPARTMENT OF TAX AND REVENUE TO DISCLOSE TO THE DIRECTOR OF PURCHASING APPROPRIATE INFORMATION VERIFYING THAT BIDDER HAS PAID THE REQUIRED BUSINESS TAXES, PROVIDED THAT SUCH INFORMATION DOES NOT CONTAIN THE AMOUNTS OF TAXES PAID NOR ANY OTHER INFORMATION DEEMED BY THE TAX COMMISSIONER TO BE CONFIDENTIAL.</p> <p>UNDER PENALTY OF LAW FOR FALSE SWEARING (WEST VIRGINIA CODE 61-5-3), BIDDER HEREBY CERTIFIES THAT THIS CERTIFICATE IS TRUE AND ACCURATE IN ALL RESPECTS; AND THAT IF A CONTRACT IS ISSUED TO BIDDER AND IF ANYTHING CONTAINED WITHIN THIS CERTIFICATE CHANGES DURING THE TERM OF THE CONTRACT, BIDDER WILL NOTIFY THE PURCHASING DIVISION IN WRITING IMMEDIATELY.</p> <p>BIDDER: -----</p> <p>DATE: -----</p> <p>SIGNED: -----</p> <p>TITLE: -----</p>						

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<p>* CHECK ANY COMBINATION OF PREFERENCE CONSIDERATION(S) IN EITHER "A" OR "B", OR BOTH "A" AND "B" WHICH YOU ARE ENTITLED TO RECEIVE. YOU MAY REQUEST UP TO THE MAXIMUM 5% PREFERENCE FOR BOTH "A" AND "B". (REV. 12/00)</p> <p style="text-align: center;">NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p style="text-align: center;">DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: SLM / FILE 31</p> <p>RFQ. NO.: EBA136</p> <p>BID OPENING DATE: 01/30/2008</p> <p>BID OPENING TIME: 1:30 PM</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY</p>						

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<p>TO CONTACT YOU REGARDING YOUR BID:</p> <p>-----</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):</p> <p>-----</p>						
<p>***** THIS IS THE END OF RFQ EBA136 *****</p>					<p>TOTAL:</p> <hr/>	

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EBA136

West Virginia Educational Broadcasting is requesting quotations for a 4.0 Kilowatt ATSC solid state 8-VSB Digital VHF Channel 10 Television Transmitter System as per the attached specifications.

Documents enclosed.

I. General Requirements

- 1. Manufacturers Requirements
- 2. Transmitter
- 3. Exciter
- 4. R. F. Amplifiers
- 5. R. F. Module Power Supplies
- 6. R. F. Dividers and Combiners
- 7. Transmitter Control System
- 8. Cooling System
- 9. AC Distribution
- 10. Mechanical Description
- 11. Options & Accessories
- 12. Performance specifications
- 13. Physical Dimensions & Weights
- 14. Environmental
- 15. Power Requirements
- 16. Air System Requirements

II. Specifications

- Schedule A: Digital Transmitter
- Schedule B: R. F. System
- Schedule C: Electrical
- Schedule D: Services
- Schedule E: Delivery
- Schedule F: Invoicing

I General Requirements

1. Manufacturers Requirements

- a) The equipment manufacturer shall have been continuously manufacturing high power solid state TV broadcast transmitters for a minimum of 10 years. A complete user's list of high-power ATSC DTV transmitters shall be provided upon request.
- b) The transmitter manufacturer shall have a service department that is manned 24 hours a day, 365 days a year.
- c) The manufacturer shall employ a staff of full-time customer service engineers available for telephone consultation, or on-site service.
- d) The manufacturer shall provide parts and service for a minimum of ten years after the sale of the equipment.
- e) The transmitter manufacturer shall conduct a training seminar for this product at the factory at least twice each year. Customers shall be notified of the dates of these schools.
- f) The transmitter manufacturer shall provide Service Bulletins to inform customers of modifications and improvements to the equipment. These bulletins shall provide instruction book updates when necessary.
- g) To provide transmitter owners with the latest transmitter improvements, the transmitter manufacturer shall have a demonstrated policy of providing up-date kits whenever possible.
- h) The manufacturer shall warrant the transmitter to be free from defects in material and workmanship under normal use and service for a period of five years from the date of shipment. The obligation under all warranties shall be limited to the replacement of defective components and to the shipment of replaced parts to the purchaser FOB factory. Standard published warranties shall apply to any item not identified with the transmitter manufacturers trademark or tradename.
- i) As a demonstration of the manufacturer's commitment to quality, the manufacturer shall have ISO-9001 registration and that registration shall be in good standing.
- j) The transmitter shall be supplied with two sets of technical manuals. These manuals shall include installation instructions, operating instructions, tuning instructions, maintenance instructions and trouble-shooting procedures. The manuals shall also include parts list that includes the part number, circuit designator, description and generic number wherever possible. The manuals shall include wiring diagrams with wire numbers and circuit schematics with component designators and values.

2 Transmitter

- a) The transmitter shall generate high quality signals for the transmission of the ATSC 8-VSB digital television standard in accordance with all applicable FCC regulations and EIA standards, on specified VHF TV channel 10.
- b) The transmitter shall be designed for continuous operation at average power level of 4kW, measured at the output of the manufacturer supplied FCC sharp-tuned mask filter.
- c) The transmitter series shall be documented in compliance with current FCC regulations for the appropriate operating power.
- d) The transmitter shall be of modular construction consisting of discrete functional cabinets. The transmitter system shall be assembled, wired and tested in the manufacturer's plant to minimize

assembly required during installation. For easy identification during maintenance, all transmitter wiring shall have wire numbers at each termination. Interconnection of transmitter cabinets shall be via factory fabricated cables and cable harnesses with factory installed plugs, connectors and terminations.

e) The transmitter shall consist of the following major components:

<u>Qty</u>	<u>Description</u>
(1)	System control cabinet with Graphical User Interface
(1)	Solid state power amplifier cabinet(s)
(1)	RF system, including FCC mask filter, interconnecting RF line, combiner (if needed for multiple PA cabinets), reject loads, and test load

- f) Typical transmitter installation drawings showing equipment locations, dimensions, weights, heat loads, inside transmission line, and AC power requirements shall be supplied.
- g) Sufficient wiring for interconnecting transmitter cabinets per typical installation drawings shall be provided with the transmitter.
- h) The transmitter shall have no frequency tuning controls.
- i) The transmitter shall be tested at the factory before shipment at full rated power, or at the customers stated operating power. Test data shall be recorded and supplied with the transmitter for future reference.
- j) A fully redundant exciter system shall be offered, with the failure of the main exciter automatically initiating a changeover to the standby exciter.
- k) The transmitter efficiency shall be optimized by the use of class AB amplifiers in the final stages.
- l) The transmitter shall be 100% solid state using identical, parallel amplifier modules.
- m) All correctors required for meeting published specifications shall be included in the transmitter. No external correctors shall be required.
- n) The transmitter shall be designed for unattended remote control. Connection to parallel remote control equipment for control, status, and metering shall be provided on standard "D" Type connectors within the transmitter cabinets. Sensors required for providing metering samples for remote control shall be included in the transmitter.
- o) Web-based remote control/monitoring of the transmitter shall be included, using an Ethernet connection.
- p) The parallel remote control circuitry of the transmitter shall be directly compatible with commercially available remote control systems, without requiring additional interface components.
- q) All inputs, RF sample connections and remote control interconnect sockets shall be provided on one conveniently located panel, located in the control cabinet.
- r) To automatically protect transmission line & antenna during antenna icing conditions, the transmitter system shall incorporate a VSWR fold-back function. The VSWR fold-back circuit shall automatically reduce transmitter power output as the system reflected power reaches a user-preset threshold. The transmitter power shall return to normal when the VSWR condition is removed.
- s) For personnel protection and safety, the transmitter shall be designed to meet the safety requirements specified in EN-60215 (IEC-215)

3. DTV Exciter

- a) The exciter shall generate high-quality signals for the transmission of advanced television in accordance with all applicable FCC Regulations, and ATSC Standard A_53 on single specified FCC VHF channel 10.
- b) The DTV exciter shall be designed & manufactured by the transmitter manufacturer. To assist in expedient repairs and short duration air time loss, all spare parts shall be stocked in the USA.
- c) The modulator, up-converter and power supplies shall be contained in a single pullout drawer, providing a fully processed, corrected and modulated on-channel R.F. signal.
- d) The exciter offered shall be entirely solid state and of the latest design and shall use the most modern state-of-the art Digital Signal Processing techniques to assure the highest possible performance and reliability.
- e) Printed circuit boards shall be used wherever practical for maximum uniformity and stability. All I.F. and R.F. signal connections between printed circuit boards shall be via shielded coaxial cables and connectors and not through PC board edge connectors.
- f) The exciter drawer shall be a pullout design, mounted on slide rails for maximum accessibility.
- g) Modulation shall take place at an intermediate frequency (IF) of 10.76MHz.
- h) A front panel color GUI display shall be included for control and display of exciter parameters.
- i) Exciter parameters shall be set by the GUI touch-screen on the front of the exciter.

Digital Circuits:

- j) The input data format shall be a 19.39Mb/s serial bit stream, with embedded clock. Input data level, timing stability and impedance shall comply with the SMPTE-310M standard.
- k) Transport to transmission channel coding shall be accomplished within the exciter. This shall include clock recovery and frame synchronization, data randomizer, Reed-Solomon encoder, data interleaver, Trellis encoder and sync insertion.
- l) Automatic, real-time, digital adaptive correction for linear and non-linear distortions shall be included. The adaptive correction shall operate continuously and seamlessly during normal transmitter operation, without the use of a non-ATSC test or training signal. The RF samples used for the adaptive correction shall be located at the transmitter and RF system outputs, to provide, linearity, group delay and response correction for all RF system components, including the DTV mask filter.

Up-conversion:

- m) Up-conversion of the modulated I.F. signal shall occur in low-level mixers feeding a broadband amplifier providing up to 250mW average R.F. output power.
- n) ALC circuitry shall be provided to maintain constant signal level.

DTV Exciter/Transmitter Monitoring Software:

- o) Software for monitoring the DTV Exciter shall be included. Software displays will show the transmitter's system performance. Displays will include transmitter spectral response, FCC mask compliance, eye diagram, constellation, SNR, EVM, amplitude and phase non-linearity. Magnitude of correction being performed shall be displayed.

- p) Software shall be able to turn automatic pre-correction on and off, or invoke a "hold" state where automatic correction is maintained at its current level.
- q) Software will be able to save measured data and perform automatic data logging of specified conditional events.

4. R.F. Amplifiers

- a) All RF amplifier stages shall be 100% solid-state. No vacuum tubes or tuned cavities shall be utilized in any part of the transmitter.
- b) Modules shall be designed for extremely high MTBF for maximum on-air reliability. Module MTBF shall be over 500,000 hours under normal operating conditions.
- c) The solid-state RF amplifier modules shall be a state of the art design employing the latest FET technology, providing high thermal stability, low noise factor, simple biasing and lower power supply currents, when compared to bipolar designs. To minimize spare parts, only type of FET device (for RF signal amplification) shall be utilized in all amplifier modules.
- d) All solid-state RF amplifier modules shall be capable of being removed or installed during normal on-air operation of the transmitter. It shall not be necessary to reduce RF drive, remove cabinet power, or make any adjustments when replacing modules.
- e) To protect the module RF and DC connectors, electrical power to the RF amplifiers shall be removed during the module pull operation, prior to connector disengagement. After any PA or driver module is re-inserted into the transmitter, it shall not be powered on until it is given manual reset command from the cabinet logic controller.
- f) No more than two types of plug in solid-state RF amplifier modules shall be used in the entire transmitter. One module type shall be used for the low-level driver amplifiers, and one type for the PA modules. Both module types shall be physically similar and utilize identical RF transistor types.
- g) All final PA modules shall be completely interchangeable, with no degradation in performance or output power.
- h) For optimum efficiency and performance, the final power amplifier modules shall operate in a linear class AB mode.
- i) For high on-air availability, parallel power amplifier modules shall be employed in all transmitter PA stages, ensuring a gradual reduction of RF power as PA modules are removed from service.
- j) Multiple PA cabinet transmitters shall have parallel RF drive paths, enabling continued on-air operation, in the event of a driver module failure or removal.
- k) Each solid-state RF module shall employ internal self-protection circuitry and shall shut down in the event of one or more of the following fault conditions occurring:
 - 1. VSWR
 - 2. RF input overdrive
 - 3. Combiner isolation resistor (module combiner)
 - 4. Over/Under voltage
 - 5. Over temperature (over 80 deg C heat sink temp.)
 - 6. DC Switch FET failure
- l) The shut down protection function shall be accomplished via a high-speed electronic switch located within each module. Fuses shall not be used.

- m) As an aid in troubleshooting, module fault diagnostics shall be included within each solid-state module. Front panel LED status indicators shall provide a means to verify normal operation or identify the fault type responsible for the module shut down. The LED indicators shall also provide a means to identify a low RF drive condition.
- n) A module fault status indication shall be displayed on the local control panel and by remote control.
- o) Temperature compensated bias circuitry shall be employed to ensure optimum performance and linearity over a wide range of ambient temperatures. Individual biasing circuitry shall be provided for each device.
- p) Module reset shall be possible either by local or remote control.
- q) As a service to the customer, the transmitter manufacturer shall offer a module repair/exchange program.
- r) The solid-state modules shall be field repairable. The transmitter technical manual shall provide written instructions for FET replacement. A module test fixture shall be available as an option.
- s) The amplifier module gain shall have a tolerance of +/- .5 dB and a phase tolerance of +/- 10 degrees to minimize transmitter combining losses.
- t) The solid-state modules shall be field repairable. The transmitter technical manual shall provide written instructions for FET replacement.

5. RF Module Power Supplies

- a) All internal DC power supplies shall be fully regulated. To ensure stable performance over a wide range of conditions, the output voltage shall be regulated from zero to full rated load current, and for AC line voltage fluctuations of up to +/- 10% from nominal. If regulated power supplies are not employed, the manufacturer shall provide external regulation.
- b) To assure optimum on-air reliability, the transmitter shall contain multiple power supplies for providing DC power for the RF modules. All RF module power supplies shall be mechanically and electrically identical, allowing full interchangeability and reduced spares inventory requirements.
- c) The RF module power supplies shall be designed as compact, roll out assemblies, allowing for fast, easy replacement and good accessibility for servicing. One person shall be able to accomplish power supply installation or removal.
- d) Control electronics for each power supply shall be on a single control board that can be easily removed for servicing from the transmitter front.
- e) For highest reliability, the RF module power supplies shall be a linear, variable conduction angle regulator design.
- f) To ensure high operating efficiency and minimal heat load, the power supplies shall be more than 90% efficient.
- g) Each power supply shall be protected against overload conditions, including the following:
 - 1. Over temperature
 - 2. Over voltage
 - 3. Over current
- h) Power supply overload status shall be provided for local and remote monitoring.

- i) The transmitter and power supplies shall be capable of surviving, without damage, AC line voltage transients meeting the criteria of industry standard test ANSI/IEEE C62.41. Upon request, the equipment manufacturer shall perform such testing during the standard factory transmitter tests.
- j) Main amplifier power supplies shall ramp up to full voltage to reduce stress and this shall be accomplished within 5 seconds from cabinet turn-on.

6. RF Dividers and Combiners

- a) The PA cabinet(s) shall utilize low loss, multi-way, in-phase, ring combiners and dividers to allow the parallel operation of the solid-state PA modules.
- b) The PA module combining system shall be designed to allow for any number of solid-state PA modules to be disabled, or physically removed from the cabinet, without affecting the operation of the other modules. On-air operation, at reduced power, shall be possible for any combination of operating modules remaining in the PA cabinet.
- c) Reject load resistors for the combiners shall be sized to allow continuous on-air operation with any combination of operative and inoperative modules. The cooling system shall ensure maximum heat transfer and compact dimensions and shall be sized to provide adequate cooling of the load resistors under all conditions.

7. Transmitter Control System

- a) Overall control and monitoring functions for the transmitter shall be accomplished via a simple, easy to use control panel, with color Graphical User Interface (GUI), located in the control cabinet.
- b) A remote GUI web interface shall be included with the transmitter. This shall provide remote control, & monitoring for all primary transmitter functions and metering. A customer supplied remote PC equipped with a web browser and internet connection shall be required. No custom software shall be required on the remote PC.
- c) The control system shall incorporate distributed control architecture with a single microprocessor based main controller located in the control cabinet and individual cabinet controllers located one in each PA cabinet.
- d) The individual cabinet controllers must be capable of allowing manual control of each PA cabinet separately from the main controller, allowing on-air operation in an emergency mode, should the main controller be inoperable or require replacement.
- e) The main controller shall incorporate a discrete logic back-up or "life-support" controller, allowing basic transmitter functions to be maintained, even if a failure of the microprocessor controller occurs. The back up control shall not allow unsafe or unstable operation of the transmitter.
- f) The main controller shall be responsible for all system level functions, including: overall cabinet control, remote control interface and VSWR Foldback.
- g) The cabinet controller shall perform the function of control and monitoring of each amplifier cabinet, including: module on/off, module fault, power supply on/off, power supply fault, and air system control and monitoring functions.
- h) Interconnection between the main controller board and the individual cabinet controller boards shall be via pre-wired plug and cable assemblies, supplied with the transmitter.
- i) It shall be possible to manually enable each amplifier cabinet, in the event of a malfunction of the main logic controller or disconnection of the control bus between the main and cabinet logic circuits.

- j) Connection to standard parallel remote control equipment shall require no additional interface components, or transmitter modifications. All remote control connections shall be via standard "D" connectors located at the transmitter control cabinet.
- k) As a minimum, the following metering shall be monitored and be available for display on the transmitter Graphical User Interface:

Average Forward Power	Average Ref. Power
VSWR	Driver Power
Power Supply Voltages	Power Supply Currents
AC Line Voltages	Logic Supply Voltages
Reject Load Power	Exciter power

- l) The control and monitoring systems shall be separated such that the transmitter system shall continue to operate in the event that the monitor system is inoperative or is removed for servicing.
- m) The current status of transmitter fault conditions and interlocks shall be displayed via the front panel display. Faults and interlocks displayed shall include:

Exciter fault	VSWR Fault
Supply fault	VSWR Foldback active
Controller	Air loss
Door interlock	Failsafe interlock
Module fault	AC phase loss
External interlock	

- n) As a diagnostic aid, a summary of active and inactive fault conditions shall be stored and available for view on the transmitter display. At least the most recent 32 faults shall be kept in the fault summary, with date, time and fault description. If the fault summary log is not cleared manually, additional faults beyond the maximum shall cause the earliest fault information to overflow, allowing only the most current faults to be stored.
- o) For all power and VSWR readings, both bar graph and digital readouts shall be displayed. True calculated VSWR shall be provided, ensuring accurate VSWR readings at any forward power level.
- p) Active VSWR Foldback circuitry shall be provided, allowing uninterrupted operation at reduced power if VSWR slowly increases beyond a preset point. As VSWR increases, forward power shall be reduced automatically to maintain a constant level of reflected power. Decreasing VSWR shall cause the power level to increase until the original output power is restored.
- q) Instantaneous VSWR overload protection shall be provided. Any VSWR overload above a pre-set threshold shall cause the RF drive to be removed and then re-applied by ramping it up slowly. If three VSWR overloads occur within 3 seconds, the transmitter shall shut off until manually reset, either by local or remote control.
- r) An Automatic Gain Control circuit shall be included to ensure constant average output power during any changes in RF module power gain such as may occur due to varying ambient temperature conditions. For the purpose of set-up and servicing, the AGC circuit can be bypassed. Output power adjustment shall be accomplished by adjustment of exciter drive levels, without affecting AGC performance. The automatic gain control shall provide a minimum of 1 dB increase in drive power capability.
- s) AC Power Failure - Battery back-up of the control logic memory shall be provided to ensure that the transmitter will return to the mode of operation preceding any long AC power failure of up to at least 4 hours in length. AC power failures of over this time period shall cause the transmitter to remain off until reset manually, by local or remote control.

8. Cooling System

- a) Individual low noise, direct-drive, cooling fans shall be provided for each amplifier cabinet. Room air drawn through filters in the cabinet rear doors shall be directed to the modules and power supplies and exhausted through the top of the cabinet.
- b) To minimize dust being drawn into the cabinet through small gaps, thereby reduce routine maintenance requirements; a positive cabinet air pressure shall exist with respect to room pressure.
- c) To ensure lowest device temperatures and highest MTBF, a parallel path airflow system shall be used to distribute an equal volume of air at the inlet (ambient) temperature to each module. Inlet air shall not be passed over more than one module heatsink before exiting the cabinet.
- d) Removal of any module or combination of modules shall not affect the cooling of the remaining modules, which may be operated indefinitely. Front cover plates or "dummy" modules shall not be required when operating with modules removed. Cooling of the combiners, reject loads and power supplies shall not be affected by module removal.
- e) For the purpose of operator comfort and safety, the cabinet cooling system shall be quiet and efficient. The noise level at 3 feet in front of the center of the transmitter shall not exceed 73dB, employing "A" weighted standards.

9. AC Distribution

- a) To allow safe on-air servicing, each transmitter cabinet shall operate from a separate external AC feed.
- b) Contactors and circuit breakers shall be provided within each cabinet to feed individual subsystems within each cabinet. Fuses shall not be employed as protection devices.
- c) AC phase loss/reversal protection shall be provided. Loss of a phase, or phase reversal, shall be indicated on the transmitter display.
- d) Each AC phase-to-phase voltage shall be measured and displayed on the transmitter GUI.

10. Mechanical Description

- a) Transmitter construction shall consist of an exciter/control cabinet and 1 or more PA cabinets (dependant upon transmitter power). In addition, a harmonic filter and all solid-state modules shall be included with the transmitter. All required power supplies shall be contained within the transmitter.
- b) All components, modules and sub-assemblies within the transmitter shall be easily accessible to ensure reduced maintenance/repair time.
- c) For operator protection and safety, all PA cabinet rear doors shall be interlocked. Opening of each PA cabinet rear door shall remove AC power to that cabinet only and quickly discharge the module power supplies.

11. Options & Accessories

- a) An FCC compliant mask filter shall be provided. It shall be designed for high temperature stability and rated for continuous operation at least 10% above the average transmitter power. (See Schedule 'B', item 8)

- b) Dual exciters with an automatic exciter switcher system shall be available. Space shall be provided in the exciter/control cabinet for the second exciter and switcher. (See Schedule 'A', item 2)
- c) External Precise Frequency Control shall be available, providing a frequency stability of within +/-3 Hz per month.

12. Performance Specifications:

<u>Power Output (Average) 4KW</u>	<i>Measured at output of mask filter.</i>
Frequency Range:	As specified VHF channel 10
System:	ATSC A-53, 8-VSB DTV standard
RF Output:	
Impedance:	50 ohms.
Connector:	1-5/8" EIA, un-flanged
Data Input:	
Data	19.39 Mb/s
Impedance	75 Ohms, unbalanced
Standard	SMPTE 310M
Connector	BNC female, isolated
External Precise Frequency Input:	
Frequency	10 MHz, sinusoidal
Impedance	50 Ohms, unbalanced
Level	0 to +10dBm
Connector	BNC 50 ohm female
RF Load Impedance:	50 ohms, 1.1:1 VSWR over specified TV channel
Signal to Noise (EVM):	27 dB, or better (4% or less); FCC standard parameter
Pilot Frequency Stability:	Less than ± 200 Hz / month <i>Less than ± 3Hz with external PFC.</i>
Stability of Output Power:	$\pm 5\%$, or less
Harmonic Radiation & Spurious:	Meets mask requirements specified in FCC 5 th & 6 th Report & Order.
Sideband Performance:	Compliant with FCC radiation mask, when measured at the output of supplied output mask filter.

13. **Physical Dimensions & Weights**

RF System Mask Filter:

Width	(See Schedule 'B', item 8)
Height	
Depth	
Weight	

14. **Environmental**

Ambient Temp. Range	0 to +50° C (+32 to +122° F) <i>Maximum temperature rating derates linearly 2° C per 1,000 ft (305 meters) above sea level.</i>
Humidity Range	0 to 95% Relative Humidity, non-condensing
Maximum Altitude	7,500 feet (2,286 meters)

15. **Power Requirements**

Input Voltage	PA: 208/220/240 volts, ±10%, 3-phase, 3 or 4-wire, 60Hz
Power consumption (typical including internal cooling fans):	<u>High Band Channel 10</u> 24.1kW

16 **Air System Requirements:**

Inlet Air Openings	Rear doors, with filters
Exhaust Air Openings	Each amplifier cabinet top; adequate to maintain constant transmitter air temperature
Exhaust Temperature	8 to 10 deg C temperature rise above inlet (typical)
Allowable Back Pressure	0.25" of water maximum, at each cabinet exhaust stack
Acoustic Noise	< 73dBA , @ 3 feet in front of center of transmitter ("A" weighting scale)
Air-Flow Requirements (total intake air flow):	4,000 cfm, approximate

II SPECIFICATIONS

Schedule A, VHF High Band ATSC Digital Transmitter, Qty 1

(Item 1) Harris PTCDD10P1-I Platinum Series, or equal 4.0 kW ATSC Air Cooled Solid State 8-VSB Digital Transmitter

- FCC Channel 10
- 4.0 kW Average DTV Power at Output of RF System
- 208/240 VAC, 3 Phase
- RF Output: 1-5/8" EIA Female, 50 Ohms
- MUST BE SUPPLIED WITH ONE OF THE

FOLLOWING RF FILTERS (LISTED SEPERATELY):

- Channel 10:
 - Dielectric: PTCDDP1-2DIEHB, or equal
 - ERI: PTCDDP1-2APPPHB, or equal

CUSTOMER OPERATING SPECIFICATIONS:

Channel: 10
 Frequency Offset: 0 Hz
 Average Digital Output Power: 4 kW
 AC Line Voltage: 208/120 VAC Three Phase Wye
 Altitude: 2960 feet AMSL

TRANSMITTER SUPPLIED WITH:

- (1) Control Cabinet, including:
 - (1) Advanced ATSC Exciter with:
 - User-Friendly 320x240 Color Touch-Screen Interface
 - Extensive Built-In Diagnostics
 - Menu-Driven Calculated Pre-correction for Wave-guide Transmission Line Group Delay Distortions
 - Electrically tested RJ-45 jack & field upgradeable software to ensure future SNMP Capability.

(1) Graphical User Interface with:

- Transmitter control
- Transmitter metering
- Transmitter status monitoring
- Transmitter fault reporting and logging
- Built-in Ethernet interface for network control and monitoring of all transmitter functions

- identical to local control
 - Basic SNMP agent for network management interface
 - Life Support Backup Control System

- (1) Automatic Gain Control Module
- (1) Uninterruptible Power Supply
- (1) Low voltage power supply

(1) Solid-State PA Cabinet, including:

- (1) Basic Cabinet Assembly with Hardware and Pre-wired Interconnecting Cables
- (1) Solid-State Driver Module
- (1) Solid-State Driver/PA Module
- (14) Solid-State Power Amplifier Modules
- (2) 50 Volt Solid-State Regulated Power Supplies
- (1) Direct Drive Cabinet Blower Assembly
- (1) Cabinet Logic Controller Assembly
- (1) 14-Way Power Divider
- (1) 14-Way Power Combiner
- (1) Combiner Reject Load and Heat Pipe Assembly
- (2) Directional RF Couplers
- (1) Thru-line Wattmeter and Element
- (1) Harmonic Filter
- (1) 1-5/8" Directional Coupler Assembly for Power Metering and AGC Sampling
- (1) RF Sample for Test/Monitoring
- (1) Interconnecting RF Line Kit
- (1) Factory Tested at Rated Customer Power
- (1) Installation Kit, Including Miscellaneous Wire, Lugs, Connectors, Plugs, Interconnect Cables, etc.
- (2) Complete Book-bound Transmitter Manuals

(Item 2) Harris HARPTCD100DE, PLATINUM SERIES DUAL EXCITER, or equal
Spare VHF Exciter/Modulator Option,
Includes:

- (1) Advanced ATSC Exciter
- (1) Exciter Switcher Module
- (1) All necessary misc. Cables and Hardware

(Item 3) Agilent HEWEPM-4418B, or equal

The power meter must measure from -70 dBm to +44 dBm at frequencies from 100 kHz to 110 GHz.

Designed for bench and automatic test equipment (ATE) use, the power meter must record up to 200 readings per second with E-series sensors, and provide accurate and repeatable power measurements.

(Item 4) Agilent HEW8482H, Agilent sensor for EPM series 1, or equal.

The thermocouple power sensor shall be designed for use with the EPM series power meters. It shall provide extraordinary accuracy and stability. The power sensor shall give extremely low SWR and be traceable to the U.S. National Institute of Standards and Technology (NIST). A calibration port shall be included with the above power meters for calibration with the power sensor. This calibration must provide trace-ability to NIST and must eliminate the uncertainties due to temperature changes and the variance in making measurements with different meter/sensor combinations.

(Item 5) Harris 9929511368, or equal Dual redundant low voltage power supply option.

Vendor shall provide parallel power supplies for all low voltage circuitry in transmitter control cabinet.

Includes the following items or equivalent:

- (1) Power Supply, Triple Output
- (1) Power Supply, 12V, 15A
- (2) MOV, 275W
- (2) Relay, 12VDC, 4PDT
- (1) Cables. Misc.
- (1) Terminal Block
- (1) Hardware. Misc.

(Item 6) Harris ECDIPLATCD2, or equal

TRANSMITTER ETHERNET INTERFACE FEATURING SNMP NETWORK AGENT AND HTTP WEB MONITORING AND CONTROL for proposed transmitter.

HTTP Level 1 Web Remote Control and monitoring, features:

- Transmitter monitoring and control with standard web browser, including:
- Easy navigation based on functional areas of transmitters
- Common interface design across for all broadcast transmission products
- Email notification of fault conditions
- Fault logging

HTTP Level 2 Web Performance Control and monitoring, features:

- Transmitter system performance monitoring, including:
- Eye diagram
- Constellation plot
- Spectral emissions plot
- Linear distortion plot
- Non-linear distortion plot
- Exciter performance management, including:
- Linear adaptive correction metrics and control
- Non-linear adaptive correction metrics and control
- Versatile plotting and benchmark functions

SNMP Network Agent, featuring:

- Transmitter identification
- Transmitter state status and control
- Transmitter power status and control
- Transmitter fault status

(Item 7) Vendor must supply FIVE YEAR MANUFACTURERS WARRANTY.

Schedule B - RF System, Qty 1

(Item 8) Dielectric PTCDP1-2DIEHB Band-pass Filter, or equal for FCC ATSC Digital Channel 10.

Dielectric DTV or equal, High band VHF, Channels 10,
Constant Impedance Band pass Filter.
For 1 and 2 Cabinet ATSC Transmitters.
Rated up to 8.5 kW DTV Average Power Rating.
1-5/8" EIA Flanged Male Input & Output.

(Item 9) Dielectric PTC10P1LKDIE Line kit, or equal Dielectric Interconnecting Line Kit
Includes:

- (3) 1-5/8" Flanged to Un-flanged adapter
- (1) 20' 1-5/8" Transmission Line
- (5) 1-5/8" Elbow, 90 Degree
- (9) 1-5/8" Coupling Assembly
- (1) 1-5/8" to 3-1/8" Flanged adapter

(Item 10) Harris 9929139028 Installation Kit for VHF Transmitters, or equal
Includes:

- Slotted Channel
- 3/8" Hardware
- Soldering Material
- Hangers

(Item 11) Dielectric PTC10PPLKDIE Patch Panel & Line Kit, or equal
Includes:

- (1) 1-5/8 Directional Coupler
- (6) 1-5/8 Flanged to Un-flanged Adapter
- (1) 1-5/8 Transmission Line
- (5) 1-5/8 Elbow, 90 Degree
- (7) 1-5/8 Coupling Assembly
- (1) 1-5/8 3 Port Patch Panel

(Item 12) Bird 8922 Load Resistor, or equal 5KW 1-5/8" EIA FLANGE
5KW LIQUID LOAD 1 5/8"

Schedule C - Electrical, Qty 1

(Item 13) Control Concepts Islatron CCBC32400208-240 Surge Supressor 208-240 VAC WYE, or equal
Transient Suppressor 208-240 VAC WYE 167kVA total, 400A maximum/leg

Schedule D – Services, Qty 1

(Item 14) INSTALLATION: Services Provided by Vendor

Include expenses in quote if there are any. Such as:

- A. Assistance in pre-installation phases to assure completion of project as scheduled. (INCLUDE SITE SURVEY (if required) and SYSTEM DRAWING)
- B. Installation of equipment to include Vendor supplied transmitter cabinets, power supplies, coax, RF combining and diplexing system up to and including output patch panel or gas barrier within 12' of output patch.
- C. Checkout, final tuning and testing of the complete transmitter system
- D. Proof of Performance measurements and Report consisting of the original and four copies. Performance data for the transmitter is measured from the transmitter input into the station load. Vendor will provide test equipment required. Transmitter performance must meet or exceed FCC requirements for ATSC Digital Transmitters.
- E. Suitable positioning equipment (dollies, cranes, etc.) necessary to off load and assist installation personnel in the final positioning of the equipment.

INSTALLATION: CUSTOMER RESPONSIBILITIES

- A. Suitable building with appropriate modifications, openings, air system, ground system, and fencing as required to achieve a properly installed and secured site for the transmitter.
- B. Securing of necessary permits, variances, and approvals; compliance with all applicable codes, ordinances, and adherence to relevant professional and/or trade union regulations.
- C. Electrical systems, including the supply and installation of: AC mains, distribution panels and wiring, disconnect boxes, over current protectors, surge eliminators, automatic voltage regulators, control wiring conduits and raceways (including wire pulling and termination). (Vendor to hook up control wire.)
- D.. A fully qualified and authorized station representative to work with Vendor on-site representatives at all times.
- E. The installation will commence when all necessary equipment is delivered to the site. Prior to the installation commencement, building construction / modifications should be substantially complete with adequate lighting, heating / cooling, and telephone communications. Site shall be unencumbered by tradesmen or their materials. Vendor further assumes the building(s) to be an asbestos free environment(s) and accessible by standard (2 wheel drive) motor conveyance.

(Item 15) TRAINING DIGITAL TRANSMITTER TRAINING

1. The Vendor shall provide a 5-day training course for three persons held at Vendors headquarters. The course shall cover installation, day-to-day operation, theory of operation and maintenance of the DTV solid state VHF transmitter and exciter. Emphasis shall be on: Operations, adjustments and diagnostics, and a thorough treatment of the RF drive system consisting of splitters, combiners and solid-state power modules.
2. Attendees will be responsible for all transportation, food, lodging and other expenses incurred while traveling to/from and during the training class.
3. Classes shall be available from 8:30 AM to 12:00 noon and 1:30 PM to 4:30 PM Monday through Friday except for legal/company holidays.

Schedule E – Delivery, Qty 1

Vendor is responsible for delivery to, and off-loading transmitter and other large items at the WSWP transmitter site. At least 24 hours prior to delivery WSWP personnel must be notified via phone or email. Phone: (304) 254-7867, Email: channah@wvpubcast.org
WSWP transmitter site address is:

WSWP Transmitter Site
Route 41/12
Layland, WV 25864

UPS or FedEx deliverable items should be delivered to the WSWP studio location:

WV Public Broadcasting (WSWP)
124 Industrial Park Road
Beaver, WV 25813

Schedule F – Invoicing

After project is completed, invoice shall be sent to:

West Virginia Educational Broadcasting
Attention: Steve Chapman, Purchasing Administrator
600 Capitol Street
Charleston, WV 25301

**Request For Quotations EBA136
West Virginia Educational Broadcasting, Beckley WV
4.0 Kilowatt ATSC VHF Channel 10 Digital Television Transmitter
Quotations Page**

Schedule A, Digital Transmitter, Qty 1 Sub Total _____

Schedule B, RF System, Qty 1 Sub Total _____

Schedule C, Electrical, Qty 1 Sub Total _____

Schedule D, Services, Sub Total _____

Schedule, E, Delivery, Sub Total _____

TOTAL, all schedules _____

STATE OF WEST VIRGINIA
Purchasing Division

025

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

LICENSING: Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY: The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit www.state.wv.us/admin/purchase/privacy for the Notice of Agency Confidentiality Policies.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and are in compliance with the requirements as stated.

Vendor's Name: _____

Authorized Signature: _____ Date: _____