



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **65942** | Service: **DTV** | Call **WMPT** | Channel: **21 (UHF)** |
ID: | Sign: |
File **0000027913**
Number:
FRN: **0003857380** | Date **05/04**
Submitted: **/2018**

Applicant Information

Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|---|---|-----------------------------|--------------------|-------------------|
| MARYLAND PUBLIC BROADCASTING COMMISSION Doing Business As: MARYLAND PUBLIC BROADCASTING COMMISSION | Larry D. Unger, President & CEO 11767 OWINGS MILLS BOULEVARD OWINGS MILLS, MD 21117 United States | +1 (410) 356- 5600 | lunger@mpt. org | Government Entity |

Reimbursement Contact Name and Information

| Applicant | Address | Phone | Email |
|----------------|---------|-------|-------|
| [Confidential] | | | |

Preparer Contact Information

Preparer Contact Name and Information

| Applicant | Address | Phone | Email |
|---|--|-----------------------|--------------------------------|
| Joseph L. Snelson , Jr . <i>Technical Consultant</i> <i>Meintel, Sgrignoli & Wallace</i> | 1282 Smallwood Drive, Suite 372 Waldorf, MD 20603 United States | +1 (303) 344- 8037 | joe. snelson@mswdtv. com |

**Broadcaster
Information
and
Transition
Plan**

| Question | Response |
|--|--|
| Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information. | No |
| Briefly describe transition plan | Current transmission system consists of a main/aux transmitter feeding a transmission line connected to an antenna. An interim antenna and line will be needed as the main antenna must be removed and replaced. See attached narrative. |

Transmitters

| Section | Question | Response |
|------------------------------|---|----------|
| Transmitter Related Expenses | Do you have transmitter related expenses? | Yes |

**Primary
Transmitter**

Existing Transmitter Information

| Section | Question | Response |
|---|--|--------------------------|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | CCT-U- DCX2 |
| | Year | 1999 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Two |
| | Power Capacity | 40.0 kW |

**Primary
Transmitter**

New Transmitter Costs

| Section | Question | Response |
|-----------------|---|--|
| New Transmitter | Use | Primary (Main) |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Manufacturer | |
| | Model | HPTV-PRLX-U48 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 75 kW |
| | Justification for New Transmitter | See previous submissions regarding upgrade from IOT to solid state. This increase of power is part a multi-station agreement provided to the FCC to accommodate moving WETA to channel 31. |

**Primary
Transmitter**

Other Transmitter Costs

| Section | Question | Response |
|--------------------|---------------------------------------|----------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | No |
| | Transformer (480V) | No |
| | Power | N/A |
| | | |

| | | |
|--|---|--|
| | Rigid Conduit and Wiring | No |
| | Size | N/A |
| | Length | N/A |
| | Other Electrical Service | Yes |
| | Description | Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Type | N/A |
| | Size | N/A |
| | Other Size | N/A |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No |
| | Size | N/A |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | N/A |
| | Is a channel 14 Mask Filer needed? | N/A |
| | Is additional field engineering time needed? | N/A |
| | Number of Days | N/A |

**Primary
Transmitter**

Other Transmitter Cost Not Listed

| Name | Description |
|------|-------------|
|------|-------------|

| | |
|---------------------------------|--|
| Coolant | The coolant used for the transmitter heat exchanger is not included in the transmitter price |
| Rigid Coax Line | Rigid interconnection coax lines from transmitter to filter to antenna switch. |
| 8-Pole MAsk Filter | A more rigid mask filter to protect adjacent land mobile stations on Ch. 20 in Philadelphia. |
| Remote Control Interface | License required to interface transmitter into current remote control system |
| CIF Mask Filter | Constant Impedance mask Filter. Current mask filter is a CIF. |
| Site Design and Survey | Incorporates all aspects of the transmitter room design, including power distribution requirements, equipment placement, RF system layout, plumbing, and remote control. |

Antennas

| Section | Question | Response |
|--------------------------|---------------------------------------|----------|
| Antenna Related Expenses | Do you have antenna related expenses? | Yes |

Primary Antenna

Existing Antenna Information

| Section | Question | Response |
|---|--|--------------------|
| Existing Antenna Description | Type of change | Purchase New |
| | Antenna Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | No |
| | Is the existing antenna directional? | Yes |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | No |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Top Mount |
| | Antenna position in stack | Top |
| | Polarization | Horizontal |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels | N/A |
| | Design power capacity in use | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 516.0 kW |
| | | |

| | |
|--------------|--------------------|
| Manufacturer | |
| Model | TFU-24- GTH-R04 |
| Year | 2001 |

Primary Antenna

New Antenna Costs

| Section | Question | Response |
|---------------------------------------|--|-----------------------|
| New Antenna Description | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna Manufacturer and Types | Class | Full Power |
| | Mounting | Top Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Elliptical |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels/Bays | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Design power capacity in use | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 1000.0 kW |
| | Manufacturer | |
| | Model | TFU-20GTH /VP-R O4 |
| | | |

| | |
|-------------------------------|--|
| Year | 2018 |
| Justification for New Antenna | Current antenna tuned for channel 42 and cannot be retuned. Applicant is proposing to replace with similar make and model tuned to channel 21 with elliptical polarization. part a multi-station agreement provided to the FCC to accommodate moving WETA. |

Primary Antenna

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|---|----------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | No |
| | Type | |
| | Number of channels supported | N/A |
| | Frequencies of channels supported | N/A |
| | Frequency | N/A |
| | Do you need a combiner output splitter /switcher for dual feed lines? | N/A |
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | Yes |
| | Broadband or Single Channel? | Single Channel |
| | | |

| | | |
|---------------------------------|---|---------------------------|
| | Feed Line Size | 6 1/8 inches inches |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for a high power antenna? | No |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No |
| Sweep Test | Do you require the sweep testing of transmission line and antenna? | Yes |

Primary Antenna

Other Antenna Cost Not Listed

| Name | Description |
|----------------------------------|--|
| Wedding Cake Adaptor | Joins antenna to mounting pole |
| Mounting Pole | 62.7 ft. mounting pole to bring Center of Radiation to current height. |
| RF Feed Though Components | Elbows and cut line segments to feed antenna to tower top plate |

**Interim
Antenna**

New Antenna Costs

| Section | Question | Response |
|--|--|----------------------------|
| New Antenna Description | Use | Interim |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Type | Broadband Panel |
| | Number of Stations Supported | 1 |
| | Number of Panels/Bays | 32 |
| | Lower Limit | 470.00 MHz |
| | Upper Limit | 698.00 MHz |
| | Design power capacity in use | 50.0 % |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 516.0 kW |
| | Manufacturer | |
| | Model | TUA-O4-8 /32H-1-R SM |
| | | |

| | | |
|--|-------------------------------|--|
| | Year | 2018 |
| | Justification for New Antenna | See attached narrative regarding Interim facility. |

**Interim
Antenna**

Other Antenna Costs

| Section | Question | Response |
|---------------------------------|---|--------------|
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | Yes |
| | Broadband or Single Channel? | B |
| | Feed Line Size | 6 1/8 inches |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for an antenna? | Yes |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | Yes |
| Sweep Test | Do you require the sweep testing of transmission line and antenna? | Yes |

**Interim
Antenna**

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

| Section | Question | Response |
|---------------------------------------|---|----------|
| Transmission Line Related Expenses | Do you have transmission line related expenses? | Yes |

Primary
Transmission Line

Existing Transmission Line

| Section | Question | Response |
|---|--|------------------|
| Existing Transmission Line Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing transmission line shared with another station or stations? | No |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | |
| | Type | Rigid |
| | Diameter | 6 1/8 inches |
| | Other Diameter | N/A |
| | Segment Length | 19 1/2 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 935 feet per run |

Primary
Transmission Line

New Transmission Line

| Section | Question | Response |
|------------------------------------|---|---|
| New Transmission Line Costs | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Type | Rigid |
| | Diameter | 7 3/16 inches |
| | Other Diameter | N/A |
| | Segment Length | 19 1/2 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 935 feet per run |
| | Justification for New Transmission Line | Current line will be used for the interim facility, This line will be used for the repack facility on channel 21. This is part of an agreement provided to the FCC to move WMPT to Ch. 21 to accommodate moving WETA to channel 31. |

| Primary Transmission Line | Other Transmission Line Expenses Not Listed |
|---------------------------|---|
| Information not provided. | |

Tower Equipment And Rigging Costs

| Section | Question | Response |
|--|---|----------|
| Tower Equipment or Rigging Costs Changes | Do you have tower equipment or rigging costs changes? | Yes |

Primary Tower

Existing Tower

| Section | Question | Response |
|---|---|-------------------|
| Existing Tower Description | Type of change | Modify Existing |
| | Tower Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Is this tower consider Complex? | No |
| | Is this tower currently shared with any other stations? | No |
| | One or more FM, AM or TV radio broadcaster(s) | N/A |
| | Others Types of Users | N/A |
| | Is tower documented for structural analysis? | Yes |
| | Is tower compliant with Rev G? | Yes |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1225569 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 39° 00' 36.7" N- |
| | Longitude (NAD83) | 076° 36' 31.8" W- |
| | Overall Structure Height | 902.88 feet |
| | Support Structure Height | 786.08 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 146.00 feet |

| | | |
|--|------------------|--|
| | Structure Type | TOWER - Free Standing or Guyed Structure |
| | Tower Owner | Maryland Public Broadcasting Commission |
| | Date Constructed | 04/01/2003 |

Primary Tower

Tower Modification Costs

| Section | Question | Response |
|----------------------|--|-----------------------------------|
| Engineering Study | Please what type of engineering study is required, if any: | Study needed for documented tower |
| Tower Reinforcements | Please select whether tower reinforcements are needed: | No reinforcements needed |

Primary Tower

Tower Rigging Costs

| Section | Question | Response |
|------------------------------|-----------------------------------|----------|
| Tower Rigging Costs | Complex Tower | N/A |
| Helicopter Services Required | Are helicopter services required? | No |

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

**Outside
Professional**

| Section | Question | Response |
|---|--|---|
| Services Costs Outside Project Management Services | Do you require outside project management services? | Yes |
| | Number of Hours | 400 |
| | Explanation | Applicant has limited internal resources to oversee installing and commissioning this repack project. It will rely on outside services to manage all work required. |
| Outside RF consulting Engineering Services | Perform engineering study for new channel assignment and antenna development | Yes |
| | Prepare engineering section of Form FCC Construction Permit Application | Yes |
| | For Auxiliary Facility | No |
| | For Main Facility | Yes |
| | Prepare engineering section of Form FCC License to Cover Application | Yes |
| | For Auxiliary Facility | No |
| | For Main Facility | Yes |
| | Prepare request for Special Temporary Authority | Yes |
| | Quantity | 1 |
| | Do you have Distributed Transmission System engineering services? | N/A |
| | Critical Facility | N/A |
| | Terrain-Shielded Facility | N/A |
| Attorney and Other Outside Consulting Services | Prepare and file Form FCC Construction Permit Application | Yes |
| | | |

| | | |
|--------------------------------------|--|-----|
| | For Auxiliary Facility | No |
| | For Main Facility | Yes |
| | Prepare and file Form FCC License to Cover Application | Yes |
| | For Auxiliary Facility | No |
| | For Main Facility | Yes |
| | Prepare request for Special Temporary Authority | Yes |
| | Quantity | 1 |
| | NEPA Section 106 environmental review | No |
| | Environmental Assessment | No |
| | ASR Modification | No |
| | FAA Consultation (including preparation of FAA Form 7460) | No |
| | Negotiation of Lease and other Matter for Shared Locations | Yes |
| | Prepare or Review FCC Form 399 for Reimbursement | Yes |
| | Address transition timing and coordination issues w/ other stations and wireless providers | No |
| RF Field Engineering Services | Comprehensive coverage verification via field study | No |
| | RF exposure measurements | No |
| | Additional Field Engineering Service | No |
| | Number of Days | N/A |
| | Justification | N/A |

Outside

Professional

Other Professional Services Expenses Not Listed

Services Costs

Name

Description

Progress Reporting

Prepare and file 10 required progress reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC.

Other Expenses

| Section | Question | Response |
|-------------------------------------|--|----------|
| AM Pattern Disturbance | Is an Impact Study needed? | No |
| | Is Remediation needed? | No |
| Facility Expenses | Name | N/A |
| | Other Distributed Transmission System Expenses Not listed | N/A |
| | Name | N/A |
| | Is Notification of a Medical Facility required as a result of DTV broadcasting? | Yes |
| Permit and Filing Costs | Local Zoning | No |
| | Non-zoning permits | No |
| | BLM or NFS Coordination | No |
| | FCC Construction Permit Minor Change | No |
| | FCC License to Cover Application | No |
| | FCC Special Temporary Authority Application | No |
| Other Miscellaneous Expenses | Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)? | Yes |
| | Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs? | Yes |
| | Does this relocation require Equipment Storage? | Yes |
| | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change? | No |
| | Does this relocation require MVPD Notification of a Channel Change? | Yes |

| | |
|-----------------------|----------------------------------|
| Other Expenses | Other Expenses Not Listed |
| | Information not provided. |

Cost Information

Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|-----------------------------------|-----------------------------|----------------|--|----------------|---------------------------|
| Primary Transmitter HPTV-PRLX-U48 | \$2,126,470.00 | \$2,133,045.00 | | \$1,019,695.00 | |
| Site Design and Survey | <i>\$15,300.00</i> | \$15,300.00 | Incorporates all aspects of the transmitter room design, including power distribution requirements, equipment placement, RF system layout, plumbing, and remote control. | \$0.00 | N/A |
| CIF Mask Filter | <i>\$40,690.00</i> | \$40,690.00 | Constant Impedance mask Filter. Current mask filter is a CIF. | N/A | N/A |
| Remote Control Interface | <i>\$2,940.00</i> | \$2,940.00 | License required to interface transmitter into current remote control system. | N/A | N/A |
| 8-Pole MAsk Filter | <i>\$15,000.00</i> | \$15,000.00 | A more rigid mask filter to protect adjacent land mobile stations on Ch. 20 in Philadelphia. | N/A | N/A |

| | | | | | |
|---|--------------------|----------------|---|----------------|-----|
| UHF - Liquid Cooled Solid State Transmitter 68.5 - 75 kW | \$1,999,000.00 | \$2,005,575.00 | See attached quote. An increase of power is part a multi-station agreement provided to the FCC to accommodate moving WETA to channel 31. | \$1,019,695.00 | N/A |
| Other Electrical Service: Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. | \$42,600.00 | \$42,600.00 | Electrical contractor to connect transmitter into existing electrical panel. Includes material and labor for three transmitter cabinets. Attached quote is for each cabinet. | N/A | N/A |
| Coolant | \$3,000.00 | \$3,000.00 | The coolant used for the transmitter heat exchanger is not included in the transmitter price. Cost reflects what is need for two transmitter cabinets. | N/A | N/A |

| | | | | | |
|------------------------------|-------------------|----------------|--|----------------|-----|
| Rigid Coax Line | \$7,940.00 | \$7,940.00 | Rigid interconnection coax lines from transmitter to filter to antenna switch. NOTE: The full length will not be used. These will be cut to desired length for interconnection purposes inside building. | N/A | N/A |
| Sub-total | \$2,126,470.00 | \$2,133,045.00 | N/A | \$1,019,695.00 | N/A |
| Total for all systems | \$3,584,041.00 | \$3,565,627.80 | N/A | \$1,278,090.94 | N/A |

Components

| Actual Information | |
|--|---|
| Description | File Name |
| Site Design and Survey | <p>Component Description: Site Survey expense for all 6 locations.</p> <p>Amount: N/A</p> |
| CIF Mask Filter | Information not provided. |
| Remote Control Interface | Information not provided. |
| 8-Pole MASK Filter | Information not provided. |
| UHF - Liquid Cooled Solid State Transmitter 68.5 - 75 kW | <p>Component Description: System WMPT PRLX u48 D21 Line 1 of invoice.</p> <p>Amount: \$1,019,695.00</p> |

| | |
|--|---------------------------|
| Other Electrical Service: Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. | Information not provided. |
| Coolant | Information not provided. |
| Rigid Coax Line | Information not provided. |

Cost Information

Antennas

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|----------------|--|--------------|---------------------------|
| Interim Antenna TUA-O4-8 /32H-1-R SM | \$271,740.00 | \$266,348.00 | | \$116,825.85 | |
| UHF – Broadband Panel, Side Mount Auxiliary /Interim, 516 horizontally polarized | <i>\$222,900.00</i> | \$222,900.00 | See attached narrative regarding Interim facility. | \$100,305.00 | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | N/A | N/A |
| Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed) | \$13,700.00 | \$10,298.00 | N/A | \$4,634.10 | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost) | \$23,150.00 | \$21,750.00 | N/A | \$10,933.65 | N/A |

| | | | | | |
|--|---------------------|---------------------|---|-------------------|-----|
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost) | \$5,260.00 | \$5,000.00 | N/A | \$953.10 | N/A |
| Primary Antenna TFU-20GTH /VP-R 04 | \$469,981.00 | \$394,119.00 | | \$5,760.00 | |
| UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized | \$289,500.00 | \$213,885.00 | N/A | N/A | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | \$5,760.00 | N/A |
| Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed) | \$12,300.00 | \$12,383.00 | See attached revised quote. | N/A | N/A |
| Mounting Pole | \$122,215.00 | \$122,215.00 | Mounting pole to bring Center of Radiation to current height. | N/A | N/A |

| | | | | | |
|----------------------------------|--------------------|----------------|---|----------------|-----|
| Wedding Cake Adaptor | \$18,330.00 | \$18,330.00 | Joins antenna to mounting pole | N/A | N/A |
| RF Feed Though Components | \$20,906.00 | \$20,906.00 | Elbows and cut line segments to feed antenna to tower top plate | N/A | N/A |
| Sub-total | \$741,721.00 | \$660,467.00 | N/A | \$122,585.85 | N/A |
| Total for all systems | \$3,584,041.00 | \$3,565,627.80 | N/A | \$1,278,090.94 | N/A |

Components

| Actual Information | |
|---|---|
| Description | File Name |
| UHF – Broadband Panel, Side Mount Auxiliary/Interim, 516 horizontally polarized | <p>Component Description: UHF Broadband panel 45% with order 45% prior to shipping 10% net 30</p> <p>Amount: \$100,305.00</p> |
| Sweep test of existing antenna | Information not provided. |
| Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed) | <p>Component Description: complex broadband antenna input 45% with order 45% prior to shipping 10% net 30</p> <p>Amount: \$4,634.10</p> |

| | | | | | | | | | | | | | |
|---|--|-------------------------------|---|----------------|------------|-------------------------------|--|----------------|----------|-------------------------------|--|----------------|----------|
| <p>Side mount brackets for high power antennas (if not included in antenna base cost)</p> | <table> <tr> <td data-bbox="722 174 1029 208">Component Description:</td><td data-bbox="1161 174 1377 365">side mount brackets 45% with order 45% prior to shipping 10% Net 30</td></tr> <tr> <td data-bbox="722 376 831 409">Amount:</td><td data-bbox="1161 376 1281 409">\$9,787.50</td></tr> <tr> <td data-bbox="722 517 1029 551">Component Description:</td><td data-bbox="1161 517 1369 667">t/l 6-75 e/a length 15'to 20' fixed FLG 1 end/swivel flg 1 end</td></tr> <tr> <td data-bbox="722 678 831 712">Amount:</td><td data-bbox="1161 678 1262 712">\$773.55</td></tr> <tr> <td data-bbox="722 819 1029 853">Component Description:</td><td data-bbox="1161 819 1377 1081">6-75 pressure cap, includes gague, allows antenna to be capped and pressurized after installed on tower.</td></tr> <tr> <td data-bbox="722 1093 831 1126">Amount:</td><td data-bbox="1161 1093 1262 1126">\$372.60</td></tr> </table> | Component Description: | side mount brackets 45% with order 45% prior to shipping 10% Net 30 | Amount: | \$9,787.50 | Component Description: | t/l 6-75 e/a length 15'to 20' fixed FLG 1 end/swivel flg 1 end | Amount: | \$773.55 | Component Description: | 6-75 pressure cap, includes gague, allows antenna to be capped and pressurized after installed on tower. | Amount: | \$372.60 |
| Component Description: | side mount brackets 45% with order 45% prior to shipping 10% Net 30 | | | | | | | | | | | | |
| Amount: | \$9,787.50 | | | | | | | | | | | | |
| Component Description: | t/l 6-75 e/a length 15'to 20' fixed FLG 1 end/swivel flg 1 end | | | | | | | | | | | | |
| Amount: | \$773.55 | | | | | | | | | | | | |
| Component Description: | 6-75 pressure cap, includes gague, allows antenna to be capped and pressurized after installed on tower. | | | | | | | | | | | | |
| Amount: | \$372.60 | | | | | | | | | | | | |
| <p>Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)</p> | <table> <tr> <td data-bbox="722 1267 1029 1301">Component Description:</td><td data-bbox="1161 1267 1334 1301">trans test 6-75</td></tr> <tr> <td data-bbox="722 1312 831 1346">Amount:</td><td data-bbox="1161 1312 1262 1346">\$953.10</td></tr> </table> | Component Description: | trans test 6-75 | Amount: | \$953.10 | | | | | | | | |
| Component Description: | trans test 6-75 | | | | | | | | | | | | |
| Amount: | \$953.10 | | | | | | | | | | | | |
| <p>UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized</p> | <p>Information not provided.</p> | | | | | | | | | | | | |

| | |
|--|---|
| Sweep test of existing antenna | <div> <div> Component Description: </div> <div> repack sweep includes 1 on site engineer for one day ,travel expenses and report </div> </div> <div> Amount: </div> <div> \$2,880.00 </div> <div> Component Description: </div> <div> repack sweep on site field engineer 45% with order 45% prior to shipping 10% net 30 </div> <div> Amount: </div> <div> \$2,880.00 </div> |
| Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed) | Information not provided. |
| Mounting Pole | Information not provided. |
| Wedding Cake Adaptor | Information not provided. |
| RF Feed Though Components | Information not provided. |

Cost
Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|----------------|------------------------------|----------------|---------------------------|
| Primary Transmission Line | \$271,150.00 | \$179,550.80 | | \$80,669.59 | |
| Rigid Transmission Line - copper, 7 3 /16" | \$271,150.00 | \$179,550.80 | N/A | \$80,669.59 | N/A |
| Sub-total | \$271,150.00 | \$179,550.80 | N/A | \$80,669.59 | N/A |
| Total for all systems | \$3,584,041.00 | \$3,565,627.80 | N/A | \$1,278,090.94 | N/A |

Components

| Actual Information Description | File Name |
|--------------------------------|-----------|
|--------------------------------|-----------|

Rigid Transmission Line -
copper, 7 3/16"

Component Description:

Line copper 7 3/16
45% upon
ordering 45% prior
to shipment
Balance Net 30

Amount:

\$77,780.59

Component Description:

Rigid
Transmission line
copper 45% upon
ordering 45% prior
to shipment 10%
net 30

Amount:

\$877.50

Component Description:

rigid transmission
line copper tlscr's
45% upon
ordering 45% prior
to shipping 10%
net 30

Amount:

\$2,011.50

Cost
Information

Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|----------------|------------------------------|----------------|---------------------------|
| Primary Tower TOWER | \$223,100.00 | \$379,755.00 | | \$5,000.00 | |
| Structural engineering tower load study for well documented tower | \$12,600.00 | \$7,000.00 | N/A | \$5,000.00 | N/A |
| Tall Tower (greater than 500') | \$210,500.00 | \$372,755.00 | See attached quote. | N/A | N/A |
| Sub-total | \$223,100.00 | \$379,755.00 | N/A | \$5,000.00 | N/A |
| Total for all systems | \$3,584,041.00 | \$3,565,627.80 | N/A | \$1,278,090.94 | N/A |

Components

| Actual Information | |
|---|--------------------------------|
| Description | File Name |
| Structural engineering tower load study for well documented tower | Component Description: |
| | Structural engineering |
| | Amount: |
| | \$2,500.00 |
| | Component Description: |
| | Structural analysis Annapolis. |
| | Amount: |
| | \$2,500.00 |
| Tall Tower (greater than 500') | Information not provided. |

Cost Information

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|---------------------|--|-----------------|---------------------------|
| Outside Professional Services | \$130,490.00 | \$126,250.00 | | \$348.00 | |
| Attorney Fees - Negotiation of lease and other matters for shared locations | \$4,210.00 | \$5,000.00 | Fees related to multi-party resolution agreement with Maryland Public TV, WETA and HME Equity Fund II, LLC. Involved several stations moving channels to accommodate WETA moving from ch 14 to 31. | \$348.00 | N/A |
| Progress Reporting | <i>\$35,000.00</i> | \$35,000.00 | Prepare and file 10 required progress reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC. | N/A | N/A |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | \$3,680.00 | \$3,500.00 | N/A | N/A | N/A |

| | | | | | |
|---|------------|------------|-----|-----|-----|
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application | \$2,365.00 | \$2,250.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00 | \$5,000.00 | N/A | N/A | N/A |
| Prepare request for Special Temporary Authorization | \$2,050.00 | \$1,500.00 | N/A | N/A | N/A |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | \$1,580.00 | \$1,500.00 | N/A | N/A | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00 | \$3,000.00 | N/A | N/A | N/A |
| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$7,000.00 | N/A | N/A | N/A |

| | | | | | |
|---|----------------|----------------|-----|----------------|-----|
| Prepare and or review reimbursement form | \$2,630.00 | \$2,500.00 | N/A | N/A | N/A |
| Project management of the transition | \$63,200.00 | \$60,000.00 | N/A | N/A | N/A |
| Sub-total | \$130,490.00 | \$126,250.00 | N/A | \$348.00 | N/A |
| Total for all systems | \$3,584,041.00 | \$3,565,627.80 | N/A | \$1,278,090.94 | N/A |

Components

| Actual Information | |
|---|--|
| Description | File Name |
| Attorney Fees - Negotiation of lease and other matters for shared locations | <p>Component Description: Page 5 of invoice. Legal fees for repacking filing. This charge is for only the Annapolis WMPT location.</p> <p>Amount: \$348.00</p> |
| Progress Reporting | Information not provided. |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | Information not provided. |
| Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application | Information not provided. |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | Information not provided. |
| Prepare request for Special Temporary Authorization | Information not provided. |

| | |
|--|---------------------------|
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | Information not provided. |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | Information not provided. |
| Perform engineering study for new channel assignment and antenna development | Information not provided. |
| Prepare and or review reimbursement form | Information not provided. |
| Project management of the transition | Information not provided. |

Cost Information

Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|--------------------|--|--------------------|--|
| Other Expenses | \$91,110.00 | \$86,560.00 | | \$49,792.50 | |
| Equipment Storage | <i>\$9,840.00</i> | \$9,840.00 | Station may receive antenna and transmission line prior to tower crew availability. No on-site storage is available. Obtained estimate from manufacturer for 60 days of storage. | N/A | N/A |
| Equipment Delivery and Handling Charges | <i>\$27,575.00</i> | \$27,575.00 | See attached transmitter quote. Estimating \$10,000 for two antennas and mounting pole. | \$29,220.00 | Line items did not include the proof and installation. |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$41,145.00</i> | \$41,145.00 | See transmitter quote for equipment removal from building. | \$20,572.50 | N/A |

| | | | | | |
|--|-------------------|----------------|--|----------------|-----|
| MVPD Notification of Channel Change | \$1,000.00 | \$1,000.00 | Notification will need to be made to MVPD's as required. Applicant to explore using an outside firm to determine which facilities will need to be notified and send the appropriate notification letters. | N/A | N/A |
| DTV Medical Facility Notification | \$11,550.00 | \$7,000.00 | N/A | N/A | N/A |
| Sub-total | \$91,110.00 | \$86,560.00 | N/A | \$49,792.50 | N/A |
| Total for all systems | \$3,584,041.00 | \$3,565,627.80 | N/A | \$1,278,090.94 | N/A |

Components

| Actual Information | |
|--------------------|---------------------------|
| Description | File Name |
| Equipment Storage | Information not provided. |

| | |
|--|--|
| Equipment Delivery and Handling Charges | <p>Component Description: 50% deposit on Installation, 45% due upon installation, 5% due upon proof. Line 3 of invoice</p> <p>Amount: \$13,882.50</p> |
| | <p>Component Description: 50% for shipping, Offloading, and placement. 45% due upon installation, 5% due upon proof Invoice line 2.</p> <p>Amount: \$8,787.50</p> |
| | <p>Component Description: 50% deposit on check out and proof parallax. 45% due upon installation, 5% due upon proof. Line 4 on invoice.</p> <p>Amount: \$6,550.00</p> |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <p>Component Description: 50% deposit for removal and disposal of existing transmitter. 45% due with installation/5% due upon proof Line 5 on invoice</p> <p>Amount: \$20,572.50</p> |
| MVPD Notification of Channel Change | Information not provided. |
| DTV Medical Facility Notification | Information not provided. |

**Cost
Information**

Grand Total

| | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
|-----------------------|--------------------------------|----------------|----------------|
| Total for all systems | \$3,584,041.00 | \$3,565,627.80 | \$1,278,090.94 |

Reimbursement Status

| Question | Response |
|--|----------|
| The facility has ceased operating on its pre-auction channel. | No |
| Construction of final facilities or all necessary modifications are complete. | No |
| All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator. | No |

| Certification | Section | Question | Response |
|---------------|---|---|----------|
| | Submission of Estimated Expenses Statements | <p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p> | |
| | | <ol style="list-style-type: none"> 1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. | |

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

| | |
|---|---|
| <p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p> | |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Holly Davenport <i>Fiscal accounts clerk</i></p> <p>05/04/2018</p> |

| Certification | Section | Question | Response |
|---------------|--|--|----------|
| | Submission of Actual Cost Documentation Statements | WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733). | |
| | | <ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. | |

4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

| | |
|--|---|
| <p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p> | |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Holly Davenport <i>Fiscal Accounts Clerk</i></p> <p>05/04/2018</p> |

Attachments