Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility ID: **41458** | Service: **DTV** | Call Sign: **WHIO-TV** | Channel: **33 (UHF)**

File Number: **0000027862**

FRN: **0001842509** | Date Submitted: **12/06/2017**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|---|---|---|---|---|
| **MIAMI VALLEY BROADCASTING CORPORATION**<br>Doing Business As: MIAMI VALLEY BROADCASTING CORPORATION | Sr. Director of Technology & Plant Operations<br>1611 SOUTH MAIN STREET<br>DAYTON, OH 45409<br>United States | +1 (937) 743-6703 | dave.thomas@coxinc.com | Corporation |

## Reimbursement Contact Information

### Reimbursement Contact Name and Information

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

## Preparer Contact Information

### Preparer Contact Name and Information

| Applicant | Address | Phone | Email |
|---|---|---|---|
| **Dave Thomas**<br>*Senior Director Technology and Plant Operation*<br>*Miami Valley Broadcasting Corporation* | Dave Thomas<br>1611 South Main St<br>Dayton, OH 45409<br>United States | +1 (937) 743-6703 | dave.thomas@coxinc.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 | There is space in the transmitter building for the new Main and Aux transmitters after building modification is complete. WHIO TV will run the current main transmitter to the Aux Antenna during the installation of the New Main Transmitter. |

## Transmitters

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

## Auxiliary Transmitter

### Existing Transmitter Information

| Section | Question | Response |
|---|---|---|
| **Existing Transmitter Description** | Type of change | Purchase New |
| | Use | Auxiliary (Backup) |
| | Description of Use | Back-Up Tranmsitter |
| | 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 | Diamond |
| | Year | 2008 |
| | Type | Solid State |
| | Solid State Cooling | Air Cooled |
| | Solid State Power Capacity | 14 kW |

## Auxiliary Transmitter

### New Transmitter Costs

| Section | Question | Response |
|---|---|---|
| **New Transmitter** | Use | Auxiliary (Backup) |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Manufacturer | |
| | Model | ULXTE-24 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 16 kW |
| | Justification for New Transmitter | Current Diamond CD transmitter cannot be retuned to new channel 33. |

## Auxiliary Transmitter

### Other Transmitter Costs

| Section | Question | Response |
|---|---|---|
| **Electrical Service** | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | Yes |
| | Transformer (480V) | No |
| | Power | N/A |
| | Rigid Conduit and Wiring | No |
| | Size | N/A |
| | Length | N/A |
| | | |

| | | |
|---|---|---|
| | Other Electrical Service | Yes |
| | Description | Install (1) 400A distribution panel and (1) 150 KVA Transformer |
| **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 leashold 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 |

## Auxiliary Transmitter

### Other Transmitter Cost Not Listed

Information not provided.

## 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 | Sigma CD |
| | Year | 2001 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Two |
| | Power Capacity | 40.2 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 | ULXTE-90 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 56.4 kW |
| | Justification for New Transmitter | Current Sigma CD transmitter cannot be retuned to new channel 33. |

## Primary Transmitter

### Other Transmitter Costs

| Section | Question | Response |
|---|---|---|
| **Electrical Service** | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | Yes |
| | Transformer (480V) | No |
| | Power | N/A |
| | Rigid Conduit and Wiring | No |
| | Size | N/A |
| | Length | N/A |
| | Other Electrical Service | Yes |

| | | |
|---|---|---|
| | Description | Install (1) 1200A Distribution panel and (1) 300KVA transformer |
| **HVAC Service** | Does the replacement transmitter require HVAC Service? | Yes |
| | Type | Cooling Only |
| | Size | 15 tons |
| | Other Size | N/A |
| **Transmitter Building Addition/Modification or Leasehold Improvement** | Does the Transmitter Building require an addition, modification, other leashold improvement? | Yes |
| | Size | 2270.0 square feet |
| **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

Information not provided.

## Antennas

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

## Auxiliary Antenna

### Existing Antenna Information

| Section | Question | Response |
|---|---|---|
| **Existing Antenna Description** | Type of change | Purchase New |
| | Antenna Use | Auxiliary (Backup) |
| | Description of Use | Back-up Antenna |
| | 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 | Side Mount |
| | Antenna position in stack | Not in Stack |
| | 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) | 1000.0 kW |

| | |
|---|---|
| Manufacturer | |
| Model | TFU-28DSC-RCT3 |
| Year | 2004 |

## Auxiliary Antenna

### New Antenna Costs

| Section | Question | Response |
|---|---|---|
| **New Antenna Description** | Use | Auxiliary (Backup) |
| | Description of Use | Back-up Antenna |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | 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 | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | 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) | 854.0 kW |
| | Manufacturer | |

| | | |
|---|---|---|
| | Model | ATW26HS3-HSO-33H |
| | Year | 2017 |
| | Justification for New Antenna | Current antenna cannot be retuned to new channel 33. |

## Auxiliary 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? | No |
| | Broadband or Single Channel? | N/A |
| | Feed Line Size | N/A |
| **Side Mount Brackets** | Do you require the separate purchase of side mount brackets for a high power 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 |

## Auxiliary Antenna

### Other Antenna Cost Not Listed

| Name | Description |
| --- | --- |
| **Aux Antenna Sweep 1** | Aux Antenna Sweep 1- will reuse line check to make sure can handle full power transmitter. |
| **Rigging Aux Antenna** | Rigging Aux Antenna - remove old and install new antenna |
| **Aux Antenna Sweep 2** | Aux Antenna Sweep 2- will reuse line made repairs from sweep 1 - verify line at full power |

## 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? | No |
| | 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 | Not in Stack |
| | 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) | 1000.0 kW |
| | | |

| | |
|---|---|
| Manufacturer | |
| Model | TFU-30GTH-R4C130 |
| Year | 2008 |

## 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? | No |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | No |
| | 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 | Horizontal |
| | 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) | 854.0 kW |
| | Manufacturer | |

| | |
|---|---|
| Model | ATW24HS3-HTO-33H |
| Year | 2017 |
| Justification for New Antenna | Current antenna cannot be retuned to new channel 33. |

**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? | No |
| | Broadband or Single Channel? | N/A |
| | Feed Line Size | N/A |
| **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 |
| --- | --- |
| **Additional Main Ant sweep** | Additional Main Ant sweep - will reuse line during repack. This is the initial sweep for line prior to removing current antenna. |

## 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 | Utilize Existing |
| | 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 | Dielectric |
| | 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 | 1200 feet per run |

## Primary Transmission Line

### Other Transmission Line Expenses Not Listed

Information not provided.

## Auxiliary Transmission Line

### Existing Transmission Line

| Section | Question | Response |
|---|---|---|
| **Existing Transmission Line Description** | Type of change | Utilize Existing |
| | Use | Auxiliary (Backup) |
| | Description of Use | Feeds Aux Antenna |
| | 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 | Dielectric |
| | 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 | 960 feet per run |

## Auxiliary Transmission Line

### Other Transmission Line Expenses Not Listed

| Name | Description |
| --- | --- |
| **New gaskets, seals, watchbands, for full power operation** | New gaskets, seals, watchbands - needed to make Aux line usable during new main antenna install - sweep showed that line could not take full power at time of sweep |

## 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

### Add Tower

| Section | Question | Response |
|---|---|---|
| **Existing Tower Description** | Type of change | Modify Existing |
| | Tower Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Leased |
| | Is this tower consider Complex? | No |
| | Is this tower currently shared with any other stations? | Yes |
| | One or more FM, AM or TV radio broadcaster(s) | Yes |
| | Others Types of Users | No |
| | Is tower documented for structural analysis? | Yes |
| | Is tower compliant with Rev G? | No |
| **Existing Tower Structure Registration** | Do you have a tower registration number? | Yes |
| | ASR Number | 1016460 |
| **Coordinates (NAD83 ( North American Datum of 1983))** | Latitude (NAD83) | 39° 44' 02.0" N- |
| | Longitude (NAD83) | 084° 44' 53.0" W- |
| | Overall Structure Height | 1098.80 feet |
| | Support Structure Height | 1018.69 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 950.12 feet |

| | |
|---|---|
| Structure Type | TOWER - Free Standing or Guyed Structure |
| Tower Owner | IWG Towers Assets II, LLC |
| Date Constructed | 01/01/1953 |

**FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared**

| Facility ID | Call Sign | Service |
|---|---|---|
| 14245 | WHKO | FM |

**Primary Tower**

**Tower Modification Costs**

| Section | Question | Response |
|---|---|---|
| **Engineering Study** | Please what type of engineering study is required, if any: | Study needed for undocumented /poorly documented tower |
| **Tower Reinforcements** | Please select whether tower reinforcements are needed: | Serious Reinforcements needed |

**Primary Tower**

**Tower Rigging Costs**

| Section | Question | Response |
|---|---|---|
| **Tower Rigging Costs** | Complex Tower | N/A |
| **Helicopter Services Required** | Are helicopter services required? | Yes |

**Primary Tower**

### Other Tower Expenses Not Listed

| Name | Description |
| --- | --- |
| **STRUCTURAL ANALYSIS DESIGN** | STRUCTURAL ANALYSIS DESIGN |

## Outside Professional Services Costs

| Section | Question | Response |
|---|---|---|
| **Outside Project Management Services** | Do you require outside project management services? | No |
| | Number of Hours | N/A |
| | Explanation | N/A |
| **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 | Yes |
| | For Main Facility | Yes |
| | Prepare engineering section of Form FCC License to Cover Application | Yes |
| | For Auxiliary Facility | Yes |
| | For Main Facility | Yes |
| | Prepare request for Special Temporary Authority | No |
| | Quantity | N/A |
| | 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 | Yes |
| | For Main Facility | Yes |
| | Prepare and file Form FCC License to Cover Application | Yes |
| | For Auxiliary Facility | Yes |
| | For Main Facility | Yes |

| | | |
|---|---|---|
| | Prepare request for Special Temporary Authority | No |
| | Quantity | N/A |
| | 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 | No |
| | Prepare or Review FCC Form 399 for Reimbursement | No |
| | Address transition timing and coordination issues w/ other stations and wireless providers | No |
| **RF Field Engineering Services** | Comprehensive coverage verification via field study | Yes |
| | RF exposure measurements | No |
| | Additional Field Engineering Service | No |
| | Number of Days | N/A |
| | Justification | N/A |

## Outside Professional Services Costs

### Other Professional Services Expenses Not Listed

| Name | Description |
|---|---|
| **RF Consultant Pattern, Transmitter, Antenna** | RF Consultant Pattern, Transmitter, Antenna |

## 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 | Yes |
| | Non-zoning permits | Yes |
| | BLM or NFS Coordination | No |
| | FCC Construction Permit Minor Change | No |
| | FCC License to Cover Application | Yes |
| | 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? | No |
| | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change? | Yes |
| | 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 ULXTE-90** | **$1,965,863.00** | **$1,700,142.61** | | **$0.00** | |
| Other -- Building Addition Size: 2270.0 | ***$49,427.00*** | $49,427.00 | Building Renovation for new transmitter area - Quote attached | N/A | N/A |
| 15 Ton system | $55,800.00 | $50,820.00 | Additional cooling needed where new main & aux transmitters will be located - quote attached. | N/A | N/A |
| UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW | $1,788,000.00 | $1,535,614.61 | Current Sigma CD TX cannot be retuned - letter from Gates Air attached. Quote for both IOT TX and Solid State TX attached - will go with Solid State TX since its cheaper | N/A | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Switchgear - industrial 800 amp | $38,200.00 | $29,845.00 | Quote attached | N/A | N/A |
| Other Electrical Service: Install (1) 1200A Distribution panel and (1) 300KVA transformer | ***$34,436.00*** | $34,436.00 | Quote attached | N/A | N/A |
| **Auxiliary Transmitter ULXTE-24** | **$743,033.00** | **$631,471.84** | | **$0.00** | |
| Other Electrical Service: Install (1) 400A distribution panel and (1) 150 KVA Transformer | ***$20,833.00*** | $20,833.00 | Quote attached | N/A | N/A |
| UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW | $684,000.00 | $587,441.84 | N/A | N/A | N/A |
| Switchgear - industrial 800 amp | $38,200.00 | $23,197.00 | Quote attached | N/A | N/A |
| **Sub-total** | $2,708,896.00 | $2,331,614.45 | N/A | $0.00 | N/A |
| **Total for all systems** | $5,233,295.29 | $5,036,817.81 | N/A | $178,035.00 | N/A |

## Components

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 |
|---|---|---|---|---|---|
| **Primary Antenna ATW24HS3-HTO-33H** | **$260,130.00** | **$266,741.19** | | **$0.00** | |
| UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized | $247,000.00 | $253,941.19 | Price from ERI for antenna model# ATW24HS3-HTO-33H - see attached quote includes mount. | N/A | N/A |
| Sweep test of existing antenna | $6,730.00 | $6,400.00 | Sweep line prior to repack | N/A | N/A |
| Additional Main Ant sweep | ***$6,400.00*** | $6,400.00 | Widelity cost - sweep line after new antenna installed. | N/A | N/A |
| **Auxiliary Antenna ATW26HS3-HSO-33H** | **$408,568.13** | **$402,578.01** | | **$0.00** | |
| Aux Antenna Sweep 2 | ***$6,400.00*** | $6,400.00 | Widelity cost - made repairs from aux sweep 1 tested full power for repack. | N/A | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Rigging Aux Antenna | ***$150,150.00*** | $150,150.00 | Quote attached FYI -No place to add in rigging cost section | N/A | 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 | N/A | N/A |
| Sweep test of existing antenna | $6,730.00 | $6,400.00 | Sweep Aux check for full power use during repack | N/A | N/A |
| UHF - High Power, Side Mount, basic slot antenna, 854 kW input, directional,, horizontally polarized | ***$210,478.13*** | $210,478.13 | see attached quote | N/A | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost) | $23,150.00 | $17,749.88 | N/A | N/A | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Aux Antenna Sweep 1 | ***$6,400.00*** | $6,400.00 | Widelity cost - sweep aux line after antenna install | N/A | N/A |
| **Sub-total** | $668,698.13 | $669,319.20 | N/A | $0.00 | N/A |
| **Total for all systems** | $5,233,295.29 | $5,036,817.81 | N/A | $178,035.00 | N/A |

## 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** | **$0.00** | **$0.00** | | **$0.00** | |
| **Auxiliary Transmission Line** | **$53,124.00** | **$53,124.00** | | **$0.00** | |
| New gaskets, seals, watchbands, for full power operation | ***$53,124.00*** | $53,124.00 | Repairs from Aux RF sweep 1 | N/A | N/A |
| **Sub-total** | $53,124.00 | $53,124.00 | N/A | $0.00 | N/A |
| **Total for all systems** | $5,233,295.29 | $5,036,817.81 | N/A | $178,035.00 | N/A |

### Components

Information not provided.

## 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** | **$1,563,377.16** | **$1,749,685.16** | | **$178,035.00** | |
| STRUCTURAL ANALYSIS DESIGN | ***$33,264.66*** | $33,264.66 | Structural analysis quote 1- $23,612 (attached) Structural analysis quote 2 - $9,652 (attached) | N/A | N/A |
| Tall Tower (greater than 500') | $210,500.00 | $149,892.00 | Tower modification estimate attached | N/A | N/A |
| Serious tower reinforcement /modifications | $1,052,000.00 | $1,300,216.00 | This is from a quote received from ERI on 5/23/17 totaling $1,450,108 - quote is uploaded | $0.00 | N/A |
| Tower Helicopter Lift | ***$241,312.50*** | $241,312.50 | Quote attached | $178,035.00 | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study | $26,300.00 | $25,000.00 | N/A | N/A | N/A |
| **Sub-total** | $1,563,377.16 | $1,749,685.16 | N/A | $178,035.00 | N/A |
| **Total for all systems** | $5,233,295.29 | $5,036,817.81 | N/A | $178,035.00 | N/A |

## Components

| Actual Information Description | File Name |
|---|---|
| STRUCTURAL ANALYSIS DESIGN | Information not provided. |
| Tall Tower (greater than 500') | Information not provided. |
| Serious tower reinforcement /modifications | Information not provided. |
| Tower Helicopter Lift | **Component Description:** Structural Installation for helicopter service (down payment)<br>**Amount:** $178,035.00 |
| Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study | 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** | **$141,815.00** | **$136,250.00** | | **$0.00** | |
| RF Consultant Pattern, Transmitter, Antenna | ***$30,000.00*** | $30,000.00 | RF Consultant Costs | N/A | N/A |
| Comprehensive coverage verification via field study, if needed | $84,200.00 | $80,000.00 | 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 - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application | $4,210.00 | $4,000.00 | 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 |

| | | | | | |
|---|---|---|---|---|---|
| Perform engineering study for new channel assignment and antenna development | $7,360.00 | $7,000.00 | 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 |
| RF Consulting Engineer Fees-Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application | $2,105.00 | $2,000.00 | 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 |
| RF Consulting Engineer Fees-Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application | $1,580.00 | $1,500.00 | N/A | N/A | N/A |
| **Sub-total** | $141,815.00 | $136,250.00 | N/A | $0.00 | N/A |
| **Total for all systems** | $5,233,295.29 | $5,036,817.81 | N/A | $178,035.00 | N/A |

## Components

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** | **$97,385.00** | **$96,825.00** | | **$0.00** | |
| Disposal Costs (for equipment and other waste, net of any salvage value) | ***$5,000.00*** | $5,000.00 | N/A | N/A | N/A |
| Non-zoning permits | ***$5,000.00*** | $5,000.00 | N/A | N/A | N/A |
| MVPD Notification of Channel Change | ***$500.00*** | $500.00 | N/A | N/A | N/A |
| Develop and air announcement of upcoming channel change | ***$15,000.00*** | $15,000.00 | N/A | N/A | N/A |
| Equipment Delivery and Handling Charges | ***$5,000.00*** | $5,000.00 | N/A | N/A | N/A |
| DTV Medical Facility Notification | $11,550.00 | $11,000.00 | N/A | N/A | N/A |
| FCC Filing Fees - Form 2100 license to cover application | $335.00 | $325.00 | N/A | N/A | N/A |
| Local Zoning | ***$55,000.00*** | $55,000.00 | N/A | N/A | N/A |

| | | | | | |
|---|---|---|---|---|---|
| **Sub-total** | $97,385.00 | $96,825.00 | N/A | $0.00 | N/A |
| **Total for all systems** | $5,233,295.29 | $5,036,817.81 | N/A | $178,035.00 | N/A |

## Components

Information not provided.

## Cost Information

### Grand Total

| | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
|---|---|---|---|
| **Total for all systems** | $5,233,295.29 | $5,036,817.81 | $178,035.00 |

## 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** | 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. | |
| | 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.<br>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.<br>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.

| | | |
|---|---|---|
| | 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. | |
| | I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above. | **Dave Thomas**<br>*Sr. Director Technology and Plant Operations*<br><br>12/06/2017 |

## 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 IMPRISIONMENT (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). | |
| | 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.<br>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.<br>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.

| | | |
|---|---|---|
| | 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.<br>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. | |
| | I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above. | **Dave Thomas**<br>*Sr. Dir Technology and Plant Operations*<br><br>12/06/2017 |

## Attachments