



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **68581** | Service: **DTV** | Call **KTVD** | Channel: **31 (UHF)** |
ID: | Sign:
File **0000027983**
Number:
FRN: **0001887363** | Date **04/10**
Submitted: **/2019**

Applicant Information

Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|--|--|-------------------|-------------------|----------------|
| MULTIMEDIA HOLDINGS CORPORATION | Law Department TEGNA Inc. 7950 Jones Branch Drive McLean, VA 22107 United States | +1 (703) 873-6600 | lawdept@tegna.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 |
|--|---|-------------------|---------------------|
| Jeffrey Johnson , Johnson . <i>Vice President Projects</i> <i>TEGNA</i> | Jeffrey Johnson 7950 Jones Branch Drive McLean, VA 22102 United States | +1 (703) 873-6736 | jsjohnson@tegna.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. | Yes |
| Briefly describe transition plan | KTVD will be moving to channel 31 from channel 19. It plans to repurpose the current broadband antenna and transmission line. It requires a new combiner port and a new transmitter. It would cost more to re-tune the existing TX than to purchase a new. |

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 | Low Power Backup transmitter |
| | 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 | Ranger |
| | Year | 2003 |
| | Type | Solid State |
| | Solid State Cooling | Air Cooled |
| | Solid State Power Capacity | 1 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? | No |
| | Manufacturer | |
| | Model | UAXTE 2R37 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Air Cooled |
| | Solid State Power capacity | 1.2 kW |
| | Justification for New Transmitter | The old transmitter cannot be re-tuned. |

**Auxiliary
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 | Yes |
| | Size | 2 inches |
| | Length | 100.0 feet |
| | Other Electrical Service | Yes |
| | | |

| | | |
|--|---|---|
| | Description | Additional electrical services required for transmitter installation. |
| 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 |

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 | PWR 60 P2 |
| | Year | 2007 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Two |
| | Power Capacity | 60 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 | ULXT 60 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 51 kW |
| | Justification for New Transmitter | It will cost more to re-tune the old transmitter with interim transmitter lease pricing than purchasing a new one. |

**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 | Yes |
| | Size | 3 inches |
| | | |

| | | |
|--|---|--|
| | Length | 100.0 feet |
| | Other Electrical Service | Yes |
| | Description | Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc. |
| 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? | Yes |
| | Size | 100.0 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 |

**Primary
Antenna****Existing Antenna Information**

| Section | Question | Response |
|---|--|--------------------|
| Existing Antenna Description | Type of change | Retune Existing |
| | 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? | Yes |
| | 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 | Broadband Panel |
| | Number of Stations Supported | 2 |
| | Number of Panels | 48 |
| | Design power capacity in use | 50.0 % |
| | Lower Limit | 470.00 MHz |

| | |
|--|---------------------|
| Upper Limit | 860.00 MHz |
| Other Antenna Type | N/A |
| ERP: (Effective Radiated Power) | 1000.0 kW |
| Manufacturer | Dielectric |
| Model | TUC-C4SP-12/48U-4-T |
| Year | 2008 |

Facility ID's and Call Signs of all stations with whom the antenna is shared.

| Facility ID | Call Sign |
|-------------|-----------|
| 47903 | KCNC-TV |

Primary Antenna

Adjustment to Existing Antenna

| Section | Question | Response |
|--------------------------------|---|----------|
| Sweep Test of Existing Antenna | Do you need a sweep test of existing antenna? | Yes |

Primary Antenna

Other Antenna Costs

| Section | Question | Response |
|-----------------------------|--|-------------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | Yes |
| | Type | Additional Module |
| | Number of channels supported | 3 |
| | Frequencies of channels supported | RF channel |
| | Frequency | N/A |

Enter a list of RF channel numbers.

| RF Channel Number |
|-------------------|
| 19 |
| 31 |
| 35 |

Primary Antenna

Other Antenna Cost Not Listed

| Name | Description |
|-------------|---|
| Mask Filter | New mask filter required for new channel. |

Auxiliary Antenna

Existing Antenna Information

| Section | Question | Response |
|--|--|--------------------|
| Existing Antenna Description | Type of change | Retune Existing |
| | Antenna Use | Auxiliary (Backup) |
| | Description of Use | AUX Antenna |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | Yes |
| | 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 | Broadband Panel |
| Number of Stations Supported | 2 |
| Number of Panels | 36 |
| Design power capacity in use | 50.0 % |
| Lower Limit | 470.00 MHz |
| Upper Limit | 860.00 MHz |
| Other Antenna Type | N/A |
| ERP: (Effective Radiated Power) | 987.0 kW |
| Manufacturer | Dielectric |
| Model | TUA-C3-12 /36-1-S |
| Year | 2008 |

Facility ID's and Call Signs of all stations with whom the antenna is shared.

| Facility ID | Call Sign |
|-------------|-----------|
| 47903 | KCNC-TV |

Auxiliary Antenna

Adjustment to Existing Antenna

| Section | Question | Response |
|--------------------------------|---|----------|
| Sweep Test of Existing Antenna | Do you need a sweep test of existing antenna? | Yes |

Auxiliary Antenna

Other Antenna Costs

| Section | Question | Response |
|-----------------------------|--|----------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | Yes |

| | | |
|--|-----------------------------------|-------------------|
| | Type | Additional Module |
| | Number of channels supported | 3 |
| | Frequencies of channels supported | RF channel |
| | Frequency | N/A |

Enter a list of RF channel numbers.

| RF Channel Number |
|-------------------|
| 19 |
| 31 |
| 35 |

Auxiliary Antenna

Other Antenna Cost Not Listed

| Name | Description |
|-------------|---|
| Mask Filter | New mask filter required for new channel. |

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? | Yes |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | Dielectric |
| | Type | Rigid |
| | Diameter | 8 3/16 inches |
| | Other Diameter | N/A |
| | Segment Length | Broadband |
| | Other Segment Length | N/A |
| | Number of parallel runs | 2 |
| | Length | 1000 feet per run |

Facility ID's and Call Signs of all stations with whom the transmission line is shared.

| Facility ID | Call Sign |
|-------------|-----------|
| 47903 | KCNC-TV |

Primary
Transmission Line

Other Transmission Line Expenses Not Listed

| Name | Description |
|---------------|--|
| TX Line Sweep | Sweep required to verify post-transition channel measures well on existing line. |

Auxiliary
Transmission Line

Existing Transmission Line

| Section | Question | Response |
|--|--|--------------------|
| Existing Transmission Line Description | Type of change | Utilize Existing |
| | Use | Auxiliary (Backup) |
| | Description of Use | AUX Line |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing transmission line shared with another station or stations? | Yes |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | Dielectric |
| | Type | Rigid |
| | Diameter | 8 3/16 inches |
| | Other Diameter | N/A |
| | Segment Length | Broadband |
| | Other Segment Length | N/A |
| | Number of parallel runs | 2 |

| | | |
|--|--------|----------------------|
| | Length | 1000 feet per run |
|--|--------|----------------------|

Facility ID's and Call Signs of
all stations with whom the
transmission line is shared.

| Facility ID | Call Sign |
|-------------|-----------|
| 47903 | KCNC-TV |

Auxiliary **Other Transmission Line Expenses Not Listed**
Transmission Line

| Name | Description |
|---------------|---|
| TX Line Sweep | Sweep required to verify post-transition channel measures well on existing line. |

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? | Yes |
| | One or more FM, AM or TV radio broadcaster(s) | Yes |
| | Others Types of Users | No |
| | Is tower documented for structural analysis? | No |
| | Is tower compliant with Rev G? | Unknown |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1058328 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 39° 43' 50.6" N- |
| | Longitude (NAD83) | 105° 13' 55.6" W- |
| | Overall Structure Height | 734.24 feet |
| | Support Structure Height | 620.40 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 7115.40 feet |

| | | |
|--|------------------|--|
| | Structure Type | TOWER - Free Standing or Guyed Structure |
| | Tower Owner | LAKE CEDAR GROUP, L. L.C. |
| | Date Constructed | 06/01/2009 |

**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 |
|-------------|-----------|---------|
| 47903 | KCNC-TV | DTV |

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: | Minor 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 Services Costs**

| Section | Question | Response |
|---|--|---|
| Outside Project Management Services | Do you require outside project management services? | Yes |
| | Number of Hours | 200 |
| | Explanation | Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x200hrs (\$30000), a new OES component has been created & funded with part of the \$ removed from PM, & "Prepare & or review reimbursement form" has been increased |
| 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 | Yes |

| | | |
|---|--|-----|
| | Quantity | 2 |
| | 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 | Yes |
| | Quantity | 2 |
| | NEPA Section 106 environmental review | No |
| | Environmental Assessment | No |
| | ASR Modification | Yes |
| | FAA Consultation (including preparation of FAA Form 7460) | Yes |
| | Negotiation of Lease and other Matter for Shared Locations | No |
| | Prepare or Review FCC Form 399 for Reimbursement | Yes |
| | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| RF Field Engineering Services | Comprehensive coverage verification via field study | Yes |
| | RF exposure measurements | Yes |
| | Additional Field Engineering Service | Yes |

| | |
|----------------|--|
| Number of Days | 10 |
| Justification | \$2,500 per site visit including expenses x 10 days. It is necessary to survey the site, plan the equipment, develop specifications for purchasing, & oversee multiple vendor RF projects. Station does not have available personnel trained in such services. |

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

| Name | Description |
|-----------------------------------|--|
| Other Legal Services | Other Legal Services related to the DTV Repack |
| Pre filing site review | outside engineering to review all facilities |
| Other Engineering Services | Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x200hrs(\$30000), a new OES component has been created & funded with part of the \$ removed from PM, & "Prepare & or review reimbursement form" has been increased |

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 | Yes |
| 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? | 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 ULXT 60 | \$904,745.51 | \$904,445.51 | | \$1,148,206.87 | |
| 3" Rigid Conduit and Wiring (Cost per foot) | \$5,200.00 | \$4,900.00 | N/A | N/A | N/A |
| UHF - Liquid Cooled Solid State Transmitter 51 kW | \$781,596.01 | \$781,596.01 | See GatesAir quote | \$1,054,955.95 | The Actual Cost exceeds the Estimated Cost due in part to the inclusion of the Combiner & RF System in this category, as well as sales tax. |
| Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc. | \$92,949.50 | \$92,949.50 | See Encore Electric Quote. The total is 50 cents higher than originally thought due to the "cents" being lopped off on the vendor's quote. | \$92,949.50 | N/A |

| | | | | | |
|---|---------------------|---------------------|--|--------------------|-----|
| Other -- Building Addition Size: 100.0 | \$25,000.00 | \$25,000.00 | New pad required for heat exchangers, transformers, pumps, etc. Equipment must also be shielded. | \$301.42 | N/A |
| Auxiliary Transmitter UAXTE 2R37 | \$153,600.00 | \$115,837.89 | | \$44,168.95 | |
| UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW | \$126,000.00 | \$88,337.89 | N/A | \$44,168.95 | N/A |
| 2" Rigid Conduit and Wiring (Cost per foot) | \$2,600.00 | \$2,500.00 | N/A | N/A | N/A |
| Other Electrical Service: Additional electrical services required for transmitter installation. | \$25,000.00 | \$25,000.00 | Additional electrical services required for transmitter installation. | N/A | N/A |
| Sub-total | \$1,058,345.51 | \$1,020,283.40 | N/A | \$1,192,375.82 | N/A |
| Total for all systems | \$2,714,680.51 | \$2,072,490.90 | N/A | \$1,263,809.30 | N/A |

Components

| Actual Information | |
|--|---------------------------|
| Description | File Name |
| 3" Rigid Conduit and Wiring (Cost per foot) | Information not provided. |
| UHF - Liquid Cooled Solid State Transmitter 51 kW | |

| | |
|-------------------------------|---|
| Component Description: | Inv MAN00269 KTVD Combiner and RF System 45 percent down payment UL20180424jg v1 |
| Amount: | \$92,291.63 |

| | |
|-------------------------------|--|
| Component Description: | Inv GO10004699-1 KTVD ULXT-60 transmitter 50 percent down payment UL20180424jg v1 |
| Amount: | \$390,798.01 |

| | |
|-------------------------------|---|
| Component Description: | Inv US0307804 KTVD ULXT-60 TX balance due UL20180515jgv2 |
| Amount: | \$456,327.97 |

| | |
|-------------------------------|--|
| Component Description: | Inv US0307626 KTVD ULXT-60 TX change order UL20180515jgv1 |
| Amount: | \$23,246.71 |

| | |
|-------------------------------|---|
| Component Description: | Transmitter /Components- GatesAir |
| Amount: | \$422,226.60 |

| | |
|-------------------------------|---|
| Component Description: | Inv MAN00386 KTVD Combiner and RF System 45 percent payment 2 UL20180424jg v1 |
| Amount: | \$92,291.63 |

| | | |
|--|---|---|
| | Component Description: Amount: | Deposit on Transmitter \$144,324.64 |
| Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc. | Component Description: Amount: | KTVD Encore Elec inv #43123 Electrical work UL20180806jg v2 \$92,949.50 |
| Other -- Building Addition Size: 100.0 | Component Description: Amount: | Inv 148630459 KTVD Equipment rental UL20180601jgv1 \$301.42 |
| UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW | Component Description: Amount: | Gates inv #GO10004858-1 Aux TX 50 pct pmt 1 UL20181030jgv1 \$44,168.95 |
| 2" Rigid Conduit and Wiring (Cost per foot) | Information not provided. | |
| Other Electrical Service: Additional electrical services required for transmitter installation. | 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 TUC-C4SP-12/48U-4-T | \$730,130.00 | \$163,571.25 | | \$8,953.00 | |
| Mask Filter | <i>\$73,250.00</i> | \$73,250.00 | New mask filter required for new post-transition channel. See attached Dielectric quote. | N/A | N/A |
| Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed) | \$18,950.00 | \$18,000.00 | N/A | \$2,153.00 | N/A |
| Adding a module to existing combiner (without antenna) | \$84,200.00 | \$65,921.25 | 3-channel manifold combiner required in order to repurpose existing broadband antenna and broadband transmission line. See attached Dielectric quote. | \$6,800.00 | N/A |

| | | | | | |
|---|---------------------|---------------------|--------------------------|--------------------|-----|
| UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, horizontally polarized | \$547,000.00 | \$0.00 | Antenna to be repurposed | N/A | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | N/A | N/A |
| Auxiliary Antenna TUA-C3-12 /36-1-S | \$134,880.00 | \$115,321.25 | | \$14,106.50 | |
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | N/A | N/A |
| UHF “ Broadband Panel, Side Mount Auxiliary /Interim, 987 horizontally polarized | \$0.00 | \$0.00 | N/A | N/A | N/A |
| Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed) | \$18,950.00 | \$18,000.00 | N/A | N/A | N/A |
| Mask Filter | \$25,000.00 | \$25,000.00 | N/A | N/A | N/A |

| | | | | | |
|--|----------------|----------------|--|----------------|-----|
| Adding a module to existing combiner (without antenna) | \$84,200.00 | \$65,921.25 | 3-channel manifold combiner required in order to repurpose existing broadband antenna and broadband transmission line. See attached Dielelctric quote. | \$14,106.50 | N/A |
| Sub-total | \$865,010.00 | \$278,892.50 | N/A | \$23,059.50 | N/A |
| Total for all systems | \$2,714,680.51 | \$2,072,490.90 | N/A | \$1,263,809.30 | N/A |

Components

| Actual Information | |
|---|---|
| Description | File Name |
| Mask Filter | Information not provided. |
| Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed) | <p>Component Description: Die inv #US0320792 Swivel Hanger and tax UL20190405jgv1</p> <p>Amount: \$2,153.00</p> |
| Adding a module to existing combiner (without antenna) | <p>Component Description: Die inv #445002 Combiner retune UL20190329jgv1</p> <p>Amount: \$6,800.00</p> |
| UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, horizontally polarized | Information not provided. |

| | |
|---|---|
| Sweep test of existing antenna | Information not provided. |
| Sweep test of existing antenna | Information not provided. |
| UHF 4" Broadband Panel, Side Mount Auxiliary /Interim, 987 horizontally polarized | Information not provided. |
| Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed) | Information not provided. |
| Mask Filter | Information not provided. |
| Adding a module to existing combiner (without antenna) | <div> <div> Component Description: </div> <div> Electron D inv #201812007 Manifold Aux Combiner Install UL20190402jgv1 </div> </div> <div> <div> Amount: </div> <div> \$14,106.50 </div> </div> |

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 | \$6,400.00 | \$6,400.00 | | \$0.00 | |
| TX Line Sweep | <i>\$6,400.00</i> | \$6,400.00 | N/A | N/A | N/A |
| Auxiliary Transmission Line | \$6,400.00 | \$6,400.00 | | \$0.00 | |
| TX Line Sweep | <i>\$6,400.00</i> | \$6,400.00 | N/A | N/A | N/A |
| Sub-total | \$12,800.00 | \$12,800.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$2,714,680.51 | \$2,072,490.90 | N/A | \$1,263,809.30 | 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 | \$394,800.00 | \$375,000.00 | | \$0.00 | |
| Minor tower reinforcement /modifications | \$158,000.00 | \$150,000.00 | N/A | N/A | 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 |
| Tall Tower (greater than 500') | \$210,500.00 | \$200,000.00 | N/A | N/A | N/A |
| Sub-total | \$394,800.00 | \$375,000.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$2,714,680.51 | \$2,072,490.90 | N/A | \$1,263,809.30 | N/A |

Components

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 | \$258,895.00 | \$261,250.00 | | \$41,353.98 | |
| Other Legal Services | <i>\$10,000.00</i> | \$10,000.00 | Other Legal Services related to the DTV Repack | \$6,133.99 | N/A |
| Additional Field Engineering Service, 10 Days | <i>\$25,000.00</i> | \$25,000.00 | \$2,500 per site visit including expenses x 10 days. It is necessary to survey the site, plan the equipment, develop specifications for purchasing, & oversee multiple vendor RF projects. Station does not have available personnel trained in such services. | N/A | N/A |
| Comprehensive coverage verification via field study, if needed | \$84,200.00 | \$80,000.00 | N/A | N/A | N/A |
| ASR modification (prepare FCC Form 854) | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |

| | | | | | |
|---|------------|------------|-----|-----|-----|
| Attorney Fees - Prepare and File request for Special Temporary Authorization | \$7,360.00 | \$7,000.00 | 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 |
| Prepare request for Special Temporary Authorization | \$4,100.00 | \$3,000.00 | 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 |

| | | | | | |
|--|-------------|-------------|-----|-----|-----|
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00 | \$3,000.00 | N/A | N/A | N/A |
| RF Exposure Measurements | \$21,050.00 | \$20,000.00 | N/A | N/A | N/A |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |
| Address transition timing and coordination issues w/ other stations and wireless | \$2,630.00 | \$2,500.00 | 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 |

| | | | | | |
|--|-------------|-------------|---|-------------|-----|
| Project management of the transition | \$31,600.00 | \$30,000.00 | It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399s. Station does not have available personnel or personnel trained in project management for such complex projects. | \$29,107.49 | N/A |
| Prepare and or review reimbursement form | \$2,630.00 | \$15,000.00 | Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x200hrs (\$30000), a new OES component has been created & funded with part of the \$ removed from PM, & "Prepare & or review reimbursement form" has been increased | \$3,637.50 | 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 |
| 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 |
| Other Engineering Services | \$15,000.00 | \$15,000.00 | Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x200hrs (\$30000), a new OES component has been created & funded with part of the \$ removed from PM, & "Prepare & or review reimbursement form" has been increased | \$2,475.00 | N/A |
| Pre filing site review | \$23,500.00 | \$23,500.00 | N/A | N/A | N/A |
| Sub-total | \$258,895.00 | \$261,250.00 | N/A | \$41,353.98 | N/A |

| | | | | | |
|------------------------------|----------------|----------------|-----|----------------|-----|
| Total for all systems | \$2,714,680.51 | \$2,072,490.90 | N/A | \$1,263,809.30 | N/A |
|------------------------------|----------------|----------------|-----|----------------|-----|

Components

| Actual Information | |
|--|--|
| Description | File Name |
| Other Legal Services | <div> <div> Component Description: Covington inv #60808553 Various legal thru 180630 UL20190410jgv1 </div> <div> Amount: \$235.69 </div> </div> <div> <div> Component Description: Covington inv #60805588 Various legal thru 180531 UL20190410jgv1 </div> <div> Amount: \$1,756.37 </div> </div> <div> <div> Component Description: Covington inv #60796723 Various Legal UL20181024jgv1 </div> <div> Amount: \$4,141.93 </div> </div> |
| Additional Field Engineering Service, 10 Days | Information not provided. |
| Comprehensive coverage verification via field study, if needed | Information not provided. |
| ASR modification (prepare FCC Form 854) | 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 - Aux Antenna, prepare and File Form 2100 Construction Permit or License 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. |
| RF Exposure Measurements | Information not provided. |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | Information not provided. |
| Address transition timing and coordination issues w/ other stations and wireless | Information not provided. |
| Perform engineering study for new channel assignment and antenna development | Information not provided. |

| | |
|--|--|
| Project management of the transition | <div> Component Description: Osborn inv #29838 Proj mgt 180526-180629 UL20190322jgv1 </div> <div> Amount: \$2,362.50 </div> |
| | <div> Component Description: Inv 29216 KTVD Proj Mgt 180428-180525 UL20180706jg v1 </div> <div> Amount: \$4,350.00 </div> |
| | <div> Component Description: Osborn inv #28999 Proj mgt 180331-180427 UL20190321jgv1 </div> <div> Amount: \$1,725.00 </div> |
| | <div> Component Description: Osborn inv #26018 Proj Mgt 170530-170728 UL20181107jg v1 </div> <div> Amount: \$20,669.99 </div> |
| Prepare and or review reimbursement form | <div> Component Description: Osborn inv #28999 Amend 399 Form UL20190301jgv2 </div> <div> Amount: \$3,200.00 </div> <div> Component Description: Osborn inv #29838 Actual Cost Invoices UL20190322jgv1 </div> <div> Amount: \$437.50 </div> |

| | |
|--|--|
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application | Information not provided. |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application | Information not provided. |
| Other Engineering Services | <p>Component Description: Osborn inv #29838 Other Eng Srvcs UL20190322jgv1</p> <p>Amount: \$2,475.00</p> |
| Pre filing site review | 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 | \$124,830.00 | \$124,265.00 | | \$7,020.00 | |
| Develop and air announcement of upcoming channel change | <i>\$6,000.00</i> | \$6,000.00 | 40 hours at \$150 per hour to shoot, edit . write and produce promotional information. | \$3,270.00 | N/A |
| Equipment Storage | <i>\$25,000.00</i> | \$25,000.00 | N/A | N/A | N/A |
| Equipment Delivery and Handling Charges | <i>\$25,000.00</i> | \$25,000.00 | N/A | N/A | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$25,000.00</i> | \$25,000.00 | N/A | N/A | N/A |
| Non-zoning permits | <i>\$25,000.00</i> | \$25,000.00 | N/A | N/A | N/A |
| Local Zoning | <i>\$750.00</i> | \$750.00 | 3 cents per \$100 of construction cost. | N/A | N/A |

| | | | | | |
|---|-------------------|----------------|---|----------------|-----|
| MVPD Notification of Channel Change | \$6,000.00 | \$6,000.00 | 40 hours at \$150 per hour to shoot, edit . write and produce promotional information. | N/A | N/A |
| FCC Filing Fees - Special Temporary Authorization request | \$195.00 | \$190.00 | 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 |
| DTV Medical Facility Notification | \$11,550.00 | \$11,000.00 | N/A | \$3,750.00 | N/A |
| Sub-total | \$124,830.00 | \$124,265.00 | N/A | \$7,020.00 | N/A |
| Total for all systems | \$2,714,680.51 | \$2,072,490.90 | N/A | \$1,263,809.30 | N/A |

Components

| Actual Information | |
|---|---|
| Description | File Name |
| Develop and air announcement of upcoming channel change | <p>Component Description: 2C Media inv #203806 Creation of channel change announcement UL20181016jgv1</p> <p>Amount: \$3,270.00</p> |
| Equipment Storage | Information not provided. |
| Equipment Delivery and Handling Charges | Information not provided. |

| | |
|--|---|
| Disposal Costs (for equipment and other waste, net of any salvage value) | Information not provided. |
| Non-zoning permits | Information not provided. |
| Local Zoning | Information not provided. |
| MVPD Notification of Channel Change | Information not provided. |
| FCC Filing Fees - Special Temporary Authorization request | Information not provided. |
| FCC Filing Fees - Form 2100 license to cover application | Information not provided. |
| DTV Medical Facility Notification | <div> <div> Component Description: </div> <div> RF Notifications inv #1052 Medical Notifications UL20181029jg v1 </div> </div> <div> <div> Amount: </div> <div> \$3,750.00 </div> </div> |

**Cost
Information****Grand Total**

| | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
|-----------------------|--------------------------------|----------------|----------------|
| Total for all systems | \$2,714,680.51 | \$2,072,490.90 | \$1,263,809.30 |

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>Jeffrey C Gehman <i>Engineering Associate</i></p> <p>04/10/2019</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>Jeffrey C Gehman <i>Engineering Associate</i></p> <p>04/10/2019</p> |

Attachments