

(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility 74176 Service: DTV Call WVVA Channel: 17 (UHF)

ID:

Sign:

File **0000027484** 

Number:

FRN: **0018223693** Date **08/17** 

Submitted: /2017

# Applicant Information

#### **Applicant Name, Type, and Contact Information**

| Applicant  | Address  | Phone                | Email                       | Applicant<br>Type               |
|--|--|----------------------|-----------------------------|---------------------------------|
| WVVA LICENSE, LLC Doing Business As: WVVA LICENSE, LLC | P.O. BOX<br>909<br>QUINCY,<br>IL 62306<br>United<br>States | +1 (217)<br>223-5100 | bdreasler@quincyinc.<br>com | Limited<br>Liability<br>Company |

# Reimbursement Contact Name and Information Reimbursement Contact Information

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

#### Preparer Contact Information

#### **Preparer Contact Name and Information**

| Applicant                                 | Address   | Phone                 | Email              |
|---|---|-----------------------|--------------------|
| Tony zumMallen<br>QCommunications,<br>LLC | Tony zumMallen 705B SE Melody LN #314 Lees Summit, MO 64063 United States | +1 (816) 729-<br>1177 | tony@qcom1.<br>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   | Transition from ch 46 to ch 17 and will need an antenna, transmitter and associated gear and systems. The station will need an interim transmitter and antenna system to provide continuous service during the transition. |

# **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<br>New          |
|                                  | Use  | Primary<br>(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   |                          |
| Manufacturer and Type            | Model  | Power CD                 |
|                                  | Year   | 2006                     |
|                                  | Туре   | Inductive<br>Output Tube |
|                                  | IOT Power Type   | Two                      |
|                                  | Power Capacity   | 60 kW                    |

# Primary Transmitter

## **New Transmitter Costs**

| Section         | Question                                  | Response   |
|-----------------|---|--|
| New Transmitter | Use                                       | Primary<br>(Main)  |
|                 | Change Type                               | Purchase<br>New  |
|                 | Is this a request for upgraded equipment? | Yes  |
|                 | Manufacturer                              |  |
|                 | Model                                     | ULXTE-72   |
|                 | Transmitter Type                          | Solid State  |
|                 | Solid State Cooling                       | Liquid Cooled  |
|                 | Solid State Power capacity                | 47 kW  |
|                 | Justification for New Transmitter         | IOT<br>transmitter is<br>not tunable<br>per the<br>manufacturer. |

# Primary Transmitter

# **Other Transmitter Costs**

| Section            | Question                              | Response   |
|--------------------|---------------------------------------|------------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | Yes        |
|                    | Switchgear (industrial 800 amp)       | Yes        |
|                    | Transformer (480V)                    | Yes        |
|                    | Power                                 | 300 kVA    |
|                    | Rigid Conduit and Wiring              | Yes        |
|                    | Size                                  | 2 inches   |
|                    | Length                                | 400.0 feet |
|                    | Other Electrical Service              | No         |
|                    | Description                           | N/A        |

| Does the replacement transmitter require HVAC Service?                                       | Yes  |
|--|--|
| Туре   | Cooling<br>Only  |
| Size   | 25 tons  |
| Other Size   | N/A  |
| Does the Transmitter Building require an addition, modification, other leashold improvement? | No   |
| Size   | N/A  |
| 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  |
|  | Type  Size  Other Size  Does the Transmitter Building require an addition, modification, other leashold improvement?  Size  Is an RF Consulting Engineer needed?  Is a channel 14 Mask Filer needed?  Is additional field engineering time needed? |

# Primary Transmitter

## **Other Transmitter Cost Not Listed**

| Name                            | Description   |
|---------------------------------|---|
| Securirty - Site                | This site requires security once the new transmission line and equipment arrive on site to be installed. Estimated length of 4-6 weeks. |
| Disconnect existing Transmitter | Disconnect transmitter and components from existing configuration and move within building to make way for new facilities.              |
| Transmitter - Training          | Transmitter training - offsite - 1 week in duration at mfg site.  |
| Site Survey - TX                | Site survey and report are required to be performed before the new transmitter and components installation plan can be finalized.       |

## Interim Transmitter

## **New Transmitter Costs**

| Section         | Question                          | Response  |
|-----------------|-----------------------------------|---|
| New Transmitter | Use                               | Interim   |
|                 | Description of Use                | N/A   |
|                 | Change Type                       | Purchase  |
|                 | Manufacturer                      |   |
|                 | Model                             | UAXTE-<br>12R44   |
|                 | Transmitter Type                  | Solid State   |
|                 | Solid State Cooling               | Air Cooled  |
|                 | Solid State Power capacity        | 10 kW   |
|                 | Justification for New Transmitter | Interim facility is required to avoid prolonged period of station silence during transition, and station currently has no aux facility to use for interim operation. Extended silent period during transition to new channel is unreasonable. |

#### Interim Transmitter

## **Other Transmitter Costs**

| Section | Question | Response |
|---------|----------|----------|
| 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   | Yes        |
|   | Size   | 2 inches   |
|   | Length   | 400.0 feet |
|   | Other Electrical Service   | No         |
|   | Description  | N/A        |
| HVAC Service  | Does the replacement transmitter require HVAC Service?                                       | No         |
|   | Туре   | N/A        |
|   | Size   | N/A        |
|   | Other Size   | N/A        |
| Transmitter Building<br>Addition/Modification or<br>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        |
| Inside RF System  | Is an additional interior RF system required to support this interim transmitter?            | Yes        |

# Otner Tran

**Other Transmitter Cost Not Listed** 

**Transmitter** Information not provided.

Interim

#### **Antennas**

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

# **Existing Antenna Information**

| Section                                   | Question   | Response             |
|---|--|----------------------|
| Existing Antenna Description              | Type of change   | Purchase<br>New      |
|   | Antenna Use  | Primary<br>(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<br>Manufacturer and Type | Class  | Full Power           |
|   | Mounting   | Top Mount            |
|   | Antenna position in stack  | Not in Stack         |
|   | Polarization   | Horizontal           |
|   | Туре   | Other                |
|   | 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   | Omni-<br>Directional |
|   | ERP: (Effective Radiated Power)                                  | 1000.0 kW            |

| Manufacturer |                    |
|--------------|--------------------|
| Model        | TFU-24JTH-<br>R-04 |
| Year         | 2006               |

## **New Antenna Costs**

| Section                 | Question   | Response          |
|-------------------------|--|-------------------|
| New Antenna Description | Use  | Primary<br>(Main) |
|                         | Description of Use   | N/A               |
|                         | Change Type  | Purchase<br>New   |
|                         | Is this a request for upgraded equipment?                            | Yes               |
|                         | 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             | Class  | Full Power        |
| Manufacturer and Types  | Mounting   | Top Mount         |
|                         | Antenna position in stack  | Not in Stack      |
|                         | Polarization   | Elliptical        |
|                         | Туре   | Broadband<br>Slot |
|                         | Number of Stations Supported   | 1                 |
|                         | Number of Panels/Bays  | 18                |
|                         | Lower Limit  | 470.00 MHz        |
|                         | Upper Limit  | 698.00 MHz        |
|                         | Design power capacity in use   | 100.0 %           |
|                         | Other Antenna Type   | N/A               |
|                         | ERP: (Effective Radiated Power)                                      | 545.0 kW          |
|                         | Manufacturer   |                   |

| Model                         | TFU18-JTT<br>/VP-R04  |
|-------------------------------|---|
| Year                          | 2017  |
| Justification for New Antenna | Existing antenna is not tunable to new channel assignment. Adding Vertical component to Primary antenna and do not know of any upgraded pricing as of time of filing. |

# **Other Antenna Costs**

| Section                        | Question  | Response            |
|--------------------------------|---|---------------------|
| Combiner for Shared<br>Antenna | Do you need a Combiner for a Shared Antenna?                          | No                  |
|                                | Туре  |                     |
|                                | 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?  | Broadband           |
|                                | 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? | Yes |
| Sweep Test               | Do you require the sweep testing of transmission line and antenna?  | Yes |

#### **Other Antenna Cost Not Listed**

#### Interim Antenna

# **New Antenna Costs**

| Section                 | Question   | Response          |
|-------------------------|--|-------------------|
| New Antenna Description | Use  | Interim           |
|                         | Description of Use   | N/A               |
|                         | Change Type  | Purchase<br>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             | Class  | Full Power        |
| Manufacturer and Type   | Mounting   | Side Mount        |
|                         | Antenna position in stack  | Not in Stack      |
|                         | Polarization   | Horizontal        |
|                         | Туре   | Broadband<br>Slot |
|                         | Number of Stations Supported   | 1                 |
|                         | Number of Panels/Bays  | 8                 |
|                         | Lower Limit  | 470.00 MHz        |
|                         | Upper Limit  | 698.00 MHz        |
|                         | Design power capacity in use   | 100.0 %           |
|                         | Other Antenna Type   | N/A               |
|                         | ERP: (Effective Radiated Power)                                      | 300.0 kW          |
|                         | Manufacturer   |                   |
|                         | Model  | TFU-8WB-R         |
|                         | Year   | 2017              |

| Justification for New Antenna | Interim         |
|-------------------------------|-----------------|
|                               | facility is     |
|                               | required to     |
|                               | avoid           |
|                               | prolonged       |
|                               | _               |
|                               | period of       |
|                               | station         |
|                               | silence         |
|                               | during          |
|                               | transition,     |
|                               | and station     |
|                               | currently has   |
|                               | no aux          |
|                               | facility to use |
|                               | for interim     |
|                               | operation.      |
|                               | Extended        |
|                               | silent period   |
|                               | during          |
|                               | transition to   |
|                               | new channel     |
|                               | is              |
|                               | unreasonable.   |
|                               | annousenable.   |

## 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?  | В             |
|                          | Feed Line Size  | 4 1/16 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** 

| Transmission <sup>Seffien</sup>    | Question  | Response |
|------------------------------------|---|----------|
| Transmission Line Related Expenses | Do you have transmission line related expenses? | Yes      |

# Primary Transmission Line

# **Existing Transmission Line**

| n Line<br>Section                      | Question   | Response            |
|--|--|---------------------|
| Existing Transmission Line Description | Type of change   | Purchase<br>New     |
|  | Use  | Primary<br>(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                  | Manufacturer   |                     |
| Line Manufacturer and Type             | Туре   | 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   | 176 feet<br>per run |

# Primary Transmission<sub>s</sub>

## **New Transmission Line**

| Section                        | Question                                  | Response  |
|--------------------------------|---|---|
| New Transmission Line<br>Costs | Use                                       | Primary<br>(Main)   |
|                                | Description of Use                        | N/A   |
|                                | Change Type                               | Purchase<br>New   |
|                                | Is this a request for upgraded equipment? | No  |
|                                | Туре                                      | 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                                    | 176 feet<br>per run   |
|                                | Justification for New Transmission Line   | Existing line will not operate on new channel assignment per Dielectric sweep test. |

# Primary

# Other Transmission Line Expenses Not Listed

| Transmission | Name                                       | Description   |
|--------------|--|---|
|              | Disconnect existing Interior RF components | Disconnect interior RF transmission line and filters from existing configuration and move within the building to make way for new facilities. |

# New Transmission Line

# Interim Transmission

| n Line<br>Section              | Question                                | Response  |
|--------------------------------|---|---|
| New Transmission Line<br>Costs | Use                                     | Interim   |
|                                | Description of Use                      | N/A   |
|                                | Change Type                             | Purchase<br>New   |
|                                | Туре                                    | Flexible Air  |
|                                | Diameter                                | 4 inches  |
|                                | Segment Length                          | N/A   |
|                                | Other Segment Length                    |   |
|                                | Number of parallel runs                 | 1   |
|                                | Length                                  | 200 feet per<br>run   |
|                                | Justification for New Transmission Line | Interim facility is required to avoid prolonged period of station silence during transition, and station currently has no aux facility to use for interim operation. Extended silent period during transition to new channel is unreasonable. |

**Other Transmission Line Expenses Not Listed** 

Transmission loine tion not provided.

# Tower Equipment And Rigging Costs

| Section                                     | Question  | Response |
|---|---|----------|
| Tower Equipment or<br>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<br>Existing     |
|   | Tower Use   | Primary<br>(Main)      |
|   | Description of Use                                      | N/A                    |
|   | Ownership   | Owned                  |
|   | Is this tower consider Complex?                         | Terrain<br>Constrained |
|   | 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?                          | Unknown                |
| Existing Tower Structure                            | Do you have a tower registration number?                | Yes                    |
| Registration  | ASR Number  | 1254053                |
| Coordinates (NAD83 ( North American Datum of 1983)) | Latitude (NAD83)  | 37° 15'<br>21.1" N-    |
|   | Longitude (NAD83)                                       | 081° 10'<br>53.3" W-   |
|   | Overall Structure Height                                | 166.66 feet            |
|   | Support Structure Height                                | 124.34 feet            |

| Ground Elevation Above Mean Sea Level (AMSL) | 3669.25 feet   |
|--|--|
| Structure Type                               | TOWER -<br>Free<br>Standing or<br>Guyed<br>Structure |
| Tower Owner                                  | WVVA<br>Television,<br>Inc.                          |
| Date Constructed                             | 09/18/2006   |

## 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:     | Minor<br>Reinforcements<br>needed |

#### Primary Tower

# **Tower Rigging Costs**

| Section                         | Question                          | Response            |
|---------------------------------|-----------------------------------|---------------------|
| Tower Rigging Costs             | Complex Tower                     | Terrain constrained |
| Helicopter Services<br>Required | Are helicopter services required? | No                  |

# Primary Tower

# Other Tower Expenses Not Listed

Outside Professional

| Section  | Question   | Response  |
|--|--|---|
| Services Costs<br>Outside Project<br>Management Services | Do you require outside project management services?                          | Yes   |
|  | Number of Hours  | 934   |
|  | Explanation  | Scope & significance of project (QMI has multiple stations repacked) require outside management services to augment existing internal personnel to assist turnkey management of and ensure timely and safe execution of channel relocation. |
| Outside RF consulting<br>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   | 4   |
|                                       | Do you have Distributed Transmission System engineering services?                          | N/A |
|                                       | Critical Facility  | N/A |
|                                       | Terrain-Shielded Facility  | N/A |
| Attorney and Other Outside Consulting | Prepare and file Form FCC Construction Permit Application                                  | Yes |
| Services                              | 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   | 4   |
|                                       | 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   | Yes |
|                                       | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| RF Field Engineering<br>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

# Other Professional Services Expenses Not Listed

| I Services Costs    | Description  |
|---------------------|--|
| Quarterly reporting | Preparation and submittal of the FCC required quarterly report 387 by PM and attorney. |

# 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<br>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   | Yes      |
|                                 | FCC Special Temporary Authority Application  | Yes      |
| Other Miscellaneous<br>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 Not Listed

**Expenses** 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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification  | Actual<br>Cost | Actual Cost<br>Justification |
|---|--------------------------------|-------------------|---|----------------|------------------------------|
| Interim<br>Transmitter<br>UAXTE-12R44                           | \$532,600.00                   | \$506,300.00      |   | \$0.00         |                              |
| UHF inside RF system including switching                        | \$147,500.00                   | \$140,000.00      | N/A   | N/A            | N/A                          |
| 2" Rigid<br>Conduit and<br>Wiring (Cost<br>per foot)            | \$10,400.00                    | \$10,000.00       | N/A   | N/A            | N/A                          |
| Switchgear -<br>industrial 800<br>amp                           | \$38,200.00                    | \$36,300.00       | N/A   | N/A            | N/A                          |
| UHF - Air<br>Cooled Solid<br>State<br>Transmitter 10<br>- 12 kW | \$336,500.00                   | \$320,000.00      | N/A   | N/A            | N/A                          |
| Primary<br>Transmitter<br>ULXTE-72                              | \$1,730,100.00                 | \$1,647,800.00    |   | \$0.00         |                              |
| Site Survey -<br>TX   | \$25,000.00                    | \$25,000.00       | Site survey and report are required to be performed before the new transmitter and components installation plan can be finalized. | N/A            | N/A                          |

| Training   |                |                | training - offsite - 1 week in duration at mfg site.   |     |     |
|--|----------------|----------------|--|-----|-----|
| Switchgear -<br>industrial 800<br>amp                              | \$38,200.00    | \$36,300.00    | N/A  | N/A | N/A |
| Service<br>entrance 3<br>phase/800 amp<br>/208 volt                | \$14,400.00    | \$13,700.00    | N/A  | N/A | N/A |
| UHF - Liquid<br>Cooled Solid<br>State<br>Transmitter 35<br>- 50 kW | \$1,473,000.00 | \$1,400,000.00 | N/A  | N/A | N/A |
| Transformer 3<br>phase/480v -<br>300 KVA                           | \$36,800.00    | \$35,000.00    | N/A  | N/A | N/A |
| 2" Rigid<br>Conduit and<br>Wiring (Cost<br>per foot)               | \$10,400.00    | \$10,000.00    | N/A  | N/A | N/A |
| 25 Ton system  | \$91,500.00    | \$87,000.00    | N/A  | N/A | N/A |
| Disconnect<br>existing<br>Transmitter                              | \$20,000.00    | \$20,000.00    | Disconnect transmitter and components from existing configuration and move within building to make way for new facilities. | N/A | N/A |

| Securirty - Site | \$17,500.00    | \$17,500.00    | This site     | N/A    | N/A |
|------------------|----------------|----------------|---------------|--------|-----|
|                  |                |                | requires      |        |     |
|                  |                |                | security      |        |     |
|                  |                |                | once the      |        |     |
|                  |                |                | new           |        |     |
|                  |                |                | transmission  |        |     |
|                  |                |                | line and      |        |     |
|                  |                |                | equipment     |        |     |
|                  |                |                | arrive on     |        |     |
|                  |                |                | site to be    |        |     |
|                  |                |                | installed.    |        |     |
|                  |                |                | Estimated     |        |     |
|                  |                |                | length of 4-6 |        |     |
|                  |                |                | weeks.        |        |     |
| Sub-total        | \$2,262,700.00 | \$2,154,100.00 | N/A           | \$0.00 | N/A |
| Total for all    | \$3,705,184.00 | \$3,534,957.00 | N/A           | \$0.00 | N/A |
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# Components

# **Cost Information**

#### **Antennas**

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

| Description  | Predetermined<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Interim<br>Antenna TFU-<br>8WB-R   | \$235,590.00                   | \$223,800.00      |                                    | \$0.00         |                              |
| UHF - Lower<br>Power Side<br>Mount, One<br>station - 200-<br>500 kW,<br>horizontally<br>polarized    | \$189,500.00                   | \$180,000.00      | N/A                                | N/A            | N/A                          |
| Side mount<br>brackets for<br>high power<br>antennas (if<br>not included<br>in antenna<br>base cost) | \$23,150.00                    | \$22,000.00       | N/A                                | N/A            | N/A                          |
| Sweep test of existing antenna   | \$6,730.00                     | \$6,400.00        | N/A                                | N/A            | N/A                          |
| Elbow<br>complex,<br>broadband,<br>at antenna<br>input, per 4 1<br>/16. feedline<br>(if needed)      | \$10,950.00                    | \$10,400.00       | N/A                                | N/A            | N/A                          |

| Pattern<br>scatter<br>analysis for<br>side mount<br>high/med<br>power<br>antennas (if<br>not included<br>in antenna<br>base cost) | \$5,260.00   | \$5,000.00   | N/A | N/A    | N/A |
|---|--------------|--------------|-----|--------|-----|
| Primary<br>Antenna<br>TFU18-JTT<br>/VP-R04  | \$205,690.00 | \$204,400.00 |     | \$0.00 |     |
| Pattern<br>scatter<br>analysis for<br>side mount<br>high/med<br>power<br>antennas (if<br>not included<br>in antenna<br>base cost) | \$5,260.00   | \$5,000.00   | N/A | N/A    | N/A |
| Elbow<br>complex,<br>broadband,<br>at antenna<br>input, per 6 1<br>/8. feedline (if<br>needed)                                    | \$13,700.00  | \$13,000.00  | N/A | N/A    | N/A |
| Sweep test of existing antenna  | \$6,730.00   | \$6,400.00   | N/A | N/A    | N/A |
|   |              |              |     |        |     |

| UHF - High            | \$180,000.00   | \$180,000.00   | per Catalog of | N/A    | N/A |
|-----------------------|----------------|----------------|----------------|--------|-----|
| Power Top             |                |                | costs for      |        |     |
| Mount One             |                |                | replacement    |        |     |
| Station               |                |                | antenna. 399   |        |     |
| antenna               |                |                | tool did not   |        |     |
| elliptically or       |                |                | populate a     |        |     |
| circularly            |                |                | standard       |        |     |
| polarized             |                |                | predetermined  |        |     |
|                       |                |                | cost. Not sure |        |     |
|                       |                |                | why this is a  |        |     |
|                       |                |                | standardized   |        |     |
|                       |                |                | antenna        |        |     |
|                       |                |                | replacement.   |        |     |
|                       |                |                | Lowered to     |        |     |
|                       |                |                | the Catalog    |        |     |
|                       |                |                | min \$180,000  |        |     |
| Sub-total             | \$441,280.00   | \$428,200.00   | N/A            | \$0.00 | N/A |
| Total for all systems | \$3,705,184.00 | \$3,534,957.00 | N/A            | \$0.00 | N/A |

# Components

# **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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification  | Actual<br>Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|---|----------------|------------------------------|
| Interim<br>Transmission<br>Line                          | \$14,800.00                    | \$14,000.00       |   | \$0.00         |                              |
| Flexible Air<br>Transmission<br>Line -<br>dielectric, 4" | \$14,800.00                    | \$14,000.00       | N/A   | N/A            | N/A                          |
| Primary<br>Transmission<br>Line                          | \$48,052.00                    | \$46,292.00       |   | \$0.00         |                              |
| Rigid<br>Transmission<br>Line - copper,<br>6 1/8"        | \$35,552.00                    | \$33,792.00       | N/A   | N/A            | N/A                          |
| Disconnect<br>existing Interior<br>RF components         | \$12,500.00                    | \$12,500.00       | Disconnect interior RF transmission line and filters from existing configuration and move within the building to make way for new facilities. | N/A            | N/A                          |
| Sub-total  | \$62,852.00                    | \$60,292.00       | N/A   | \$0.00         | N/A                          |
| Total for all systems                                    | \$3,705,184.00                 | \$3,534,957.00    | N/A   | \$0.00         | N/A                          |

## Components

# **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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Primary Tower<br>TOWER   | \$591,600.00                   | \$562,000.00      |                                    | \$0.00         |                              |
| Complex Tower<br>(includes, for<br>example, those<br>with<br>candelabras and<br>/or stacked<br>antennas) | \$421,000.00                   | \$400,000.00      | N/A                                | N/A            | N/A                          |
| Structural engineering tower load study for well documented tower  | \$12,600.00                    | \$12,000.00       | N/A                                | N/A            | N/A                          |
| Minor tower reinforcement /modifications   | \$158,000.00                   | \$150,000.00      | N/A                                | N/A            | N/A                          |
| Sub-total  | \$591,600.00                   | \$562,000.00      | N/A                                | \$0.00         | N/A                          |
| Total for all systems  | \$3,705,184.00                 | \$3,534,957.00    | N/A                                | \$0.00         | N/A                          |

## Components

# **Cost Information**

## **Outside Professional Services**

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

|  | Predetermined | Estimated    | Estimated<br>Cost  | Actual | Actual Cost   |
|--|---------------|--------------|--|--------|---------------|
| Description  | Cost Estimate | Cost         | Justification  |        | Justification |
| Outside<br>Professional<br>Services  | \$286,672.00  | \$270,850.00 |  | \$0.00 |               |
| Quarterly<br>reporting   | \$7,000.00    | \$7,000.00   | Preparation<br>and<br>submittal of<br>the FCC<br>required<br>quarterly<br>report 387<br>by PM and<br>attorney. | 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 request for Special Temporary Authorization                       | \$14,720.00   | \$14,000.00  | N/A  | N/A    | N/A           |
| Attorney Fees -<br>Prepare and File<br>FCC Form 2100<br>(main), License<br>to Cover<br>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         \$8,200.00         \$6,000.00         N/A         N/A         N/A           Prepare sequency Authorization         \$1,580.00         \$1,500.00         N/A         N/A         N/A           Prepare engineering section of FCC Form 2100 (main), License to Cover Application         \$147,572.00         \$140,100.00         N/A         N/A         N/A           Project management of the transition         \$3,155.00         \$3,000.00         N/A         N/A         N/A           Prepare engineering section of FCC Form 2100 (main), Construction Permit Application         \$2,630.00         \$2,500.00         N/A         N/A         N/A           Perform enimeering study for new channel assignment and antenna development         \$2,630.00         \$7,000.00         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 | Total for all systems   | \$3,705,184.00 | \$3,534,957.00 | N/A | \$0.00 | N/A |
|---|---|----------------|----------------|-----|--------|-----|
| for Special Temporary Authorization         Temporary Authorization           Prepare engineering section of FCC Form 2100 (main), License to Cover Application         \$1,580.00         \$1,500.00         N/A         N/A         N/A           Project management of the transition         \$147,572.00         \$140,100.00         N/A         N/A         N/A           Prepare engineering section of FCC Form 2100 (main), Construction Permit Application         \$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           Address transition timing and coordination issues w/ other stations and         \$2,630.00         \$2,500.00         N/A         N/A         N/A  | Sub-total   | \$286,672.00   | \$270,850.00   | N/A | \$0.00 | N/A |
| for Special Temporary Authorization         Temporary Authorization           Prepare engineering section of FCC Form 2100 (main), License to Cover Application         \$1,580.00         \$1,500.00         N/A         N/A         N/A           Project management of the transition         \$147,572.00         \$140,100.00         N/A         N/A         N/A           Prepare engineering section of FCC Form 2100 (main), Construction Permit Application         \$2,630.00         \$2,500.00         N/A         N/A         N/A           Perform engineering study for new channel assignment and antenna         \$7,360.00         \$7,000.00         N/A         N/A         N/A  | transition timing<br>and coordination<br>issues w/ other<br>stations and  | \$2,630.00     | \$2,500.00     | N/A | N/A    | N/A |
| for Special Temporary Authorization  Prepare \$1,580.00 \$1,500.00 N/A N/A N/A N/A engineering section of FCC Form 2100 (main), License to Cover Application  Project \$147,572.00 \$140,100.00 N/A N/A N/A N/A management of the transition  Prepare \$3,155.00 \$3,000.00 N/A N/A N/A N/A engineering section of FCC Form 2100 (main), Construction Permit Application  Prepare and or review reimbursement   | engineering<br>study for new<br>channel<br>assignment and<br>antenna      | \$7,360.00     | \$7,000.00     | N/A | N/A    | N/A |
| for Special Temporary Authorization  Prepare \$1,580.00 \$1,500.00 N/A N/A N/A engineering section of FCC Form 2100 (main), License to Cover Application  Project \$147,572.00 \$140,100.00 N/A N/A N/A management of the transition  Prepare \$3,155.00 \$3,000.00 N/A N/A N/A engineering section of FCC Form 2100 (main), Construction Permit  | review<br>reimbursement   | \$2,630.00     | \$2,500.00     | N/A | N/A    | N/A |
| for Special Temporary Authorization  Prepare \$1,580.00 \$1,500.00 N/A N/A N/A engineering section of FCC Form 2100 (main), License to Cover Application  Project \$147,572.00 \$140,100.00 N/A N/A N/A management of   | engineering section of FCC Form 2100 (main), Construction Permit          | \$3,155.00     | \$3,000.00     | N/A | N/A    | N/A |
| for Special Temporary Authorization  Prepare \$1,580.00 \$1,500.00 N/A N/A N/A engineering section of FCC Form 2100 (main), License to Cover  | management of   | \$147,572.00   | \$140,100.00   | N/A | N/A    | N/A |
| for Special Temporary   | engineering<br>section of FCC<br>Form 2100<br>(main), License<br>to Cover | \$1,580.00     | \$1,500.00     | N/A | N/A    | N/A |
| D   | Temporary   |                |                |     |        |     |

# Components

# **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<br>Cost | Estimated Cost<br>Justification   | Actual<br>Cost | Actual Cost<br>Justification |
|--|-----------------------------|-------------------|---|----------------|------------------------------|
| Other<br>Expenses  | \$60,080.00                 | \$59,515.00       |   | \$0.00         |                              |
| Develop and<br>air<br>announcement<br>of upcoming<br>channel<br>change | \$15,000.00                 | \$15,000.00       | Required FCC announcements and good will public relations must we upheld. The production airing and disseminating of these announcements are fundamental to our operations.                 | N/A            | N/A                          |
| Equipment<br>Storage   | \$10,000.00                 | \$10,000.00       | Expecting multiple staggered equipment deliveries from different vendors and need to store and stage new equipment prior to installation date. Anticipate from 6-24 months of storage time. | N/A            | N/A                          |
| Equipment Delivery and Handling Charges                                | \$8,000.00                  | \$8,000.00        | Transport, forklift rental and handling fees from staging area to transmitter site.   | N/A            | N/A                          |

| Disposal<br>Costs (for<br>equipment and<br>other waste,<br>net of any<br>salvage value) | \$10,000.00    | \$10,000.00    | Rent 40 yard<br>dumpster with<br>multiple<br>pickups.<br>Estimated 6-<br>months on site.<br>Potential<br>hazardous<br>waste<br>management<br>issues. | 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 |
| MVPD<br>Notification of<br>Channel<br>Change  | \$5,000.00     | \$5,000.00     | Required FCC notification.   | N/A    | N/A |
| DTV Medical<br>Facility<br>Notification   | \$11,550.00    | \$11,000.00    | N/A  | N/A    | N/A |
| Sub-total   | \$60,080.00    | \$59,515.00    | N/A  | \$0.00 | N/A |
| Total for all systems   | \$3,705,184.00 | \$3,534,957.00 | N/A  | \$0.00 | N/A |
|   |                |                |  |        |     |

# Components

# Cost Information

## **Grand Total**

|                       | Predetermined<br>Cost Estimate | Estimated Cost | Actual Cost |
|-----------------------|--------------------------------|----------------|-------------|
| Total for all systems | \$3,705,184.00                 | \$3,534,957.00 | \$0.00      |

| Reimbursem | envestialus  | Response |
|------------|--|----------|
|            | The facility has ceased operating on its preauction 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       |

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.
- 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.

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 abovenamed applicant for the Authorization(s) specified above. Brady
Dreasler
Corporate
Director of
Engineering

08/17/2017

**Attachments**