



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **66170** | Service: **DTV** | Call **KTIV** | Channel: **14 (UHF)** |  
ID: | Sign:  
File **0000027507**  
Number:  
FRN: **0018223693** | Date **07/10**  
Submitted: **/2017**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant   | Address   | Phone                | Email                         | Applicant Type                  |
|---|---|----------------------|-------------------------------|---------------------------------|
| <b>KTIV LICENSE, LLC</b><br>Doing Business As:<br>KTIV LICENSE, LLC | Brady<br>Dreasler<br>PO Box<br>909<br>QUINCY,<br>IL 62306<br>United<br>States | +1 (217)<br>223-5100 | bdreasler@quincymedia.<br>com | Limited<br>Liability<br>Company |

## 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              |
|---|--|-----------------------|--------------------|
| <b>Tony zumMallen</b><br><i>QCommunications</i> | Tony zumMallen<br>705B SE Melody LN #314<br>Lees Summit, MO 64063<br>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. | Yes  |
| Briefly describe transition plan   | To transition from ch41 to ch14 RF analysis indicates both the line and antenna can be modified to allow use on the new channel. An interim system of antenna, line and transmitter will be required for on air use 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                 |
|---|--|--------------------------|
| <b>Existing Transmitter<br/>Description</b>           | 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                      |
| <b>Existing Transmitter<br/>Manufacturer and Type</b> | Manufacturer   |                          |
|   | Model  | PowerCD                  |
|   | Year   | 2006                     |
|   | Type   | 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-80   |
|                 | Transmitter Type                          | Solid State  |
|                 | Solid State Cooling                       | Liquid Cooled  |
|                 | Solid State Power capacity                | 50 kW  |
|                 | Justification for New Transmitter         | IOT<br>Transmitter is<br>not tunable<br>per the<br>manufacturer.<br>Special<br>Case-<br>Channel 14 |

**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                                | 500.0 feet |
|                    | Other Electrical Service              | No         |

|  |   |              |
|--|---|--------------|
|  | Description   | N/A          |
| <b>HVAC Service</b>  | Does the replacement transmitter require HVAC Service?  | Yes          |
|  | Type  | Cooling Only |
|  | Size  | 50 tons      |
|  | Other Size  | N/A          |
| <b>Transmitter Building Addition/Modification or Leasehold Improvement</b> | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No           |
|  | Size  | N/A          |
| <b>Channel 14 Costs</b>  | 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  | 10           |

**Primary Transmitter**      **Other Transmitter Cost Not Listed**  
Information not provided.

**Interim  
Transmitter**

**New Transmitter Costs**

| Section         | Question                          | Response  |
|-----------------|-----------------------------------|---|
| New Transmitter | Use                               | Interim   |
|                 | Description of Use                | N/A   |
|                 | Change Type                       | Purchase  |
|                 | Manufacturer                      |   |
|                 | Model                             | ULXTE-30  |
|                 | Transmitter Type                  | Solid State   |
|                 | Solid State Cooling               | Liquid Cooled   |
|                 | Solid State Power capacity        | 20 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 |
|--------------------|---------------------------------------|----------|
| 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  | 500.0 feet   |
|  | Other Electrical Service  | No           |
|  | Description   | N/A          |
| <b>HVAC Service</b>  | Does the replacement transmitter require HVAC Service?  | Yes          |
|  | Type  | Cooling Only |
|  | Size  | 25 tons      |
|  | Other Size  | N/A          |
| <b>Transmitter Building Addition/Modification or Leasehold Improvement</b> | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No           |
|  | Size  | N/A          |
| <b>Channel 14 Costs</b>  | 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          |
| <b>Inside RF System</b>  | Is an additional interior RF system required to support this interim transmitter?             | Yes          |

**Interim 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           |
|---|--|--------------------|
| <b>Existing Antenna<br/>Description</b>           | 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?  | Yes                |
| <b>Existing Antenna<br/>Manufacturer and Type</b> | Class  | Full Power         |
|   | Mounting   | Top Mount          |
|   | Antenna position in stack  | Not in Stack       |
|   | Polarization   | Horizontal         |
|   | Type   | Slotted<br>Coaxial |
|   | Number of Stations Supported                                     | N/A                |
|   | Number of Panels   | N/A                |
|   | Design power capacity in use                                     | N/A                |
|   | Lower Limit  | N/A                |
|   | Upper Limit  | N/A                |
|   | Other Antenna Type   | N/A                |
|   | ERP: (Effective Radiated Power)<br>.....                         | 873.0 kW           |
|   |  |                    |

|              |                |
|--------------|----------------|
| Manufacturer |                |
| Model        | TFU-30JTH-R-04 |
| Year         | 2006           |

**Primary  
Antenna**

**New Antenna Costs**

| Section                                       | Question   | Response        |
|---|--|-----------------|
| <b>New Antenna Description</b>                | Use  | Primary (Main)  |
|   | Description of Use   | N/A             |
|   | Change Type  | Purchase New    |
|   | Is this a request for upgraded equipment?                            | No              |
|   | Ownership  | Owned           |
|   | Owner  | N/A             |
|   | Is antenna shared?   | No              |
|   | Is antenna directional?  | Yes             |
|   | Will antenna be located on or in close proximity to an antenna farm? | Yes             |
| <b>New Antenna<br/>Manufacturer and Types</b> | Class  | Full Power      |
|   | Mounting   | Top Mount       |
|   | Antenna position in stack  | Not in Stack    |
|   | Polarization   | Horizontal      |
|   | Type   | Broadband Panel |
|   | Number of Stations Supported   | 1               |
|   | Number of Panels/Bays  | 24              |
|   | 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)<br>.....                             | 873.0 kW        |
|   | Manufacturer   |                 |
|   | Model  | TFU-24GTH       |

|  |                               |  |
|--|-------------------------------|--|
|  | Year                          | 2017   |
|  | Justification for New Antenna | Required to operate on the new channel assignment. |

## Primary Antenna

### Other Antenna Costs

| Section                            | Question  | Response               |
|------------------------------------|---|------------------------|
| <b>Combiner for Shared Antenna</b> | Do you need a Combiner for a Shared Antenna?  | No                     |
|                                    | Type  |                        |
|                                    | Number of channels supported  | N/A                    |
|                                    | Frequencies of channels supported   | N/A                    |
|                                    | Frequency   | N/A                    |
|                                    | Do you need a combiner output splitter /switcher for dual feed lines?                                       | N/A                    |
| <b>Elbow Complex</b>               | Do you require the separate purchase of the Elbow Complex?  | Yes                    |
|                                    | Broadband or Single Channel?  | Broadband              |
|                                    | Feed Line Size  | 6 1/8 inches<br>inches |
| <b>Side Mount Brackets</b>         | Do you require the separate purchase of side mount brackets for a high power antenna?                       | Yes                    |
| <b>Pattern Scatter Analysis</b>    | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | Yes                    |
| <b>Sweep Test</b>                  | Do you require the sweep testing of transmission line and antenna?  | Yes                    |

**Primary  
Antenna**

**Other Antenna Cost Not Listed**  
Information not provided.

**Interim  
Antenna**

**New Antenna Costs**

| Section                                      | Question   | Response           |
|--|--|--------------------|
| <b>New Antenna Description</b>               | Use  | Interim            |
|  | Description of Use   | N/A                |
|  | Change Type  | Purchase<br>New    |
|  | Ownership  | Owned              |
|  | Owner  | N/A                |
|  | Is antenna shared?   | Yes                |
|  | Is antenna directional?  | Yes                |
|  | Will antenna be located on or in close proximity to an antenna farm? | Yes                |
| <b>New Antenna<br/>Manufacturer and Type</b> | Class  | Full Power         |
|  | Mounting   | Side Mount         |
|  | Antenna position in stack  | Not in Stack       |
|  | Polarization   | Elliptical         |
|  | Type   | Slotted<br>Coaxial |
|  | Number of Stations Supported   | N/A                |
|  | Number of Panels/Bays  | N/A                |
|  | Lower Limit  | N/A                |
|  | Upper Limit  | N/A                |
|  | Design power capacity in use   | N/A                |
|  | Other Antenna Type   | N/A                |
|  | ERP: (Effective Radiated Power)<br>.....                             | 300.0 kW           |
|  | Manufacturer   |                    |
|  | Model  | TFU-24WB-<br>1-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. Shared with KPTH and KMEG. |
|--|-------------------------------|---|

## Interim Antenna

### Other Antenna Costs

| Section                            | Question  | Response     |
|------------------------------------|---|--------------|
| <b>Combiner for Shared Antenna</b> | Do you need a Combiner for a Shared Antenna?                                | Yes          |
|                                    | Type  | New          |
|                                    | Number of channels supported  | 3            |
|                                    | Frequencies of channels supported   | RF channel   |
|                                    | Frequency   | N/A          |
|                                    | Do you need a combiner output splitter /switcher for dual feed lines?       | No           |
| <b>Elbow Complex</b>               | Do you require the separate purchase of the Elbow Complex?                  | Yes          |
|                                    | Broadband or Single Channel?  | B            |
|                                    | Feed Line Size  | 6 1/8 inches |
| <b>Side Mount Brackets</b>         | Do you require the separate purchase of side mount brackets for an antenna? | Yes          |

|                                 |   |     |
|---------------------------------|---|-----|
| <b>Pattern Scatter Analysis</b> | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No  |
| <b>Sweep Test</b>               | Do you require the sweep testing of transmission line and antenna?  | Yes |

**Enter a list of RF channel numbers.**

| RF Channel Number |
|-------------------|
| 32                |
| 14                |
| 30                |

**Interim  
Antenna**

**Other Antenna Cost Not Listed**  
Information not provided.



**Transmission Line**

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

**Primary**  
**Transmission Line**

**Existing Transmission Line**

| Section   | Question   | Response          |
|---|--|-------------------|
| <b>Existing Transmission Line Description</b>           | Type of change   | Purchase New      |
|   | Use  | Primary (Main)    |
|   | Description of Use   | N/A               |
|   | Ownership  | Owned             |
|   | Owner  | N/A               |
|   | Site   | N/A               |
|   | Is the existing transmission line shared with another station or stations? | No                |
|   | Is Transmission Line in operating condition?                               | Yes               |
| <b>Existing Transmission Line Manufacturer and Type</b> | Manufacturer   |                   |
|   | Type   | Rigid             |
|   | Diameter   | 7 3/16 inches     |
|   | Other Diameter   | N/A               |
|   | Segment Length   | 19 1/2 inches     |
|   | Other Segment Length   | N/A               |
|   | Number of parallel runs  | 1                 |
|   | Length   | 2298 feet per run |

Primary  
Transmission Line

New Transmission Line

| Section                     | Question                                  | Response   |
|-----------------------------|---|--|
| New Transmission Line Costs | Use                                       | Primary (Main)   |
|                             | Description of Use                        | N/A  |
|                             | Change Type                               | Purchase New   |
|                             | Is this a request for upgraded equipment? | No   |
|                             | Type                                      | Rigid  |
|                             | Diameter                                  | 7 3/16 inches  |
|                             | Other Diameter                            | N/A  |
|                             | Segment Length                            | 20 inches  |
|                             | Other Segment Length                      | N/A  |
|                             | Number of parallel runs                   | 1  |
|                             | Length                                    | 2140 feet per run  |
|                             | Justification for New Transmission Line   | Required to make the channel assignment relocation from CH41 to CH14 |

Primary  
Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

**Tower Equipment And Rigging Costs**

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

**Primary Tower**

**Existing Tower**

| Section   | Question  | Response          |
|---|---|-------------------|
| Existing Tower Description                          | Type of change  | Modify Existing   |
|   | Tower Use   | Primary (Main)    |
|   | Description of Use                                      | N/A               |
|   | Ownership   | Leased            |
|   | Is this tower consider Complex?                         | Candelabra        |
|   | Is this tower currently shared with any other stations? | Yes               |
|   | One or more FM, AM or TV radio broadcaster(s)           | Yes               |
|   | Others Types of Users                                   | No                |
|   | Is tower documented for structural analysis?            | Yes               |
|   | Is tower compliant with Rev G?                          | No                |
| Existing Tower Structure Registration               | Do you have a tower registration number?                | Yes               |
|   | ASR Number  | 1057963           |
| Coordinates (NAD83 ( North American Datum of 1983)) | Latitude (NAD83)  | 42° 35' 12.0" N-  |
|   | Longitude (NAD83)                                       | 096° 13' 19.0" W- |
|   | Overall Structure Height                                | 1987.84 feet      |
|   | Support Structure Height                                | 1847.09 feet      |
|   | Ground Elevation Above Mean Sea Level (AMSL)            | 1332.99 feet      |

|  |                  |  |
|--|------------------|--|
|  | Structure Type   | TOWER - Free Standing or Guyed Structure |
|  | Tower Owner      | Heartland Tower Company, L.L.C.          |
|  | Date Constructed | 02/22/2007                               |

**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 |
|-------------|-----------|---------|
| 77451       | KPTH      | DTV     |
| 39665       | KMEG      | DTV     |

## Primary Tower

### Tower Modification Costs

| Section              | Question   | Response                               |
|----------------------|--|--|
| Engineering Study    | Please what type of engineering study is required, if any: | Study needed for tower with candelabra |
| Tower Reinforcements | Please select whether tower reinforcements are needed:     | Major Reinforcements needed            |

## Primary Tower

### Tower Rigging Costs

| Section                      | Question                          | Response   |
|------------------------------|-----------------------------------|------------|
| Tower Rigging Costs          | Complex Tower                     | Candelabra |
| 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  |
|---|--|---|
| <b>Outside Project Management Services</b>        | Do you require outside project management services?                          | Yes   |
|   | Number of Hours  | 933   |
|   | 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. |
| <b>Outside RF consulting Engineering Services</b> | 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 |
| <b>Attorney and Other Outside Consulting Services</b> | Prepare and file Form FCC Construction Permit Application                                  | Yes |
|   | For Auxiliary Facility   | No  |
|   | For Main Facility  | Yes |
|   | Prepare and file Form FCC License to Cover Application                                     | Yes |
|   | For Auxiliary Facility   | No  |
|   | For Main Facility  | Yes |
|   | Prepare request for Special Temporary Authority  | Yes |
|   | Quantity   | 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                                 | Yes |
|   | Prepare or Review FCC Form 399 for Reimbursement   | Yes |
|   | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| <b>RF Field Engineering Services</b>                  | Comprehensive coverage verification via field study  | Yes |
|   |  |     |



|                                      |     |
|--------------------------------------|-----|
| RF exposure measurements             | No  |
| Additional Field Engineering Service | No  |
| Number of Days                       | N/A |
| Justification                        | N/A |

**Outside Professional Services Costs**      **Other Professional Services Expenses Not Listed**  
Is not provided.

## Other Expenses

| Section                             | Question   | Response |
|-------------------------------------|--|----------|
| <b>AM Pattern Disturbance</b>       | Is an Impact Study needed?   | No       |
|                                     | Is Remediation needed?   | No       |
| <b>Facility Expenses</b>            | 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      |
| <b>Permit and Filing Costs</b>      | Local Zoning   | No       |
|                                     | Non-zoning permits   | No       |
|                                     | BLM or NFS Coordination  | No       |
|                                     | FCC Construction Permit Minor Change   | Yes      |
|                                     | FCC License to Cover Application   | Yes      |
|                                     | FCC Special Temporary Authority Application  | Yes      |
| <b>Other Miscellaneous Expenses</b> | 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      |

|                       |   |
|-----------------------|---|
| <b>Other Expenses</b> | <b>Other Expenses Not Listed</b><br>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 |
|--|-----------------------------|----------------|------------------------------|---------------|---------------------------|
| <b>Interim Transmitter ULXTE-30</b>                      | <b>\$1,168,960.00</b>       | <b>\$0.00</b>  |                              | <b>\$0.00</b> |                           |
| 2" Rigid Conduit and Wiring (Cost per foot)              | \$13,000.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| Switchgear - industrial 800 amp                          | \$38,200.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW | \$684,000.00                | \$0.00         | N/A                          | N/A           | N/A                       |
| 25 Ton system  | \$91,500.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| RF Consulting Engineer                                   | \$5,260.00                  | \$0.00         | N/A                          | N/A           | N/A                       |
| Channel 14 Mask Filter                                   | \$189,500.00                | \$0.00         | N/A                          | N/A           | N/A                       |
| UHF inside RF system including switching                 | \$147,500.00                | \$0.00         | N/A                          | N/A           | N/A                       |
| <b>Primary Transmitter ULXTE-80</b>                      | <b>\$2,005,760.00</b>       | <b>\$0.00</b>  |                              | <b>\$0.00</b> |                           |
| 50 Ton system  | \$172,500.00                | \$0.00         | N/A                          | N/A           | N/A                       |
| Switchgear - industrial 800 amp                          | \$38,200.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| Service entrance 3 phase/800 amp /208 volt               | \$14,400.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| RF Consulting Engineer                                   | \$5,260.00                  | \$0.00         | N/A                          | N/A           | N/A                       |

|   |                |             |     |        |     |
|---|----------------|-------------|-----|--------|-----|
| 2" Rigid Conduit<br>and Wiring (Cost<br>per foot)               | \$13,000.00    | \$0.00      | N/A | N/A    | N/A |
| Transformer 3<br>phase/480v - 300<br>KVA                        | \$36,800.00    | \$0.00      | N/A | N/A    | N/A |
| UHF - Liquid<br>Cooled Solid State<br>Transmitter 35 - 50<br>kW | \$1,473,000.00 | \$0.00      | N/A | N/A    | N/A |
| Channel 14 Mask<br>Filter                                       | \$189,500.00   | \$0.00      | N/A | N/A    | N/A |
| Additional field<br>engineering time,<br>10-30 days             | \$63,100.00    | \$0.00      | N/A | N/A    | N/A |
| <b>Sub-total</b>  | \$3,174,720.00 | \$0.00      | N/A | \$0.00 | N/A |
| <b>Total for all<br/>systems</b>                                | \$5,630,854.00 | \$26,000.00 | N/A | \$0.00 | N/A |

## Components

Information not provided.

## Cost Information

### Antennas

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

| Description   | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost   | Actual Cost Justification |
|---|-----------------------------|----------------|------------------------------|---------------|---------------------------|
| <b>Interim Antenna TFU-24WB-1-R</b>   | <b>\$354,780.00</b>         | <b>\$0.00</b>  |                              | <b>\$0.00</b> |                           |
| Sweep test of existing antenna  | \$6,730.00                  | \$0.00         | N/A                          | N/A           | N/A                       |
| UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized | \$227,000.00                | \$0.00         | N/A                          | N/A           | N/A                       |
| New combiner, cost per channel (without antenna)  | \$84,200.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)                           | \$13,700.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| Side mount brackets for high power antennas (if not included in antenna base cost)                    | \$23,150.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| <b>Primary Antenna TFU-24GTH</b>  | <b>\$295,840.00</b>         | <b>\$0.00</b>  |                              | <b>\$0.00</b> |                           |
| UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized                 | \$247,000.00                | \$0.00         | N/A                          | N/A           | N/A                       |
| Sweep test of existing antenna  | \$6,730.00                  | \$0.00         | N/A                          | N/A           | N/A                       |

|  |                |             |     |        |     |
|--|----------------|-------------|-----|--------|-----|
| Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)                            | \$13,700.00    | \$0.00      | N/A | N/A    | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost)                     | \$23,150.00    | \$0.00      | N/A | N/A    | N/A |
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost) | \$5,260.00     | \$0.00      | N/A | N/A    | N/A |
| <b>Sub-total</b>   | \$650,620.00   | \$0.00      | N/A | \$0.00 | N/A |
| <b>Total for all systems</b>   | \$5,630,854.00 | \$26,000.00 | N/A | \$0.00 | N/A |

## Components

Information not provided.

Cost  
Information

Transmission Line

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

| Description                                      | Predetermined<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Primary<br>Transmission Line                     | \$620,600.00                   | \$0.00            |                                    | \$0.00         |                              |
| Rigid Transmission<br>Line - copper, 7 3<br>/16" | \$620,600.00                   | \$0.00            | N/A                                | N/A            | N/A                          |
| Sub-total  | \$620,600.00                   | \$0.00            | N/A                                | \$0.00         | N/A                          |
| Total for all<br>systems                         | \$5,630,854.00                 | \$26,000.00       | N/A                                | \$0.00         | N/A                          |

Components

Information not provided.



Cost  
Information

Tower Equipment and Rigging Costs

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

| Description   | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|----------------|------------------------------|-------------|---------------------------|
| Primary Tower TOWER   | \$862,000.00                | \$0.00         |                              | \$0.00      |                           |
| Structural engineering tower load study for a documented tower with candelabra        | \$20,000.00                 | \$0.00         | N/A                          | N/A         | N/A                       |
| Major tower reinforcement /modifications  | \$421,000.00                | \$0.00         | N/A                          | N/A         | N/A                       |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00                | \$0.00         | N/A                          | N/A         | N/A                       |
| Sub-total   | \$862,000.00                | \$0.00         | N/A                          | \$0.00      | N/A                       |
| Total for all systems   | \$5,630,854.00              | \$26,000.00    | N/A                          | \$0.00      | 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 |
|--|-----------------------------|----------------|------------------------------|---------------|---------------------------|
| <b>Outside Professional Services</b>   | <b>\$283,724.00</b>         | <b>\$0.00</b>  |                              | <b>\$0.00</b> |                           |
| Comprehensive coverage verification via field study, if needed                       | \$84,200.00                 | \$0.00         | N/A                          | N/A           | N/A                       |
| Project management of the transition   | \$147,414.00                | \$0.00         | N/A                          | N/A           | N/A                       |
| Prepare and or review reimbursement form   | \$2,630.00                  | \$0.00         | N/A                          | N/A           | N/A                       |
| Prepare request for Special Temporary Authorization                                  | \$8,200.00                  | \$0.00         | N/A                          | N/A           | N/A                       |
| Address transition timing and coordination issues w/ other stations and wireless     | \$2,630.00                  | \$0.00         | N/A                          | N/A           | N/A                       |
| Perform engineering study for new channel assignment and antenna development         | \$7,360.00                  | \$0.00         | N/A                          | N/A           | N/A                       |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00                  | \$0.00         | N/A                          | N/A           | N/A                       |

|  |                       |                    |            |               |            |
|--|-----------------------|--------------------|------------|---------------|------------|
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application      | \$1,580.00            | \$0.00             | N/A        | N/A           | N/A        |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00            | \$0.00             | N/A        | N/A           | N/A        |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application    | \$2,365.00            | \$0.00             | N/A        | N/A           | N/A        |
| Attorney Fees - Negotiation of lease and other matters for shared locations            | \$4,210.00            | \$0.00             | N/A        | N/A           | N/A        |
| Attorney Fees - Prepare and File request for Special Temporary Authorization           | \$14,720.00           | \$0.00             | N/A        | N/A           | N/A        |
| <b>Sub-total</b>   | <b>\$283,724.00</b>   | <b>\$0.00</b>      | <b>N/A</b> | <b>\$0.00</b> | <b>N/A</b> |
| <b>Total for all systems</b>   | <b>\$5,630,854.00</b> | <b>\$26,000.00</b> | <b>N/A</b> | <b>\$0.00</b> | <b>N/A</b> |

## Components

Information not provided.

## Cost Information

### Other Expenses

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

| Description   | Predetermined Cost Estimate | Estimated Cost     | Estimated Cost Justification  | Actual Cost   | Actual Cost Justification |
|---|-----------------------------|--------------------|---|---------------|---------------------------|
| <b>Other Expenses</b>                                     | <b>\$39,190.00</b>          | <b>\$26,000.00</b> |   | <b>\$0.00</b> |                           |
| DTV Medical Facility Notification                         | \$11,550.00                 | \$0.00             | N/A   | N/A           | N/A                       |
| FCC Filing Fees - Form 2100 minor change CP application   | \$1,110.00                  | \$0.00             | N/A   | N/A           | N/A                       |
| Equipment Storage   | <i>\$5,000.00</i>           | \$5,000.00         | 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                       |
| FCC Filing Fees - Form 2100 license to cover application  | \$335.00                    | \$0.00             | N/A   | N/A           | N/A                       |
| FCC Filing Fees - Special Temporary Authorization request | \$195.00                    | \$0.00             | N/A   | N/A           | N/A                       |

|  |                   |             |  |        |     |
|--|-------------------|-------------|--|--------|-----|
| Disposal Costs<br>(for equipment<br>and other waste,<br>net of any<br>salvage value) | <b>\$3,000.00</b> | \$3,000.00  | 4-6 yard<br>disposal bin<br>on site to<br>capture all<br>waste from on<br>site system<br>integration and<br>tower vendors. | N/A    | N/A |
| Equipment<br>Delivery and<br>Handling<br>Charges                                     | <b>\$8,000.00</b> | \$8,000.00  | Transport and<br>handling fees<br>from staging<br>area to<br>transmitter<br>site.  | N/A    | N/A |
| Develop and air<br>announcement<br>of upcoming<br>channel change                     | <b>\$5,000.00</b> | \$5,000.00  | Required FCC<br>announcement.  | N/A    | N/A |
| MVPD<br>Notification of<br>Channel Change  | <b>\$5,000.00</b> | \$5,000.00  | Required FCC<br>notifications.   | N/A    | N/A |
| <b>Sub-total</b>   | \$39,190.00       | \$26,000.00 | N/A  | \$0.00 | N/A |
| <b>Total for all<br/>systems</b>   | \$5,630,854.00    | \$26,000.00 | N/A  | \$0.00 | N/A |

## Components

Information not provided.

|                         |                              |                                    |                       |
|-------------------------|------------------------------|------------------------------------|-----------------------|
| <b>Cost Information</b> | <b>Grand Total</b>           |                                    |                       |
|                         |                              | <b>Predetermined Cost Estimate</b> | <b>Estimated Cost</b> |
|                         |                              |                                    | <b>Actual Cost</b>    |
|                         | <b>Total for all systems</b> | \$5,630,854.00                     | \$26,000.00           |
|                         |                              |                                    | \$0.00                |

|                             |  |                 |
|-----------------------------|--|-----------------|
| <b>Reimbursement Status</b> | <b>Question</b>  | <b>Response</b> |
|                             | 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 |
|---------------|--|---|----------|
|               | <b>Submission of Estimated Expenses Statements</b> | <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"> <li>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.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>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.</li> </ol> |          |

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><b>Tony zumMallen</b><br/> <i>President,</i><br/> <i>QCommunications</i></p> <p>07/10/2017</p> |

## Attachments

Information not provided.