



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **36912** | Service: **DTV** | Call **WSAZ-TV** | Channel: **22 (UHF)** |  
ID:  
File **0000028915** | Sign:  
Number:  
FRN: **0018223693** | Date **08/23**  
Submitted: **/2017**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant  | Address  | Phone             | Email                   | Applicant Type            |
|--|--|-------------------|-------------------------|---------------------------|
| <b>GRAY TELEVISION LICENSEE, LLC</b><br>Doing Business As: GRAY TELEVISION LICENSEE, LLC | Robert Folliard<br>4370 Peachtree Road<br>Atlanta, GA 30319<br>United States | +1 (202) 750-1585 | Robert.Folliard@gray.tv | Limited Liability 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>Samuel Hariton</b><br><i>Widely, inc.</i> | 4031 University Dr<br>Suite 100<br>Fairfax, VA 22030<br>United States | +1 (339) 222-8107 | sam.hariton@widely.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   |  | WSAZ will be replacing its main transmission line, antenna, and transmitter, its aux antenna. The station will be installing a broadband main antenna and broadband interim antenna to be shared with WQCW. The station will also be installing an interim XMTR |

**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  | DCX-<br>Millenium        |
|   | Year   | 2003                     |
|   | Type   | Inductive<br>Output Tube |
|   | IOT Power Type   | Three                    |
|   | Power Capacity   | 60 kW                    |

**Primary  
Transmitter**

**New Transmitter Costs**

| Section         | Question                                  | Response                               |
|-----------------|---|--|
| New Transmitter | Use                                       | Primary (Main)                         |
|                 | Change Type                               | Purchase New                           |
|                 | Is this a request for upgraded equipment? | Yes                                    |
|                 | Manufacturer                              |  |
|                 | Model                                     | ULXTE-90                               |
|                 | Transmitter Type                          | Solid State                            |
|                 | Solid State Cooling                       | Liquid Cooled                          |
|                 | Solid State Power capacity                | 56.4 kW                                |
|                 | Justification for New Transmitter         | Existing transmitter cannot be retuned |

**Primary  
Transmitter**

**Other Transmitter Costs**

| Section            | Question                              | Response   |
|--------------------|---------------------------------------|------------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No         |
|                    | Switchgear (industrial 800 amp)       | No         |
|                    | Transformer (480V)                    | Yes        |
|                    | Power                                 | 500 kVA    |
|                    | Rigid Conduit and Wiring              | Yes        |
|                    | Size                                  | 4 inches   |
|                    | Length                                | 200.0 feet |
|                    | Other Electrical Service              | Yes        |
|                    |                                       |            |

|  |   |   |
|--|---|---|
|  | Description   | The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors. |
| <b>HVAC Service</b>  | Does the replacement transmitter require HVAC Service?  | No  |
|  | Type  | N/A   |
|  | Size  | N/A   |
|  | 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   |

**Primary Transmitter**

**Other Transmitter Cost Not Listed**

| Name                           | Description                                 |
|--------------------------------|---|
| <b>BGS</b>                     | Burk Transmitter Remote WSAZ                |
| <b>Pad for Heat Exchangers</b> | Pad for Heat Exchangers behind new Building |

|   |  |
|---|--|
| <b>Ice Bridge Building Interconnect</b> | Ice Bridge for interconnection between buildings |
|---|--|

**Interim  
Transmitter**

**New Transmitter Costs**

| Section                | Question                          | Response  |
|------------------------|-----------------------------------|---|
| <b>New Transmitter</b> | 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        | 19.2 kW   |
|                        | Justification for New Transmitter | Interim transmitter needed to broadcast during the transition |

**Interim  
Transmitter**

**Other Transmitter Costs**

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

|  |   |  |
|--|---|--|
|  | Description   | The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractor. |
| <b>HVAC Service</b>  | Does the replacement transmitter require HVAC Service?  | Yes  |
|  | Type  | Cooling Only   |
|  | Size  | 15 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?             | No   |

**Interim  
Transmitter**

**Other Transmitter Cost Not Listed**

| Name  | Description                              |
|---|--|
| <b>Waveguide Switch for Interim</b>         | UHF Inside RF System including switching |
| <b>Tower to interim building ice bridge</b> | Tower to interim building ice bridge     |



|                            |   |
|----------------------------|---|
| <b>Site Prep</b>           | Site prep for Construction                        |
| <b>Building Renovation</b> | Renovate OLD building to install Interim facility |

**Antennas**

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

**Auxiliary  
Antenna****Existing Antenna Information**

| Section   | Question   | Response              |
|---|--|-----------------------|
| <b>Existing Antenna<br/>Description</b>           | Type of change   | Purchase<br>New       |
|   | Antenna Use  | Auxiliary<br>(Backup) |
|   | Description of Use   | Backup<br>Antenna     |
|   | Ownership  | Owned                 |
|   | Owner  | N/A                   |
|   | Site   | N/A                   |
|   | Is the existing antenna shared with another station or stations? | No                    |
|   | Is the existing antenna directional?                             | No                    |
|   | Is antenna in operating condition?                               | Yes                   |
|   | Is antenna located on or in close proximity to an antenna farm?  | No                    |
| <b>Existing Antenna<br/>Manufacturer and Type</b> | Class  | Full Power            |
|   | Mounting   | Side 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)                                  | 724.0 kW              |

|              |                       |
|--------------|-----------------------|
| Manufacturer |                       |
| Model        | TFU-<br>20DSC-R<br>04 |
| Year         | 2002                  |

## Auxiliary Antenna

### New Antenna Costs

| Section                               | Question   | Response              |
|---------------------------------------|--|-----------------------|
| New Antenna Description               | Use  | Auxiliary<br>(Backup) |
|                                       | Description of Use   | Backup<br>Antenna     |
|                                       | Change Type  | Purchase<br>New       |
|                                       | Is this a request for upgraded equipment?                            | Yes                   |
|                                       | Ownership  | Owned                 |
|                                       | Owner  | N/A                   |
|                                       | Is antenna shared?   | Yes                   |
|                                       | Is antenna directional?  | No                    |
|                                       | Will antenna be located on or in close proximity to an antenna farm? | No                    |
| New Antenna<br>Manufacturer and Types | Class  | Full Power            |
|                                       | Mounting   | Side Mount            |
|                                       | Antenna position in stack  | Not in Stack          |
|                                       | Polarization   | Horizontal            |
|                                       | Type   | Broadband<br>Panel    |
|                                       | Number of Stations Supported   | 2                     |
|                                       | Number of Panels/Bays  | 2                     |
|                                       | Lower Limit  | 476.00 MHz            |
|                                       | Upper Limit  | 530.00 MHz            |
|                                       | Design power capacity in use   | 100.0 %               |
|                                       | Other Antenna Type   | N/A                   |
|                                       | ERP: (Effective Radiated Power)<br>.....                             | 530.0 kW              |
|                                       | Manufacturer   |                       |
|                                       |  |                       |

|  |                               |                                     |
|--|-------------------------------|-------------------------------------|
|  | Model                         | TFU-24WB<br>C160                    |
|  | Year                          | 2017                                |
|  | Justification for New Antenna | Needed for<br>interim<br>operations |

## Auxiliary 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  | 2                               |
|                                    | Frequencies of channels supported   | Upper and<br>lower<br>frequency |
|                                    | Frequency   | 476.0 MHz<br>- 530.0 MHz        |
|                                    | 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?  | Broadband                       |
|                                    | Feed Line Size  | 6 1/8<br>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? | No                              |
| <b>Sweep Test</b>                  | Do you require the sweep testing of transmission line and antenna?  | Yes                             |

**Auxiliary  
Antenna**

**Other Antenna Cost Not Listed**

| Name       | Description  |
|------------|--|
| Ice Shield | Ice Shield over Coax into old Building for interim |

**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?  | No                 |
| <b>Existing Antenna<br/>Manufacturer and Type</b> | Class  | Full Power         |
|   | Mounting   | Top Mount          |
|   | Antenna position in stack  | Not in Stack       |
|   | Polarization   | Elliptical         |
|   | 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>.....                         | 595.0 kW           |
|   |  |                    |



|              |                               |
|--------------|-------------------------------|
| Manufacturer |                               |
| Model        | ATW28H3-<br>ETO-23H<br>Trasar |
| Year         | 2010                          |

Primary  
Antenna

New Antenna Costs

| Section                            | Question   | Response        |
|------------------------------------|--|-----------------|
| New Antenna Description            | Use  | Primary (Main)  |
|                                    | Description of Use   | N/A             |
|                                    | Change Type  | Purchase New    |
|                                    | Is this a request for upgraded equipment?                            | Yes             |
|                                    | Ownership  | Owned           |
|                                    | Owner  | N/A             |
|                                    | Is antenna shared?   | Yes             |
|                                    | Is antenna directional?  | No              |
|                                    | Will antenna be located on or in close proximity to an antenna farm? | No              |
| New Antenna Manufacturer and Types | Class  | Full Power      |
|                                    | Mounting   | Top Mount       |
|                                    | Antenna position in stack  | Not in Stack    |
|                                    | Polarization   | Elliptical      |
|                                    | Type   | Broadband Panel |
|                                    | Number of Stations Supported   | 2               |
|                                    | Number of Panels/Bays  | 64              |
|                                    | 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>.....                             | 2000.0 kW       |
|                                    | Manufacturer   |                 |
|                                    |  |                 |

|                               |  |
|-------------------------------|--|
| Model                         | UHF<br>16B4P-elli-<br>omni-90kw                                    |
| Year                          | 2018   |
| Justification for New Antenna | Main<br>antenna<br>cannot be<br>retuned,<br>combining<br>with WQCW |

## Primary 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  | 2                               |
|                                    | Frequencies of channels supported   | Upper and<br>lower<br>frequency |
|                                    | Frequency   | 470.0 MHz<br>- 698.0 MHz        |
|                                    | 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?  | Broadband                       |
|                                    | Feed Line Size  | 8 3/16<br>inches<br>inches      |
| <b>Side Mount Brackets</b>         | Do you require the separate purchase of side mount brackets for a high power antenna?                       | No                              |
| <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 |
|-------------------|--|-----|

**Primary  
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      |

**Auxiliary**      **Existing Transmission Line**  
**Transmission Line**

| Section   | Question   | Response           |
|---|--|--------------------|
| <b>Existing Transmission Line Description</b>           | Type of change   | Purchase New       |
|   | Use  | Auxiliary (Backup) |
|   | Description of Use   | Backup             |
|   | 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   | 6 1/8 inches       |
|   | Other Diameter   | N/A                |
|   | Segment Length   | 20 inches          |
|   | Other Segment Length   | N/A                |
|   | Number of parallel runs  | 1                  |
|   | Length   | 970 feet per run   |

**Auxiliary**      **New Transmission Line**  
**Transmission Line**      **Section**

| Section                            | Question                                  | Response                        |
|------------------------------------|---|---------------------------------|
| <b>New Transmission Line Costs</b> | Use                                       | Auxiliary (Backup)              |
|                                    | Description of Use                        | Backup and Interim              |
|                                    | Change Type                               | Purchase New                    |
|                                    | Is this a request for upgraded equipment? | Yes                             |
|                                    | Type                                      | Rigid                           |
|                                    | Diameter                                  | 6 1/8 inches                    |
|                                    | Other Diameter                            | N/A                             |
|                                    | Segment Length                            | Broadband                       |
|                                    | Other Segment Length                      | N/A                             |
|                                    | Number of parallel runs                   | 1                               |
|                                    | Length                                    | 960 feet per run                |
|                                    | Justification for New Transmission Line   | Needed for interim broadcasting |

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

Information not provided.

**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   | 6 1/8 inches      |
|   | Other Diameter   | N/A               |
|   | Segment Length   | 20 inches         |
|   | Other Segment Length   | N/A               |
|   | Number of parallel runs  | 1                 |
|   | Length   | 1022 feet per run |



**Primary** **New Transmission Line**  
**Transmission Line**

| Section                            | Question                                  | Response   |
|------------------------------------|---|--|
| <b>New Transmission Line Costs</b> | Use                                       | Primary (Main)   |
|                                    | Description of Use                        | N/A  |
|                                    | Change Type                               | Purchase New   |
|                                    | Is this a request for upgraded equipment? | No   |
|                                    | Type                                      | Rigid  |
|                                    | Diameter                                  | 8 3/16 inches  |
|                                    | Other Diameter                            | N/A  |
|                                    | Segment Length                            | Broadband  |
|                                    | Other Segment Length                      | N/A  |
|                                    | Number of parallel runs                   | 1  |
|                                    | Length                                    | 1022 feet per run  |
|                                    | Justification for New Transmission Line   | The current line will not support the combined RF power for two full power transmitters. |

**Primary** **Other Transmission Line Expenses Not Listed**  
**Transmission Line**

Information not provided.

**Tower  
Equipment  
And  
Rigging  
Costs**

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

**Primary  
Tower**

**Existing Tower**

| Section  | Question  | Response          |
|--|---|-------------------|
| Existing Tower Description                         | Type of change  | Modify Existing   |
|  | Tower Use   | Primary (Main)    |
|  | Description of Use                                      | N/A               |
|  | Ownership   | Owned             |
|  | Is this tower consider Complex?                         | No                |
|  | Is this tower currently shared with any other stations? | No                |
|  | One or more FM, AM or TV radio broadcaster(s)           | N/A               |
|  | Others Types of Users                                   | N/A               |
|  | Is tower documented for structural analysis?            | Yes               |
|  | Is tower compliant with Rev G?                          | Yes               |
| Existing Tower Structure Registration              | Do you have a tower registration number?                | Yes               |
|  | ASR Number  | 1035121           |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83)  | 38° 30' 36.3" N-  |
|  | Longitude (NAD83)                                       | 082° 13' 09.5" W- |
|  | Overall Structure Height                                | 1029.84 feet      |
|  | Support Structure Height                                | 966.20 feet       |
|  | Ground Elevation Above Mean Sea Level (AMSL)            | 1011.14 feet      |
|  |   |                   |

|                  |   |
|------------------|---|
| Structure Type   | GTOWER -<br>Guyed<br>Structure Used<br>for<br>Communication<br>Purposes |
| Tower Owner      | Gray Television<br>Group, Inc.  |
| Date Constructed | 10/27/2014  |

**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:     | Major Reinforcements needed       |

**Primary  
Tower**

**Tower Rigging Costs**

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

**Primary  
Tower**

**Other Tower Expenses Not Listed**

| Name          | Description                |
|---------------|----------------------------|
| Tower Mapping | Mapping of existing tower. |

**Outside  
Professional**

| Section   | Question   | Response          |
|---|--|-------------------|
| <b>Services Costs<br/>Outside Project<br/>Management Services</b> | Do you require outside project management services?                          | Yes               |
|   | Number of Hours  | 900               |
|   | Explanation  | Strategic Support |
| <b>Outside RF consulting<br/>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   | Yes               |
|   | For Main Facility  | Yes               |
|   | Prepare engineering section of Form FCC License to Cover Application         | Yes               |
|   | For Auxiliary Facility   | Yes               |
|   | For Main Facility  | Yes               |
|   | Prepare request for Special Temporary Authority                              | Yes               |
|   | Quantity   | 1                 |
|   | Do you have Distributed Transmission System engineering services?            | N/A               |
|   | Critical Facility  | N/A               |
|   | Terrain-Shielded Facility  | N/A               |
| <b>Attorney and Other<br/>Outside Consulting<br/>Services</b>     | Prepare and file Form FCC Construction Permit Application                    | Yes               |
|   | For Auxiliary Facility   | Yes               |
|   | For Main Facility  | Yes               |
|   | Prepare and file Form FCC License to Cover Application                       | Yes               |
|   | For Auxiliary Facility   | Yes               |
|   | For Main Facility  | Yes               |

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

**Outside Professional Services Costs**      **Other Professional Services Expenses Not Listed**

If wireless 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   | Yes      |
|                                     | BLM or NFS Coordination  | No       |
|                                     | FCC Construction Permit Minor Change   | No       |
|                                     | 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      |

**Other  
Expenses**

**Other Expenses Not Listed**

| Name         |  | Description                          |
|--------------|--|--------------------------------------|
| Tree Removal |  | Removal of Trees for Tagline Rigging |
| Security     |  | Security for Site 60 Days            |

## 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 |
|--------------------------------------|-----------------------------|----------------|--|-------------|---------------------------|
| Interim Transmitter ULXTE-30         | \$875,989.55                | \$719,213.09   |  | \$0.00      |                           |
| 15 Ton system                        | \$88,400.00                 | \$53,000.00    | N/A  | N/A         | N/A                       |
| Building Renovation                  | <i>\$34,072.00</i>          | \$34,072.00    | N/A  | N/A         | N/A                       |
| Site Prep                            | <i>\$10,600.00</i>          | \$10,600.00    | N/A  | N/A         | N/A                       |
| Tower to interim building ice bridge | <i>\$6,917.55</i>           | \$6,917.55     | See attached Steel Products and Manufacturing quote #003 for Ice Bridge between tower and analog transmitter building. | N/A         | N/A                       |
| Waveguide Switch for Interim         | <i>\$50,000.00</i>          | \$50,000.00    | N/A  | N/A         | N/A                       |



|  |                       |                       |                   |               |     |
|--|-----------------------|-----------------------|-------------------|---------------|-----|
| Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractor. | \$2,000.00            | \$2,000.00            | N/A               | N/A           | N/A |
| UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW   | \$684,000.00          | \$562,623.54          | N/A               | N/A           | N/A |
| <b>Primary Transmitter ULXTE-90</b>  | <b>\$2,009,012.00</b> | <b>\$1,640,335.32</b> |                   | <b>\$0.00</b> |     |
| UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW   | \$1,788,000.00        | \$1,422,723.32        | Quote GA-00023867 | N/A           | N/A |
| Transformer 3 phase/480v - 500 KVA   | \$48,400.00           | \$46,000.00           | N/A               | N/A           | N/A |
| 4" Rigid Conduit and Wiring (Cost per foot)  | \$20,200.00           | \$19,200.00           | N/A               | N/A           | N/A |

|   |                    |                |  |        |     |
|---|--------------------|----------------|--|--------|-----|
| Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors. | <b>\$80,000.00</b> | \$80,000.00    | Whitt-Meadows quote  | N/A    | N/A |
| BGS   | <b>\$2,838.00</b>  | \$2,838.00     | See attached BGS quote   | N/A    | N/A |
| Pad for Heat Exchangers   | <b>\$59,555.00</b> | \$59,555.00    | See Maynard C. Smith Construction Co., Inc. quote This is half the cost, other half paid by WQCW | N/A    | N/A |
| Ice Bridge Building Interconnect  | <b>\$10,019.00</b> | \$10,019.00    | This is half the cost, other half paid by WQCW   | N/A    | N/A |
| <b>Sub-total</b>  | \$2,885,001.55     | \$2,359,548.41 | N/A  | \$0.00 | N/A |
| <b>Total for all systems</b>  | \$5,657,268.55     | \$4,268,646.56 | 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>Primary Antenna UHF 16B4P-elli-omni-90kw</b>   | <b>\$877,880.00</b>         | <b>\$427,200.00</b> |                              | <b>\$0.00</b> |                           |
| Sweep test of existing antenna  | \$6,730.00                  | \$3,200.00          | N/A                          | N/A           | N/A                       |
| New combiner, cost per channel (without antenna)  | \$84,200.00                 | \$50,000.00         | WSAZ's half of the cost      | N/A           | N/A                       |
| UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, elliptically or circularly polarized | \$768,000.00                | \$365,000.00        | WSAZ's half of the cost      | N/A           | N/A                       |
| Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)  | \$18,950.00                 | \$9,000.00          | WSAZ's half of the cost      | N/A           | N/A                       |
| <b>Auxiliary Antenna TFU-24WB C160</b>  | <b>\$235,240.00</b>         | <b>\$203,160.00</b> |                              | <b>\$0.00</b> |                           |
| UHF – Broadband Panel, Side Mount Auxiliary /Interim, 530 horizontally polarized                                    | <i>\$90,500.00</i>          | \$90,500.00         | WSAZ's half of the cost      | N/A           | N/A                       |

|  |                    |                |                         |        |     |
|--|--------------------|----------------|-------------------------|--------|-----|
| Sweep test of existing antenna   | \$6,730.00         | \$3,200.00     | WSAZ's half of the cost | N/A    | N/A |
| Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)        | \$13,700.00        | \$6,500.00     | WSAZ's half of the cost | N/A    | N/A |
| Ice Shield   | <b>\$16,960.00</b> | \$16,960.00    | WSAZ's half of the cost | N/A    | N/A |
| New combiner, cost per channel (without antenna)                                   | \$84,200.00        | \$75,000.00    | WSAZ's half of the cost | N/A    | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost) | \$23,150.00        | \$11,000.00    | WSAZ's half of the cost | N/A    | N/A |
| <b>Sub-total</b>   | \$1,113,120.00     | \$630,360.00   | N/A                     | \$0.00 | N/A |
| <b>Total for all systems</b>   | \$5,657,268.55     | \$4,268,646.56 | 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 Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|----------------|------------------------------|-------------|---------------------------|
| Primary Transmission Line                           | \$407,778.00                | \$193,669.00   |                              | \$0.00      |                           |
| Rigid Transmission Line - copper, 8 3/16" broadband | \$407,778.00                | \$193,669.00   | WSAZ's half of the cost      | N/A         | N/A                       |
| Auxiliary Transmission Line                         | \$222,720.00                | \$106,080.00   |                              | \$0.00      |                           |
| Rigid Transmission Line - copper, 6 1/8" broadband  | \$222,720.00                | \$106,080.00   | WSAZ's half of the cost      | N/A         | N/A                       |
| Sub-total   | \$630,498.00                | \$299,749.00   | N/A                          | \$0.00      | N/A                       |
| Total for all systems                               | \$5,657,268.55              | \$4,268,646.56 | 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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification   | Actual<br>Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|--------------------------------------|----------------|------------------------------|
| Primary Tower<br>GTOWER  | \$661,060.00                   | \$629,680.00      |                                      | \$0.00         |                              |
| Tall Tower<br>(greater than<br>500')   | \$210,500.00                   | \$200,000.00      | N/A                                  | N/A            | N/A                          |
| Structural<br>engineering<br>tower load study<br>for well<br>documented<br>tower | \$12,600.00                    | \$12,720.00       | Includes<br>state and<br>local taxes | N/A            | N/A                          |
| Major tower<br>reinforcement<br>/modifications                                   | \$421,000.00                   | \$400,000.00      | N/A                                  | N/A            | N/A                          |
| Tower Mapping  | <i>\$16,960.00</i>             | \$16,960.00       | N/A                                  | N/A            | N/A                          |
| Sub-total  | \$661,060.00                   | \$629,680.00      | N/A                                  | \$0.00         | N/A                          |
| Total for all<br>systems   | \$5,657,268.55                 | \$4,268,646.56    | 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>\$185,015.00</b>         | <b>\$175,250.00</b> |                              | <b>\$0.00</b> |                           |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | \$2,105.00                  | \$2,000.00          | N/A                          | N/A           | N/A                       |
| Attorney Fees - Prepare and File request for Special Temporary Authorization   | \$3,680.00                  | \$3,500.00          | N/A                          | N/A           | N/A                       |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application  | \$2,365.00                  | \$2,250.00          | N/A                          | N/A           | N/A                       |
| Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application                         | \$4,210.00                  | \$4,000.00          | N/A                          | N/A           | N/A                       |

|   |              |              |     |     |     |
|---|--------------|--------------|-----|-----|-----|
| Attorney Fees -<br>Prepare and File<br>FCC Form 2100<br>(main),<br>Construction<br>Permit<br>Application  | \$5,260.00   | \$5,000.00   | N/A | N/A | N/A |
| Prepare request<br>for Special<br>Temporary<br>Authorization  | \$2,050.00   | \$1,500.00   | N/A | N/A | N/A |
| RF Consulting<br>Engineer Fees-<br>Aux Antenna:<br>Prepare<br>engineering<br>section of FCC<br>Form 2100,<br>License to<br>Cover<br>Application | \$1,580.00   | \$1,500.00   | N/A | N/A | N/A |
| Perform<br>engineering<br>study for new<br>channel<br>assignment and<br>antenna<br>development  | \$7,360.00   | \$7,000.00   | N/A | N/A | N/A |
| Address<br>transition timing<br>and coordination<br>issues w/ other<br>stations and<br>wireless   | \$2,630.00   | \$2,500.00   | N/A | N/A | N/A |
| Project<br>management of<br>the transition  | \$142,200.00 | \$135,000.00 | N/A | N/A | N/A |
| Prepare and or<br>review<br>reimbursement<br>form   | \$2,630.00   | \$2,500.00   | N/A | N/A | N/A |



|  |                |                |     |        |     |
|--|----------------|----------------|-----|--------|-----|
| RF Consulting<br>Engineer Fees-<br>Aux Antenna:<br>Prepare<br>engineering<br>section of FCC<br>Form 2100,<br>Construction<br>Permit<br>Application | \$2,105.00     | \$2,000.00     | N/A | N/A    | N/A |
| Prepare<br>engineering<br>section of FCC<br>Form 2100<br>(main), License<br>to Cover<br>Application  | \$1,580.00     | \$1,500.00     | N/A | N/A    | N/A |
| ASR<br>modification<br>(prepare FCC<br>Form 854)   | \$2,105.00     | \$2,000.00     | N/A | N/A    | N/A |
| Prepare<br>engineering<br>section of FCC<br>Form 2100<br>(main),<br>Construction<br>Permit<br>Application  | \$3,155.00     | \$3,000.00     | N/A | N/A    | N/A |
| <b>Sub-total</b>   | \$185,015.00   | \$175,250.00   | N/A | \$0.00 | N/A |
| <b>Total for all<br/>systems</b>   | \$5,657,268.55 | \$4,268,646.56 | N/A | \$0.00 | N/A |

## Components

Information not provided.

## Cost Information

### Other Expenses

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

| Description  | Predetermined Cost Estimate | Estimated Cost      | Estimated Cost Justification  | Actual Cost   | Actual Cost Justification |
|--|-----------------------------|---------------------|---|---------------|---------------------------|
| <b>Other Expenses</b>  | <b>\$182,574.00</b>         | <b>\$174,059.15</b> |   | <b>\$0.00</b> |                           |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$86,210.00</i>          | \$86,210.00         | Maynard C. Smith Construction Co., Inc. quote WSAZ Demo Safety Klean Disposal Quote | N/A           | N/A                       |
| Equipment Storage  | <i>\$21,400.00</i>          | \$21,400.00         | Storage Rates Central Van and Storage quote   | N/A           | N/A                       |
| Security   | <i>\$9,000.00</i>           | \$9,000.00          | Cost shared between stations  | N/A           | N/A                       |
| Tree Removal   | <i>\$9,752.00</i>           | \$9,752.00          | N/A   | N/A           | N/A                       |
| Develop and air announcement of upcoming channel change                  | <i>\$10,000.00</i>          | \$10,000.00         | N/A   | N/A           | N/A                       |
| MVPD Notification of Channel Change                                      | <i>\$1,272.00</i>           | \$1,272.00          | N/A   | N/A           | N/A                       |
| Equipment Delivery and Handling Charges                                  | <i>\$21,200.00</i>          | \$21,200.00         | N/A   | N/A           | N/A                       |

|   |                    |                |     |        |     |
|---|--------------------|----------------|-----|--------|-----|
| Non-zoning permits  | <b>\$11,660.00</b> | \$11,660.00    | N/A | N/A    | N/A |
| FCC Filing Fees - Form 2100 license to cover application  | \$335.00           | \$325.00       | N/A | N/A    | N/A |
| DTV Medical Facility Notification                         | \$11,550.00        | \$3,050.15     | N/A | N/A    | N/A |
| FCC Filing Fees - Special Temporary Authorization request | \$195.00           | \$190.00       | N/A | N/A    | N/A |
| <b>Sub-total</b>  | \$182,574.00       | \$174,059.15   | N/A | \$0.00 | N/A |
| <b>Total for all systems</b>                              | \$5,657,268.55     | \$4,268,646.56 | N/A | \$0.00 | N/A |

## Components

Information not provided.

|                             |                              |  |                       |
|-----------------------------|------------------------------|--|-----------------------|
| <b>Cost<br/>Information</b> | <b>Grand Total</b>           |  |                       |
|                             |                              | <b>Predetermined<br/>Cost Estimate</b> | <b>Estimated Cost</b> |
|                             |                              |  | <b>Actual Cost</b>    |
|                             | <b>Total for all systems</b> | \$5,657,268.55                         | \$4,268,646.56        |
|                             |                              |  | \$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 |
|---------------|---|---|----------|
|               | Submission of Estimated Expenses Statements | <p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>   |          |
|               |   | <ol style="list-style-type: none"> <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>Robert Folliard</b><br/> <i>Assistant Secretary</i></p> <p>08/23/2017</p> |

## Attachments