



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **710** | Service: **DTV** | Call **WGIQ** | Channel: **30 (UHF)**
ID: | Sign:
File **0000027860**
Number:
FRN: **0001750314** | Date **01/28**
Submitted: **/2019**

Applicant Information

Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|--|---|-------------------|----------------|-------------------|
| ALABAMA EDUCATIONAL TELEVISION COMMISSION | Windell L. Wood | +1 (800) 239-5233 | wwood@aptv.org | Government Entity |
| Doing Business As: | 2112 11TH AVENUE SOUTH SUITE 400 BIRMINGHAM, AL 35205 United States | | | |

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 |
|--|--|-------------------|--------------------------|
| Robert Gehman <i>Consulting Engineer</i> <i>Kessler and Gehman Associates, Inc.</i> | Robert Gehman 507 NW 60 Street Suite D Gainesville, FL 32607 United States | +1 (352) 332-3157 | bob@kesslerandgehman.com |

**Broadcaster
Information
and
Transition
Plan**

| Question | Response |
|--|---|
| Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information. | No |
| Briefly describe transition plan | Replace transmitter, antenna and transmission line. Acquire interim antenna and line for continued operation during construction and duration of the assigned phase. Map and analyze tower; design and implement modifications if required. |

Transmitters

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

**Primary
Transmitter**

Existing Transmitter Information

| Section | Question | Response |
|---|--|--------------------------|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | Sigma CD3130P1 |
| | Year | 2007 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Single |
| | Power Capacity | 25 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-20 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 12.9 kW |
| | Justification for New Transmitter | The manufacturer of the existing IOT transmitter advises that the transmitter cannot be re-tuned to the assigned channel. The purchase price of a new transmitter is based on a Proposal from Comark for an MSDC IOT as suggested by the FCC. See attachment. |

**Primary
Transmitter**

Other Transmitter Costs

| Section | Question | Response |
|--|---|----------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | Yes |
| | Transformer (480V) | Yes |
| | Power | 150 kVA |
| | Rigid Conduit and Wiring | No |
| | Size | N/A |
| | Length | N/A |
| | Other Electrical Service | No |
| | Description | N/A |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Type | N/A |
| | Size | N/A |
| | Other Size | N/A |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No |
| | Size | N/A |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | N/A |
| | Is a channel 14 Mask Filer needed? | N/A |
| | Is additional field engineering time needed? | N/A |
| | Number of Days | N/A |

**Primary
Transmitter**

Other Transmitter Cost Not Listed

| Name | Description |
|--------------------------------------|--|
| Additional Interior RF System | Interior RF system to enable installation of new Transmitter |

Antennas

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

**Primary
Antenna**

Existing Antenna Information

| Section | Question | Response |
|---|--|--------------------|
| Existing Antenna Description | Type of change | Purchase New |
| | Antenna Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | No |
| | Is the existing antenna directional? | Yes |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | No |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels | N/A |
| | Design power capacity in use | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 952.0 kW |
| | | |

| | |
|--------------|-----------------------------------|
| Manufacturer | |
| Model | TFU- 36DSC-R- P310BNT DC |
| Year | 2007 |

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? | No |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna Manufacturer and Types | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Elliptical |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels/Bays | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Design power capacity in use | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 702.0 kW |
| | Manufacturer | |
| | Model | TFU-29JSC /VP- RP310BNT |

| | |
|-------------------------------|--|
| Year | 2018 |
| Justification for New Antenna | The existing primary antenna is a single channel slotted coaxial which cannot accommodate the assigned channel. The proposed antenna includes vertical polarization making it an Upgrade |

Primary Antenna

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|---|---------------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | No |
| | Type | |
| | Number of channels supported | N/A |
| | Frequencies of channels supported | N/A |
| | Frequency | N/A |
| | Do you need a combiner output splitter /switcher for dual feed lines? | N/A |
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | Yes |
| | Broadband or Single Channel? | Single Channel |
| | Feed Line Size | 6 1/8 inches inches |

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

**Primary
Antenna**

Other Antenna Cost Not Listed

| Name | | Description |
|------------|--|-------------------------------------|
| Sweep Line | | Sweep of existing transmission line |

**Interim
Antenna**

New Antenna Costs

| Section | Question | Response |
|--|--|----------------------|
| New Antenna Description | Use | Interim |
| | Description of Use | N/A |
| | Change Type | |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels/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) | 450.0 kW |
| | Manufacturer | |
| | Model | TUA-P2-9 /18M-1-S |
| | Year | 2018 |
| | | |

| | | |
|--|-------------------------------|---|
| | Justification for New Antenna | An interim antenna is necessary to keep station on the air during primary antenna replacement and for the duration of the assigned phase. Station will attempt to lease if leasing is available at time of acquisition. |
|--|-------------------------------|---|

**Interim
Antenna**

Other Antenna Costs

| Section | Question | Response |
|---------------------------------|---|--------------|
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | Yes |
| | Broadband or Single Channel? | S |
| | Feed Line Size | 3 1/8 inches |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for an antenna? | Yes |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No |
| Sweep Test | Do you require the sweep testing of transmission line and antenna? | Yes |

**Interim
Antenna**

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

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

Primary Transmission Line**Existing Transmission Line**

| Section | Question | Response |
|--|--|------------------|
| Existing Transmission Line Description | Type of change | Utilize Existing |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing transmission line shared with another station or stations? | No |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | Dielectric |
| | Type | Rigid |
| | Diameter | 6 1/8 inches |
| | Other Diameter | N/A |
| | Segment Length | 20 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 770 feet per run |

Primary

Other Transmission Line Expenses Not Listed

Transmission Line

Information not provided.

Interim

New Transmission Line

Transmission Line

| Section | Question | Response |
|-----------------------------|---|---|
| New Transmission Line Costs | Use | Interim |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Type | Flexible Air |
| | Diameter | 4 inches |
| | Segment Length | N/A |
| | Other Segment Length | |
| | Number of parallel runs | 1 |
| | Length | 710 feet per run |
| | Justification for New Transmission Line | An interim transmission line is necessary for the interim antenna to keep station on the air during primary antenna replacement and for the duration of the assigned phase. |

| Interim | 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? | Yes |
| | One or more FM, AM or TV radio broadcaster(s) | No |
| | Others Types of Users | Yes |
| | Is tower documented for structural analysis? | No |
| | Is tower compliant with Rev G? | No |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1036417 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 31° 43' 05.0" N- |
| | Longitude (NAD83) | 085° 26' 03.0" W- |
| | Overall Structure Height | 726.70 feet |
| | Support Structure Height | 726.70 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 586.94 feet |

| | | |
|--|------------------|---|
| | Structure Type | TOWER - Free Standing or Guyed Structure |
| | Tower Owner | Alabama Educational Television Commission |
| | Date Constructed | 01/01/1992 |

Other Types of Users

Users

WBIQ microwave

Primary Tower

Tower Modification Costs

| Section | Question | Response |
|----------------------|--|--|
| Engineering Study | Please what type of engineering study is required, if any: | Study needed for undocumented /poorly documented tower |
| Tower Reinforcements | Please select whether tower reinforcements are needed: | 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
Information not provided.

**Outside
Professional Services Costs**

| Section | Question | Response |
|---|--|---|
| Outside Project Management Services | Do you require outside project management services? | Yes |
| | Number of Hours | 157 |
| | Explanation | It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399. Station does not have available personnel or personnel trained in project management for such complex projects. |
| Outside RF consulting Engineering Services | Perform engineering study for new channel assignment and antenna development | Yes |
| | Prepare engineering section of Form FCC Construction Permit Application | Yes |
| | For Auxiliary Facility | 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 | 1 |
| | Do you have Distributed Transmission System engineering services? | N/A |
| | Critical Facility | N/A |
| | Terrain-Shielded Facility | N/A |
| Attorney and Other Outside Consulting Services | Prepare and file Form FCC Construction Permit Application | Yes |
| | For Auxiliary Facility | 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 | 1 |
| | NEPA Section 106 environmental review | No |
| | Environmental Assessment | No |
| | ASR Modification | No |
| | FAA Consultation (including preparation of FAA Form 7460) | No |
| | Negotiation of Lease and other Matter for Shared Locations | No |
| | Prepare or Review FCC Form 399 for Reimbursement | Yes |
| | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| RF Field Engineering Services | Comprehensive coverage verification via field study | No |
| | RF exposure measurements | No |
| | Additional Field Engineering Service | Yes |

| | |
|----------------|---|
| Number of Days | 18 |
| Justification | It will be necessary to survey the site, plan the equipment, develop specifications for purchasing, and oversee multiple vendor RF projects. Station does not have available personnel or personnel trained in such services. |

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

Services provided.

Other Expenses

| Section | Question | Response |
|-------------------------------------|--|----------|
| AM Pattern Disturbance | Is an Impact Study needed? | No |
| | Is Remediation needed? | No |
| Facility Expenses | Name | N/A |
| | Other Distributed Transmission System Expenses Not listed | N/A |
| | Name | N/A |
| | Is Notification of a Medical Facility required as a result of DTV broadcasting? | Yes |
| Permit and Filing Costs | Local Zoning | No |
| | Non-zoning permits | No |
| | BLM or NFS Coordination | No |
| | FCC Construction Permit Minor Change | No |
| | FCC License to Cover Application | No |
| | FCC Special Temporary Authority Application | No |
| Other Miscellaneous Expenses | Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)? | Yes |
| | Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs? | Yes |
| | Does this relocation require Equipment Storage? | Yes |
| | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change? | Yes |
| | Does this relocation require MVPD Notification of a Channel Change? | Yes |

| | |
|-----------------------|---|
| Other Expenses | Other Expenses Not Listed Information not provided. |
|-----------------------|---|

Cost Information

Transmitters

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|-----------------------|---|---------------------|--|
| Primary Transmitter ULXTE-20 | \$1,192,498.63 | \$1,211,397.97 | | \$642,193.64 | |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | \$494,500.00 | \$582,898.61 | Total cost of Transmitter, installation, and all equipment, materials and shipping. Cost based on sealed bids administered by the State of Alabama. The baseline cost for comparison is the Comark 25 kW IOT at \$865,551.00. | \$582,898.61 | Cost was obtained via sealed bids administered by the State of Alabama |
| Additional Interior RF System | \$56,248.63 | \$56,248.63 | ***System Notice: Estimate adjusted and locked because line has been superseded. *** | \$0.00 | N/A |
| Transformer 3 phase /480v - 150 KVA | \$25,550.00 | \$27,021.23 | Electrical installation. Based on a sealed bid administered by the State of Alabama | \$27,021.23 | Delete item \$27,571.99. Final |

| | | | | | |
|---------------------------------------|----------------|----------------|--|----------------|---------------------------------------|
| Switchgear - industrial 800 amp | \$38,200.00 | \$32,273.80 | N/A | \$32,273.80 | Delete item \$33,304.69. Final |
| Single IOT system (25 kW) | \$578,000.00 | \$512,955.70 | ***System Notice: Estimate adjusted and locked because line has been superseded. ***The purchase price of a new transmitter is based on a Proposal from Comark for an MSDC IOT as recommended by the FCC. See attachment. | \$0.00 | Delete item \$569,204.33. Final |
| Sub-total | \$1,192,498.63 | \$1,211,397.97 | N/A | \$642,193.64 | N/A |
| Total for all systems | \$3,121,459.08 | \$2,480,077.65 | N/A | \$1,247,645.72 | N/A |

Components

| Actual Information | |
|---|--|
| Description | File Name |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | <p>Component Description: Solid State Liquid Cooled Transmitter and Electrical Transformer</p> <p>Amount: \$582,898.61</p> |
| Additional Interior RF System | <p>Component Description: Interior RF System is included in transmitter invoice</p> <p>Amount: N/A</p> |

| | |
|---------------------------------------|---|
| Transformer 3 phase/480v - 150 KVA | <div> Component Description: <p>The freight for this item is in Other Expenses category for WGIQ</p> </div> <div> Amount: <p>\$27,021.23</p> </div> <div> Component Description: <p>Electrical connection of transmitter heat exchanger WGIQ</p> </div> <div> Amount: <p>\$27,571.99</p> </div> |
| Switchgear - industrial 800 amp | <div> Component Description: <p>Transmitter Electrical installation WGIQ</p> </div> <div> Amount: <p>\$32,273.80</p> </div> <div> Component Description: <p>Electrical installation of transmitter WGIQ</p> </div> <div> Amount: <p>\$33,304.69</p> </div> |
| Single IOT system (25 kW) | <div> Component Description: <p>Final</p> </div> <div> Amount: <p>\$512,955.70</p> </div> <div> Component Description: <p>Main/Primary Transmitter Option 3 Solid State Liquid. No response received bid request for IOT. See WGIQ Supporting Documentation for invoice 202775 attached.</p> </div> <div> Amount: <p>\$569,204.33</p> </div> |

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 |
|--|-----------------------------|---------------------|---|---------------------|---------------------------|
| Interim Antenna TUA-P2-9 /18M-1-S | \$416,480.00 | \$205,869.98 | | \$102,934.99 | |
| Sweep test of existing antenna | \$6,730.00 | \$4,977.78 | Sweep of interim antenna system | \$0.00 | N/A |
| UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized | \$189,500.00 | \$102,934.99 | ***System Notice: Estimate adjusted and locked because line has been superseded.*** | \$0.00 | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost) | \$23,150.00 | \$17,033.33 | N/A | \$0.00 | N/A |
| Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed) | \$7,600.00 | \$1,279.44 | N/A | \$0.00 | N/A |

| | | | | | |
|--|---------------------|---------------------|---|---------------------|--|
| UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized | \$189,500.00 | \$79,644.44 | N/A | \$102,934.99 | The invoice 202775C is to replace 202775, which has been requested to be denied. |
| Primary Antenna TFU-29JSC /VP- RP310BNT | \$483,654.45 | \$484,046.12 | | \$251,745.12 | |
| Side mount brackets for high power antennas (if not included in antenna base cost) | \$23,150.00 | \$22,555.56 | Sealed bids administered by State of Alabama | \$0.00 | N/A |
| Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed) | \$12,300.00 | \$14,941.11 | Sealed bids administered by the State of Alabama | \$0.00 | N/A |
| Sweep Line | \$4,977.78 | \$4,977.78 | Sweep of Existing Line | \$0.00 | N/A |

| | | | | | |
|--|---------------------|----------------|---|----------------|--|
| UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, elliptically or circularly polarized | \$197,011.11 | \$197,011.11 | Upgrade Primary Elliptical Polarized Antenna | \$246,670.12 | Invoice 202775B is a replacement for 202775, which has been requested to be denied |
| UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, horizontally polarized | \$239,485.56 | \$239,485.56 | ***System Notice: Estimate adjusted and locked because line has been superseded.*** | \$0.00 | This invoice item includes the side mount brackets, elbow complex, and sweep that are listed in other components that will not be invoiced separately. |
| Sweep test of existing antenna | \$6,730.00 | \$5,075.00 | Sweep of new antenna | \$5,075.00 | Sweep measurements and report for existing antenna and line. This report confirmed the existing line can be used. |
| Sub-total | \$900,134.45 | \$689,916.10 | N/A | \$354,680.11 | N/A |
| Total for all systems | \$3,121,459.08 | \$2,480,077.65 | N/A | \$1,247,645.72 | N/A |

Components

| Actual Information Description | File Name |
|-----------------------------------|-----------|
|-----------------------------------|-----------|

| | |
|--|--|
| Sweep test of existing antenna | <div> Component Description: Sweep is included in the Interim Antenna invoice</div> <div> Amount: N/A</div> <div> Component Description: The price of the sweep is included in Line 2: Interim Antenna System. This closes out this component.</div> <div> Amount: N/A</div> |
| UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized | <div> Component Description: Final</div> <div> Amount: \$102,934.99</div> |
| Side mount brackets for high power antennas (if not included in antenna base cost) | <div> Component Description: Side mount Brackets are included in the Interim Antenna invoice</div> <div> Amount: N/A</div> <div> Component Description: Side mount brackets for Interim Antenna</div> <div> Amount: \$17,033.33</div> |
| Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed) | <div> Component Description: Elbow Complex is included in the Interim Antenna invoice</div> <div> Amount: N/A</div> |

| | | | | | | | | | |
|---|---|-------------------------------|---|----------------|--------------|-------------------------------|--------------------------|----------------|--------------|
| <p>UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized</p> | <table> <tr> <td data-bbox="707 174 1015 208">Component Description:</td><td data-bbox="1147 174 1374 327">Interim Antenna, including sweep, brackets and elbow complex.</td></tr> <tr> <td data-bbox="707 338 815 365">Amount:</td><td data-bbox="1147 338 1294 365">\$102,934.99</td></tr> <tr> <td data-bbox="707 477 1015 510">Component Description:</td><td data-bbox="1147 477 1369 544">Interim antenna for WGIQ</td></tr> <tr> <td data-bbox="707 555 815 582">Amount:</td><td data-bbox="1147 555 1294 582">\$102,934.99</td></tr> </table> | Component Description: | Interim Antenna, including sweep, brackets and elbow complex. | Amount: | \$102,934.99 | Component Description: | Interim antenna for WGIQ | Amount: | \$102,934.99 |
| Component Description: | Interim Antenna, including sweep, brackets and elbow complex. | | | | | | | | |
| Amount: | \$102,934.99 | | | | | | | | |
| Component Description: | Interim antenna for WGIQ | | | | | | | | |
| Amount: | \$102,934.99 | | | | | | | | |
| <p>Side mount brackets for high power antennas (if not included in antenna base cost)</p> | <table> <tr> <td data-bbox="707 725 1015 759">Component Description:</td><td data-bbox="1147 725 1337 913">Side mount brackets are included in the primary antenna invoice</td></tr> <tr> <td data-bbox="707 925 815 952">Amount:</td><td data-bbox="1147 925 1193 952">N/A</td></tr> </table> | Component Description: | Side mount brackets are included in the primary antenna invoice | Amount: | N/A | | | | |
| Component Description: | Side mount brackets are included in the primary antenna invoice | | | | | | | | |
| Amount: | N/A | | | | | | | | |
| <p>Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)</p> | <table> <tr> <td data-bbox="707 1097 1015 1131">Component Description:</td><td data-bbox="1147 1097 1353 1249">Elbow complex is included in the primary antenna invoice</td></tr> <tr> <td data-bbox="707 1261 815 1288">Amount:</td><td data-bbox="1147 1261 1193 1288">N/A</td></tr> </table> | Component Description: | Elbow complex is included in the primary antenna invoice | Amount: | N/A | | | | |
| Component Description: | Elbow complex is included in the primary antenna invoice | | | | | | | | |
| Amount: | N/A | | | | | | | | |
| <p>Sweep Line</p> | <table> <tr> <td data-bbox="707 1431 1015 1464">Component Description:</td><td data-bbox="1147 1431 1361 1541">Sweep is included in the primary antenna invoice</td></tr> <tr> <td data-bbox="707 1552 815 1579">Amount:</td><td data-bbox="1147 1552 1193 1579">N/A</td></tr> </table> | Component Description: | Sweep is included in the primary antenna invoice | Amount: | N/A | | | | |
| Component Description: | Sweep is included in the primary antenna invoice | | | | | | | | |
| Amount: | N/A | | | | | | | | |
| <p>UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, elliptically or circularly polarized</p> | <table> <tr> <td data-bbox="707 1722 1015 1756">Component Description:</td><td data-bbox="1147 1722 1378 1995">Above cost is for Baseline Antenna with Horizontal polarization, including brackets, sweep, elbow complex and freight</td></tr> <tr> <td data-bbox="707 2007 815 2033">Amount:</td><td data-bbox="1147 2007 1294 2033">\$246,670.12</td></tr> </table> | Component Description: | Above cost is for Baseline Antenna with Horizontal polarization, including brackets, sweep, elbow complex and freight | Amount: | \$246,670.12 | | | | |
| Component Description: | Above cost is for Baseline Antenna with Horizontal polarization, including brackets, sweep, elbow complex and freight | | | | | | | | |
| Amount: | \$246,670.12 | | | | | | | | |

| | | | | | | | | | |
|---|--|-------------------------------|---|----------------|--------------|-------------------------------|---|----------------|--------------|
| <p>UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, horizontally polarized</p> | <table> <tr> <td data-bbox="691 87 1098 448">Component Description:</td><td data-bbox="1098 87 1428 448">Main-Primary Antenna System. See WGIQ Supporting Documentation for invoice 202775 attached.</td></tr> <tr> <td data-bbox="691 448 1098 560">Amount:</td><td data-bbox="1098 448 1428 560">\$244,560.56</td></tr> <tr> <td data-bbox="691 560 1098 725">Component Description:</td><td data-bbox="1098 560 1428 725">Final</td></tr> <tr> <td data-bbox="691 725 1098 725">Amount:</td><td data-bbox="1098 725 1428 725">\$239,485.56</td></tr> </table> | Component Description: | Main-Primary Antenna System. See WGIQ Supporting Documentation for invoice 202775 attached. | Amount: | \$244,560.56 | Component Description: | Final | Amount: | \$239,485.56 |
| Component Description: | Main-Primary Antenna System. See WGIQ Supporting Documentation for invoice 202775 attached. | | | | | | | | |
| Amount: | \$244,560.56 | | | | | | | | |
| Component Description: | Final | | | | | | | | |
| Amount: | \$239,485.56 | | | | | | | | |
| <p>Sweep test of existing antenna</p> | <table> <tr> <td data-bbox="691 725 1098 851">Component Description:</td><td data-bbox="1098 725 1428 851">Added in error</td></tr> <tr> <td data-bbox="691 851 1098 963">Amount:</td><td data-bbox="1098 851 1428 963">N/A</td></tr> <tr> <td data-bbox="691 963 1098 1299">Component Description:</td><td data-bbox="1098 963 1428 1299">Sweep measurements and report for existing antenna and line. This report confirmed the existing line can be used.</td></tr> <tr> <td data-bbox="691 1299 1098 1391">Amount:</td><td data-bbox="1098 1299 1428 1391">\$5,075.00</td></tr> </table> | Component Description: | Added in error | Amount: | N/A | Component Description: | Sweep measurements and report for existing antenna and line. This report confirmed the existing line can be used. | Amount: | \$5,075.00 |
| Component Description: | Added in error | | | | | | | | |
| Amount: | N/A | | | | | | | | |
| Component Description: | Sweep measurements and report for existing antenna and line. This report confirmed the existing line can be used. | | | | | | | | |
| Amount: | \$5,075.00 | | | | | | | | |

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 |
|---|-----------------------------|----------------|---|----------------|--|
| Interim Transmission Line | \$195,960.00 | \$69,057.56 | | \$38,652.71 | |
| Flexible Air Transmission Line - dielectric, 4" | \$52,540.00 | \$34,528.78 | N/A | \$38,652.71 | This invoice 202775C is a replacement for 202775, which has been requested to be denied. |
| Rigid Transmission Line - copper, 6 1/8" | \$143,420.00 | \$34,528.78 | ***System Notice: Estimate adjusted and locked because line has been superseded. *** | \$0.00 | N/A |
| Primary Transmission Line | \$0.00 | \$0.00 | | \$0.00 | |
| Sub-total | \$195,960.00 | \$69,057.56 | N/A | \$38,652.71 | N/A |
| Total for all systems | \$3,121,459.08 | \$2,480,077.65 | N/A | \$1,247,645.72 | N/A |

Components

| Actual Information Description | File Name |
|--------------------------------|-----------|
|--------------------------------|-----------|

| | |
|---|---|
| Flexible Air Transmission Line - dielectric, 4" | <div> <div>Component Description:</div> <div>New Interim Transmission Line, including freight</div> </div> <div> <div>Amount:</div> <div>\$38,652.71</div> </div> |
| Rigid Transmission Line - copper, 6 1/8" | <div> <div>Component Description:</div> <div>Delete and replace with 4" Flex</div> </div> <div> <div>Amount:</div> <div>N/A</div> </div> <div> <div>Component Description:</div> <div>Interim transmission line. See WGIQ Supporting Documentation for invoice 202775 attached.</div> </div> <div> <div>Amount:</div> <div>\$34,528.78</div> </div> |

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 | \$657,800.00 | \$338,406.02 | | \$198,537.61 | |
| Major tower reinforcement /modifications | \$421,000.00 | \$184,537.61 | N/A | \$184,537.61 | N/A |
| Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study | \$26,300.00 | \$14,000.00 | N/A | \$14,000.00 | Professional services associated with mapping, assessment of the tower, a structural analysis that failed, geotechnical investigation with structural reanalysis, and structural design drawings to solicit bids to modify the tower |
| Tall Tower (greater than 500') | \$210,500.00 | \$139,868.41 | N/A | \$0.00 | N/A |
| Sub-total | \$657,800.00 | \$338,406.02 | N/A | \$198,537.61 | N/A |
| Total for all systems | \$3,121,459.08 | \$2,480,077.65 | N/A | \$1,247,645.72 | N/A |

Components

| Actual Information | |
|---|--|
| Description | File Name |
| Major tower reinforcement /modifications | Component Description: FCC Tower Modifications Amount: WGIQ \$74,920.65 |
| | Component Description: Actual Additional Tower Modifications Amount: WGIQ \$109,616.96 |
| | Component Description: Structural Design Drawings Amount: \$4,000.00 |
| | Component Description: Mapping, Maintenance & condition assessment and structural analysis Amount: \$6,000.00 |
| Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study | Component Description: Structural Reanalysis Amount: \$750.00 |
| | Component Description: Geotechnical Investigation Amount: \$3,250.00 |
| | |
| | |
| Tall Tower (greater than 500') | Information not provided. |

Cost Information

Outside Professional Services

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|--------------------|------------------------------|--------------------|---|
| Outside Professional Services | \$91,516.00 | \$88,300.00 | | \$12,000.00 | |
| Additional Field Engineering Service, 18 Days | <i>\$36,000.00</i> | \$36,000.00 | N/A | \$5,000.00 | Technical Specifications for bidding the transmitter and antenna systems. |
| 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 - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00 | \$5,000.00 | N/A | N/A | N/A |
| Prepare request for Special Temporary Authorization | \$2,050.00 | \$1,500.00 | N/A | N/A | N/A |

| | | | | | |
|--|----------------|----------------|-----|----------------|--|
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | \$1,580.00 | \$1,500.00 | N/A | N/A | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00 | \$3,000.00 | N/A | \$2,500.00 | Prep of Original Schedule 399 |
| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$7,000.00 | N/A | \$2,000.00 | RF Allocation study for new channel assignment and antenna development |
| Address transition timing and coordination issues w/ other stations and wireless | \$2,630.00 | \$2,500.00 | N/A | N/A | N/A |
| Prepare and or review reimbursement form | \$2,630.00 | \$2,500.00 | N/A | \$2,500.00 | Preparation of Original FCC form 2100 Schedule 399 |
| Project management of the transition | \$24,806.00 | \$23,550.00 | N/A | N/A | N/A |
| Sub-total | \$91,516.00 | \$88,300.00 | N/A | \$12,000.00 | N/A |
| Total for all systems | \$3,121,459.08 | \$2,480,077.65 | N/A | \$1,247,645.72 | N/A |

Components

| Actual Information | | |
|--|---|---|
| Description | File Name | |
| Additional Field Engineering Service, 18 Days | Component Description: Amount: | Bid Spec Post Transition WGIQ-TV. Technical specifications for bidding transmitter and antenna systems. \$5,000.00 |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | Information not provided. | |
| Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application | Information not provided. | |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | Information not provided. | |
| Prepare request for Special Temporary Authorization | Information not provided. | |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | Information not provided. | |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | Component Description: Amount: | FCC Form FCC Construction Permit application \$2,500.00 |

| | |
|--|--|
| Perform engineering study for new channel assignment and antenna development | <p>Component Description:</p> <p>Engineering Study for New Channel Assignment and antenna development</p> <p>Amount:</p> <p>\$2,000.00</p> |
| Address transition timing and coordination issues w/ other stations and wireless | Information not provided. |
| Prepare and or review reimbursement form | <p>Component Description:</p> <p>Prepare FCC Form 399 for Reimbursement - WGIQ</p> <p>Amount:</p> <p>\$2,500.00</p> |
| Project management of the transition | Information not provided. |

Cost
Information

Other Expenses

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|----------------|---|-------------|---------------------------|
| Other Expenses | \$83,550.00 | \$83,000.00 | | \$1,581.65 | |
| Equipment Delivery and Handling Charges | <i>\$35,000.00</i> | \$35,000.00 | The freight charges are higher than were anticipated in the planning and estimating stages of the repack. | \$1,581.65 | Delete item \$25,077.77 |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$25,000.00</i> | \$25,000.00 | N/A | \$0.00 | N/A |
| MVPD Notification of Channel Change | <i>\$2,000.00</i> | \$2,000.00 | N/A | N/A | N/A |
| Develop and air announcement of upcoming channel change | <i>\$0.00</i> | \$0.00 | N/A | N/A | N/A |
| Equipment Storage | <i>\$10,000.00</i> | \$10,000.00 | N/A | N/A | N/A |
| DTV Medical Facility Notification | \$11,550.00 | \$11,000.00 | N/A | N/A | N/A |
| Sub-total | \$83,550.00 | \$83,000.00 | N/A | \$1,581.65 | N/A |

| | | | | | |
|------------------------------|----------------|----------------|-----|----------------|-----|
| Total for all systems | \$3,121,459.08 | \$2,480,077.65 | N/A | \$1,247,645.72 | N/A |
|------------------------------|----------------|----------------|-----|----------------|-----|

Components

| Actual Information | |
|---------------------------|------------------|
| Description | File Name |

Equipment Delivery and
Handling Charges

Component Description:

Delivery is included
in the Interim
Transmission Line
invoice

Amount:

N/A

Component Description:

Delivery is included
in the Transmitter
invoice

Amount:

N/A

Component Description:

Delivery is included
in the Primary
Antenna invoice

Amount:

N/A

Component Description:

Transmitter Heat
Exchanger
Electrical delivery

Amount:

\$550.76

Component Description:

Transmitter
Electrical delivery

Amount:

\$1,030.89

Component Description:

This is the total
cost of shipping the
transmitter, main
antenna and
interim antenna
and line. Shipping
for electrical is
included in the cost
of the electrical
component. See
WGIQ Supporting
Documentation for
invoice 202775
attached.

Amount:

\$25,002.77

| | |
|--|--|
| Disposal Costs (for equipment and other waste, net of any salvage value) | <div> <div> Component Description: Amount: </div> <div> Disposal is included in the Transmitter invoice N/A </div> </div> <div> <div> Component Description: Amount: </div> <div> The price of Disposal associated with the transmitter project is included Line 3: Main/Primary Transmitter. See WGIQ Supporting Documentation for invoice 202775 attached. N/A </div> </div> |
| MVPD Notification of Channel Change | Information not provided. |
| Develop and air announcement of upcoming channel change | Information not provided. |
| Equipment Storage | Information not provided. |
| DTV Medical Facility Notification | Information not provided. |

| | | | |
|-------------------------|------------------------------|------------------------------------|-----------------------|
| Cost Information | Grand Total | | |
| | | Predetermined Cost Estimate | Estimated Cost |
| | | | Actual Cost |
| | Total for all systems | \$3,121,459.08 | \$2,480,077.65 |
| | | | \$1,247,645.72 |

| | | |
|-----------------------------|--|-----------------|
| Reimbursement Status | Question | Response |
| | The facility has ceased operating on its pre-auction channel. | No |
| | Construction of final facilities or all necessary modifications are complete. | No |
| | All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator. | No |

| Certification | Section | Question | Response |
|---------------|---|---|----------|
| | Submission of Estimated Expenses Statements | <p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p> | |
| | | <ol style="list-style-type: none"> 1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. | |

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

| | |
|---|---|
| <p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p> | |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Robert Gehman <i>Consulting Engineer</i></p> <p>01/28/2019</p> |

| Certification | Section | Question | Response |
|---------------|--|--|----------|
| | Submission of Actual Cost Documentation Statements | WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733). | |
| | | <ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. | |

4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

| | |
|--|---|
| <p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p> | |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Robert Gehman <i>Consulting Engineer</i></p> <p>01/28/2019</p> |

Attachments