



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **721** | Service: **DTV** | Call **WEIQ** | Channel: **30 (UHF)**
ID: | Sign:
File **0000027857**
Number:
FRN: **0001750314** | Date **12/14**
Submitted: **/2020**

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@aetv.org | Government Entity |
| Doing Business As: | 2112 11TH AVE SOUTH | | | |
| ALABAMA EDUCATIONAL TELEVISION COMMISSION | 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 and antenna, plus line sweep tests. Acquire interim antenna and line for continued operation during construction and duration of the assigned phase. Map and analyze tower; design and implement modifications. |

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-50 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 31.7 kW |
| | Justification for New Transmitter | The manufacturer of the existing IOT transmitter advises that the transmitter cannot be re-tuned to the assigned channel. A new Comark Paragon MSDC IOT transmitter is the basis for a replacement 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 | Yes |
| | Size | 3 inches |
| | Length | 100.0 feet |
| | 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 Existing Transmitter to Interim Transmission line |

| | |
|-------------------------------------|------------------------------|
| Mechanical - HVAC - Plumbing | Mechanical - HVAC - Plumbing |
| Electrical | Electrical |

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? | No |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | No |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Top Mount |
| | Antenna position in stack | 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) | 464.0 kW |

| | |
|--------------|-----------------|
| Manufacturer | |
| Model | TFU-30GTH O4 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? | 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 | 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) | 373.0 kW |
| | Manufacturer | |
| | Model | TFU26JTH /VP-R 04 (SP) |
| | | |

| | |
|-------------------------------|---|
| Year | 2018 |
| Justification for New Antenna | The existing primary antenna is a single channel slotted coaxial which cannot accommodate the assigned channel. |

Primary Antenna

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|---|----------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | |
| | 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 |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for a high power antenna? | |
| 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 |
|----------------|--------------------|
| Freight | Freight |

**Interim
Antenna**

New Antenna Costs

| Section | Question | Response |
|--|--|--------------------|
| New Antenna Description | Use | Interim |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna 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) | 240.0 kW |
| | Manufacturer | |
| | Model | TFU-8WB C160 |
| | 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 | 4 1/16 inches |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for an antenna? | Yes |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | Yes |
| Sweep Test | Do you require the sweep testing of transmission line and antenna? | No |

**Interim
Antenna**

Other Antenna Cost Not Listed

| Name | | Description | |
|---------|--|-------------|--|
| Freight | | Freight | |
| Sweep | | Sweep | |

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 | 570 feet per run |

Primary Transmission Line

Other Transmission Line Expenses Not Listed

| Name | Description |
|------------|---|
| Sweep Line | Sweep tests to verify performance on assigned channel |

Interim Transmission Line

New 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 | 670 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 | 1036419 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 30° 39' 34.0" N- |
| | Longitude (NAD83) | 087° 53' 33.0" W- |
| | Overall Structure Height | 545.27 feet |
| | Support Structure Height | 545.93 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 166.99 feet |

| | | |
|--|------------------|---|
| | Structure Type | TOWER - Free Standing or Guyed Structure |
| | Tower Owner | Alabama Educational Television Commission |
| | Date Constructed | 01/01/1955 |

Other Types of Users

Users

WHIL aural ICR

US Dept of Comm

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**

| Section | Question | Response |
|---|--|---|
| Services Costs Outside Project Management Services | Do you require outside project management services? | Yes |
| | Number of Hours | 191 |
| | 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 | Yes |
| | FAA Consultation (including preparation of FAA Form 7460) | Yes |
| | Negotiation of Lease and other Matter for Shared Locations | No |
| | Prepare or Review FCC Form 399 for Reimbursement | Yes |
| | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| RF Field Engineering Services | Comprehensive coverage verification via field study | 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

| Name | Description |
|----------------------------|---|
| Other Engineering Services | Cost estimate for other engineering services such as RF calculations, evolving transition plan calculations, bid spec prep / distribution / award recommendation / etc and discussion, etc. |

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-50 | \$1,360,910.88 | \$1,357,460.88 | | \$1,151,960.88 | |
| Mechanical - HVAC - Plumbing | <i>\$35,331.92</i> | \$35,331.92 | See attached / uploaded PDF file titled "TSG 203930 v200515jgv4.pdf" | \$35,331.92 | N/A |
| Additional Interior RF System | <i>\$140,000.00</i> | \$140,000.00 | N/A | N/A | N/A |
| Electrical | <i>\$47,298.89</i> | \$47,298.89 | See attached / uploaded PDF file titled "TSG 203930 v200515jgv4.pdf" | \$47,298.89 | N/A |
| 3" Rigid Conduit and Wiring (Cost per foot) | \$5,200.00 | \$4,900.00 | N/A | N/A | N/A |
| Transformer 3 phase /480v - 150 KVA | \$25,550.00 | \$24,300.00 | N/A | N/A | N/A |
| Switchgear - industrial 800 amp | \$38,200.00 | \$36,300.00 | N/A | N/A | N/A |

| | | | | | |
|--|-----------------------|----------------|--|----------------|-----|
| UHF - Liquid Cooled Solid State Transmitter 31.7 kW | \$1,069,330.07 | \$1,069,330.07 | See attached PDF file titled "TSG 203930 v191111jgv1. pdf" | \$1,069,330.07 | N/A |
| Sub-total | \$1,360,910.88 | \$1,357,460.88 | N/A | \$1,151,960.88 | N/A |
| Total for all systems | \$2,804,263.14 | \$2,563,334.28 | N/A | \$1,888,455.28 | N/A |

Components

| Actual Information | |
|--|--|
| Description | File Name |
| Mechanical - HVAC - Plumbing | Component Description: TSG 203930 v200515jgv4 Amount: \$35,331.92 |
| Additional Interior RF System | Information not provided. |
| Electrical | Component Description: TSG 203930 v200515jgv4 Amount: \$47,298.89 |
| 3" Rigid Conduit and Wiring (Cost per foot) | Information not provided. |
| Transformer 3 phase/480v - 150 KVA | Information not provided. |
| Switchgear - industrial 800 amp | Information not provided. |
| UHF - Liquid Cooled Solid State Transmitter 31.7 kW | Component Description: TSG 203930 v200515jgv4 Amount: \$1,069,330.07 |

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 TFU-8WB C160 | \$245,734.41 | \$108,985.66 | | \$103,985.66 | |
| Sweep | <i>\$8,000.00</i> | \$8,000.00 | See attached / uploaded PDF file titled "TSG 203930 v200515jgv4.pdf" | \$8,000.00 | N/A |
| Freight | <i>\$10,254.41</i> | \$10,254.41 | See attached / uploaded PDF file titled "TSG 203930 v200515jgv4.pdf" | \$10,254.41 | N/A |
| UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized | \$189,500.00 | \$52,412.50 | See attached / uploaded PDF file titled "TSG 203930 v200515jgv4.pdf" | \$52,412.50 | N/A |

| | | | | | |
|--|---------------------|---------------------|--|---------------------|-----|
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost) | \$5,260.00 | \$5,000.00 | N/A | N/A | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost) | \$23,150.00 | \$21,900.00 | See attached / uploaded PDF file titled "TSG 203930 v200515jgv4.pdf" | \$21,900.00 | N/A |
| Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed) | \$9,570.00 | \$11,418.75 | See attached / uploaded PDF file titled "TSG 203930 v200515jgv4.pdf" | \$11,418.75 | N/A |
| Primary Antenna TFU26JTH /VP-R 04 (SP) | \$316,074.85 | \$229,989.85 | | \$229,989.85 | |
| Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed) | \$12,300.00 | \$12,495.00 | See attached / uploaded PDF file titled "TSG 204122 v200206jgv1.pdf" | \$12,495.00 | N/A |

| | | | | | |
|--|-------------------|----------------|--|----------------|-----|
| Sweep test of existing antenna | \$6,730.00 | \$8,000.00 | See attached / uploaded PDF file titled "TSG 204122 v200206jgv1.pdf" | \$8,000.00 | N/A |
| UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized | \$289,500.00 | \$201,950.00 | See attached / uploaded PDF file titled "TSG 204122 v200206jgv1.pdf" | \$201,950.00 | N/A |
| Freight | \$7,544.85 | \$7,544.85 | See attached / uploaded PDF file titled "TSG 204122 v200206jgv1.pdf" | \$7,544.85 | N/A |
| Sub-total | \$561,809.26 | \$338,975.51 | N/A | \$333,975.51 | N/A |
| Total for all systems | \$2,804,263.14 | \$2,563,334.28 | N/A | \$1,888,455.28 | N/A |

Components

| Actual Information | |
|--------------------|--|
| Description | File Name |
| Sweep | <div> <div>Component Description:</div> <div>TSG 203930 v200515jgv4</div> </div> <div> <div>Amount:</div> <div>\$8,000.00</div> </div> |

| | |
|--|---|
| Freight | <p>Component Description: TSG 203930 v200515jgv4</p> <p>Amount: \$10,254.41</p> |
| UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized | <p>Component Description: TSG 203930 v200515jgv4</p> <p>Amount: \$52,412.50</p> |
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost) | Information not provided. |
| Side mount brackets for high power antennas (if not included in antenna base cost) | <p>Component Description: TSG 203930 v200515jgv4</p> <p>Amount: \$21,900.00</p> |
| Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed) | <p>Component Description: TSG 203930 v200515jgv4</p> <p>Amount: \$9,773.75</p> <p>Component Description: TSG 203930 v200515jgv4</p> <p>Amount: \$1,645.00</p> |
| Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed) | <p>Component Description: TSG 204122 v200519jgv3</p> <p>Amount: \$12,495.00</p> |
| Sweep test of existing antenna | <p>Component Description: TSG 204122 v200519jgv3</p> <p>Amount: \$8,000.00</p> |

| | | |
|--|---|---|
| UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized | Component Description: Amount: | TSG 204122 v200519jgv3 \$201,950.00 |
| Freight | Component Description: Amount: | TSG 204122 v200519jgv3 \$7,544.85 |

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 | \$49,580.00 | \$38,844.89 | | \$38,844.89 | |
| Flexible Air Transmission Line - dielectric, 4" | \$49,580.00 | \$38,844.89 | See attached / uploaded PDF file titled "TSG 203930 v200515jgv4.pdf" | \$38,844.89 | N/A |
| Primary Transmission Line | \$6,400.00 | \$6,400.00 | | \$0.00 | |
| Sweep Line | \$6,400.00 | \$6,400.00 | N/A | N/A | N/A |
| Sub-total | \$55,980.00 | \$45,244.89 | N/A | \$38,844.89 | N/A |
| Total for all systems | \$2,804,263.14 | \$2,563,334.28 | N/A | \$1,888,455.28 | N/A |

Components

| Actual Information | |
|---|---|
| Description | File Name |
| Flexible Air Transmission Line - dielectric, 4" | <div>Component Description: TSG 203930 v200515jgv4</div> <div>Amount: \$38,844.89</div> |
| Sweep Line | Information not provided. |

Cost
Information

Tower Equipment and Rigging Costs

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|----------------|------------------------------|--------------|--|
| Primary Tower TOWER | \$657,800.00 | \$655,300.00 | | \$331,771.00 | |
| Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study | \$26,300.00 | \$25,000.00 | N/A | \$20,750.00 | Tower mapping, condition assessment and initial structural analysis. Analysis failed. Foundation mapping and geotechnical investigation leading to Structural Design Drawings for bidding tower modification to upgrade tower to 22' G to accommodate new ante |
| Major tower reinforcement /modifications | \$421,000.00 | \$400,000.00 | N/A | \$80,721.00 | N/A |

| | | | | | |
|--------------------------------------|----------------|----------------|---|----------------|-----|
| Tall Tower (greater than 500') | \$210,500.00 | \$230,300.00 | See attached / uploaded PDF files titled "TSG 203930 v200515jgv4. pdf" and "TSG 204122 v200519jgv3" | \$230,300.00 | N/A |
| Sub-total | \$657,800.00 | \$655,300.00 | N/A | \$331,771.00 | N/A |
| Total for all systems | \$2,804,263.14 | \$2,563,334.28 | N/A | \$1,888,455.28 | N/A |

Components

| Actual Information | |
|---|--|
| Description | File Name |
| Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study | Component Description: Structural Design Drawings |
| | Amount: \$8,000.00 |
| | Component Description: Foundation Mapping |
| | Amount: \$3,500.00 |
| | Component Description: Geotechnical Investigation |
| | Amount: \$3,250.00 |
| | Component Description: Tower Mapping \$2000, Structural Analysis \$2500, and Maintenance and Condition Assessment TIA \$1500. |
| | Amount: \$6,000.00 |

| | |
|---|---|
| Major tower reinforcement /modifications | <div> <div>Component Description:</div> <div>Tilson 4052775 v190619jgv1</div> </div> <div> <div>Amount:</div> <div>\$80,721.00</div> </div> |
| Tall Tower (greater than 500') | <div> <div>Component Description:</div> <div>TSG 203930 v200515jgv4</div> </div> <div> <div>Amount:</div> <div>\$115,150.00</div> </div> <div> <div>Component Description:</div> <div>TSG 204122 v200519jgv3</div> </div> <div> <div>Amount:</div> <div>\$115,150.00</div> </div> |

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 | \$104,598.00 | \$111,618.00 | | \$27,168.00 | |
| Other Engineering Services | <i>\$3,500.00</i> | \$3,500.00 | Cost estimate for other engineering services such as RF calculations, evolving transition plan calculations, bid spec prep / distribution / award recommendation / etc and discussion, etc. | \$3,500.00 | N/A |
| Additional Field Engineering Service, 18 Days | <i>\$36,000.00</i> | \$36,000.00 | N/A | N/A | N/A |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |
| ASR modification (prepare FCC Form 854) | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |

| | | | | | |
|--|------------|-------------|---|-------------|--------------------------|
| Attorney Fees - Prepare and File request for Special Temporary Authorization | \$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 |
| Prepare and or review reimbursement form | \$2,630.00 | \$13,165.00 | The Estimated Cost includes Form 399 submissions including ongoing Actual Cost invoice prep and submission, and amendments as needed. | \$13,165.00 | N/A |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | \$1,580.00 | \$1,553.00 | N/A | \$1,553.00 | N/A |
| Prepare request for Special Temporary Authorization | \$2,050.00 | \$1,500.00 | N/A | \$1,500.00 | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00 | \$3,000.00 | N/A | \$2,000.00 | FCC Form 2100 C applicat |

| | | | | | |
|--|----------------|----------------|-----|----------------|---|
| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$7,000.00 | N/A | \$3,500.00 | Engineer 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 |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00 | \$5,000.00 | N/A | N/A | N/A |
| Project management of the transition | \$30,178.00 | \$28,650.00 | N/A | \$1,950.00 | N/A |
| Sub-total | \$104,598.00 | \$111,618.00 | N/A | \$27,168.00 | N/A |
| Total for all systems | \$2,804,263.14 | \$2,563,334.28 | N/A | \$1,888,455.28 | N/A |

Components

Actual Information

| Description | File Name |
|-------------|-----------|
|-------------|-----------|

| | |
|--|---|
| Other Engineering Services | Component Description: KGA 250-228 v201214jgv1 Amount: \$1,750.00 |
| | Component Description: KGA 250-261 v201211jgv1 Amount: \$375.00 |
| | Component Description: KGA 250-264 v201211jgv1 Amount: \$50.00 |
| | Component Description: KGA 250-228 v201214jgv1 Amount: \$250.00 |
| | Component Description: KGA 250-274 v201211jgv1 Amount: \$450.00 |
| | Component Description: KGA 250-291 v201211jgv1 Amount: \$625.00 |
| Additional Field Engineering Service, 18 Days | Information not provided. |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | Information not provided. |
| ASR modification (prepare FCC Form 854) | Information not provided. |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | Information not provided. |

| | | |
|--|---|---|
| Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application | Information not provided. | |
| Prepare and or review reimbursement form | Component Description: Amount: | Prepare FCC Form 399 for Reimbursement - WEIQ \$2,500.00 |
| | Component Description: Amount: | KGA 250-241 v201211jgv1 \$265.00 |
| | Component Description: Amount: | KGA 250-280 v201211jgv1 \$925.00 |
| | Component Description: Amount: | KGA 250-288 v201211jgv1 \$4,100.00 |
| | Component Description: Amount: | KGA 250-269 v201211jgv1 \$150.00 |
| | Component Description: Amount: | KGA 250-275 v201211jgv1 \$50.00 |
| | Component Description: Amount: | KGA 250-294 v201211jgv1 \$1,150.00 |
| | Component Description: Amount: | KGA 250-302 v201211jgv1 \$775.00 |

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|--|---|
| | Component Description: KGA 250-282 v201211jgv1 Amount: \$900.00 |
| | Component Description: KGA 250-272 v201211jgv1 Amount: \$1,725.00 |
| | Component Description: KGA 250-228 v201214jgv1 Amount: \$625.00 |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | Component Description: KGA 250-276 v201211jgv1 Amount: \$1,553.00 |
| Prepare request for Special Temporary Authorization | Component Description: KGA 250-267 v201211jgv1 Amount: \$1,500.00 |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | Component Description: Form FCC Construction permit application Amount: \$2,000.00 |
| Perform engineering study for new channel assignment and antenna development | Component Description: Engineering study for new channel assignment and antenna development Amount: \$3,500.00 |
| Address transition timing and coordination issues w/ other stations and wireless | Information not provided. |

| | | |
|--|---|--|
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | Information not provided. | |
| Project management of the transition | Component Description: Amount: | KGA 250-209 v201214jgv1 \$300.00 |
| | Component Description: Amount: | KGA 250-245 v201214jgv1 \$150.00 |
| | Component Description: Amount: | KGA 250-268 v201211jgv1 \$150.00 |
| | Component Description: Amount: | KGA 250-225 v201214jgv1 \$225.00 |
| | Component Description: Amount: | KGA 250-236 v201214jgv1 \$150.00 |
| | Component Description: Amount: | KGA 250-277 v201211jgv1 \$150.00 |
| | Component Description: Amount: | KGA 250-278 v201211jgv1 \$150.00 |
| | Component Description: Amount: | KGA 250-219 v201214jgv1 \$225.00 |

| | |
|-------------------------------|----------------------------|
| Component Description: | KGA 250-271 v201211jgv1 |
| Amount: | \$150.00 |

| | |
|-------------------------------|----------------------------|
| Component Description: | KGA 250-265 v201211jgv1 |
| Amount: | \$150.00 |

| | |
|-------------------------------|----------------------------|
| Component Description: | KGA 250-230 v201214jgv1 |
| Amount: | \$150.00 |

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 | \$63,165.00 | \$54,735.00 | | \$4,735.00 | |
| DTV Medical Facility Notification | \$11,550.00 | \$3,120.00 | N/A | \$3,120.00 | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$15,000.00</i> | \$15,000.00 | N/A | N/A | N/A |
| MVPD Notification of Channel Change | <i>\$1,615.00</i> | \$1,615.00 | N/A | \$1,615.00 | N/A |
| Equipment Delivery and Handling Charges | <i>\$25,000.00</i> | \$25,000.00 | N/A | N/A | N/A |
| Equipment Storage | <i>\$10,000.00</i> | \$10,000.00 | 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 |
| Sub-total | \$63,165.00 | \$54,735.00 | N/A | \$4,735.00 | N/A |
| Total for all systems | \$2,804,263.14 | \$2,563,334.28 | N/A | \$1,888,455.28 | N/A |

Components

| Actual Information | |
|--|---|
| Description | File Name |
| DTV Medical Facility Notification | <p>Component Description: KGA 250-262 v201211jgv1</p> <p>Amount: \$3,120.00</p> |
| Disposal Costs (for equipment and other waste, net of any salvage value) | Information not provided. |
| MVPD Notification of Channel Change | <p>Component Description: KGA 250-263 v201211jgv1</p> <p>Amount: \$1,615.00</p> |
| Equipment Delivery and Handling Charges | Information not provided. |
| Equipment Storage | Information not provided. |
| Develop and air announcement of upcoming channel change | Information not provided. |

| Cost Information | Grand Total | | |
|------------------|-----------------------------|----------------|----------------|
| | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
| | Total for all systems | \$2,804,263.14 | \$2,563,334.28 |
| | | \$1,888,455.28 | |

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

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

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

| | |
|---|---|
| <p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p> | |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Jeffrey C Gehman <i>Engineering Associate</i></p> <p>12/14/2020</p> |

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

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

| | |
|--|--|
| <p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p> | |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Jeffrey C Gehman <i>Engineering Associate</i></p> <p>12/14/2020</p> |

Attachments