



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **69271** | Service: **DTV** | Call **WEKW-TV** | Channel: **18 (UHF)**
ID:
File **0000027760**
Number:
FRN: **0021895115** | Date **05/01**
Submitted: **/2019**

Applicant Information

Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|--|---|-------------------|----------------------|----------------|
| NEW HAMPSHIRE PUBLIC BROADCASTING Doing Business As: NEW HAMPSHIRE PUBLIC BROADCASTING | Dawn DeAngelis 268 MAST ROAD DURHAM, NH 03824 United States | +1 (603) 868-4304 | ddeangelis@nhpbs.org | Not-for-Profit |

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 |
|---|--|-------------------|---------------------------|
| Ryan Wilhour <i>Consulting Engineer</i> <i>Kessler and Gehman Associates, Inc.</i> | 507 NW 60th ST STE D Gainesville, FL 32607 United States | +1 (352) 332-3157 | ryan@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. | Yes |
| 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 |

**Auxiliary
Transmitter****Add Transmitter Information**

| Section | Question | Response |
|---|--|-----------------------|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Auxiliary (Backup) |
| | Description of Use | Auxiliary |
| | 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 | NV7250 |
| | Year | 2002 |
| | Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power Capacity | 4 kW |

**Auxiliary
Transmitter**

New Transmitter Costs

| Section | Question | Response |
|------------------------|---|---|
| New Transmitter | Use | Auxiliary (Backup) |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Manufacturer | |
| | Model | TBD |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 4 kW |
| | Justification for New Transmitter | The manufacturer of the existing transmitter advises that the transmitter cannot be re-tuned to the assigned channel. See attachment. |

**Auxiliary
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 | 2 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 |

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

**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 | AT7105K0 |
| | Year | 2011 |
| | Type | Solid State |
| | Solid State Cooling | Air Cooled |
| | Solid State Power Capacity | 5 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? | No |
| | Manufacturer | |
| | Model | TBD |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Air Cooled |
| | Solid State Power capacity | 5 kW |
| | Justification for New Transmitter | The manufacturer of the existing transmitter advises that the transmitter cannot be re-tuned to the assigned channel. 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 |
| Standby Exciter and Switch | Standby Exciter with Automatic Change Over Switch |

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 | Broadband Panel |
| | Number of Stations Supported | 1 |
| | Number of Panels | 48 |
| | Design power capacity in use | 35.0 % |
| | Lower Limit | 470.00 MHz |
| | Upper Limit | 860.00 MHz |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 112.0 kW |

| | |
|--------------|--------------|
| Manufacturer | |
| Model | 9551310-4660 |
| Year | 2002 |

**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? | No |
| | 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 | 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) | 66.0 kW |
| | Manufacturer | |
| Model | TBD | |

| | |
|-------------------------------|---|
| Year | 2018 |
| Justification for New Antenna | This is a large change in channels from 49 to 18 and the existing primary broadband antenna has not been performance tested on the assigned channel. The station will use existing if possible. ERP is from 1% expansion. |

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 | 4 1/16 inches inches |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for a high power antenna? | No |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No |
| Sweep Test | Do you require the sweep testing of transmission line and antenna? | Yes |

**Primary
Antenna**

Other Antenna Cost Not Listed

Information not provided.

**Interim
Antenna**

New Antenna Costs

| Section | Question | Response |
|--|--|--------------------|
| 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? | No |
| | 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) | 112.0 kW |
| | Manufacturer | |
| | Model | TBD |
| 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 rent if renting 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? | Yes |
| 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 | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing transmission line shared with another station or stations? | No |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | |
| | Type | Rigid |
| | Diameter | 4 1/16 inches |
| | Other Diameter | N/A |
| | Segment Length | 19 3/4 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 475 feet per run |

**Primary
Transmission
Line**

New Transmission Line

| Section | Question | Response |
|---|---|---------------------|
| <p>New Transmission Line Costs</p> | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Type | Rigid |
| | Diameter | 4 1/16 inches |
| | Other Diameter | N/A |
| | Segment Length | 20 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 480 feet per run |

Justification for New Transmission Line

The line might be compatible with the assigned channel. A new line is included in case the performance is unacceptable on the assigned channel. The station will utilize the existing line if the sweep tests confirm acceptable performance.

Primary Transmission Line **Other Transmission Line Expenses Not Listed**
Information not provided.

**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 | 3 inches |
| | Segment Length | N/A |
| | Other Segment Length | |
| | Number of parallel runs | 1 |
| | Length | 380 feet per run |
| | Justification for New Transmission Line | An interim transmission line is necessary to keep station on the air during primary line replacement. Station will attempt to rent if renting is available at time of acquisition. |

**Interim
Transmission
Line**

Other Transmission Line Expenses Not Listed

Information not provided.

Tower Equipment And Rigging Costs

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

Primary Tower

Existing Tower

| Section | Question | Response |
|--|---|-------------------|
| Existing Tower Description | Type of change | Modify Existing |
| | Tower Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | 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) | Yes |
| | Others Types of Users | Yes |
| | Is tower documented for structural analysis? | No |
| | Is tower compliant with Rev G? | Yes |
| Existing Tower Structure Registration | Do you have a tower registration number? | No |
| | ASR Number | |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 43° 01' 59.9" N- |
| | Longitude (NAD83) | 072° 22' 02.0" W- |
| | Overall Structure Height | 499.99 feet |
| | Support Structure Height | 455.05 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 1517.04 feet |

| | |
|------------------|--|
| Structure Type | TOWER - Free Standing or Guyed Structure |
| Tower Owner | New Hampshire Public Broadcasting |
| Date Constructed | 01/01/1967 |

**FM, AM or TV radio
broadcasters. Facility ID's,
Call Signs and Services of
other broadcast stations with
whom the tower is shared**

| Facility ID | Call Sign | Service |
|-------------|-----------|---------|
| 46334 | WKKN | FM |
| 48413 | WVMA-CD | DTV |
| 48440 | WEVN | FM |
| 36834 | WKNE | FM |

Other Types of Users

| Users |
|-----------------|
| 12 mwave dishes |

**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 |
|--|---|--|
| <p>Outside Project Management Services</p> | <p>Do you require outside project management services?</p> | <p>Yes</p> |
| | <p>Number of Hours</p> | <p>40</p> |
| | <p>Explanation</p> | <p>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.</p> |
| <p>Outside RF consulting Engineering Services</p> | <p>Perform engineering study for new channel assignment and antenna development</p> | <p>Yes</p> |
| | <p>Prepare engineering section of Form FCC Construction Permit Application</p> | <p>Yes</p> |
| | <p>For Auxiliary Facility</p> | <p>No</p> |
| | <p>For Main Facility</p> | <p>Yes</p> |
| | <p>Prepare engineering section of Form FCC License to Cover Application</p> | <p>Yes</p> |
| | <p>For Auxiliary Facility</p> | <p>No</p> |
| | <p>For Main Facility</p> | <p>Yes</p> |
| | <p>Prepare request for Special Temporary Authority</p> | <p>Yes</p> |

| | | |
|--|---|-----|
| | 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 | Yes |
| | RF exposure measurements | No |
| | Additional Field Engineering Service | Yes |

| | |
|----------------|---|
| Number of Days | 6 |
| 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 Legal Services | Legal services not specifically listed under Outside Professional Services |
| Other Engineering Services | Engineering services not specifically listed under Outside Professional Services |

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? | No |
| | 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 TBD | \$470,450.00 | \$455,500.00 | | \$128.89 | |
| Standby Exciter and Switch | <i>\$25,000.00</i> | \$25,000.00 | N/A | N/A | N/A |
| Additional Interior RF System | <i>\$140,000.00</i> | \$140,000.00 | N/A | N/A | 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 - Air Cooled Solid State Transmitter 4 - 6 kW | \$236,500.00 | \$225,000.00 | N/A | \$128.89 | N/A |
| Auxiliary Transmitter TBD | \$291,350.00 | \$288,100.00 | | \$0.00 | |
| 2" Rigid Conduit and Wiring (Cost per foot) | \$2,600.00 | \$2,500.00 | 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 4 kW | \$225,000.00 | \$225,000.00 | N/A | N/A | N/A |
| Sub-total | \$761,800.00 | \$743,600.00 | N/A | \$128.89 | N/A |
| Total for all systems | \$2,031,970.00 | \$1,958,835.00 | N/A | \$22,206.29 | N/A |

Components

| Actual Information | |
|---|---------------------------|
| Description | File Name |
| Standby Exciter and Switch | Information not provided. |
| Additional Interior RF System | Information not provided. |
| 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. |

| | |
|--|--|
| <p>UHF - Air Cooled Solid State Transmitter 4 - 6 kW</p> | <p>Component Description: Needham inv #S4909377.002 Parts to move exist TX heat exch to make space for the new TX v190501jgv2</p> <p>Amount: \$75.41</p> <p>Component Description: Support Base for backup TX heat exchanger - preparation for new transmitter installation</p> <p>Amount: \$53.48</p> |
| <p>2" Rigid Conduit and Wiring (Cost per foot)</p> | <p>Information not provided.</p> |
| <p>Transformer 3 phase/480v - 150 KVA</p> | <p>Information not provided.</p> |
| <p>Switchgear - industrial 800 amp</p> | <p>Information not provided.</p> |
| <p>UHF - Liquid Cooled Solid State Transmitter 4 kW</p> | <p>Information not provided.</p> |

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 TBD | \$132,140.00 | \$125,800.00 | | \$0.00 | |
| 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 | \$22,000.00 | N/A | N/A | N/A |
| Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed) | \$7,600.00 | \$7,400.00 | N/A | N/A | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | N/A | N/A |

| | | | | | |
|---|---------------------|---------------------|---|-------------------|-----|
| UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized | \$89,400.00 | \$85,000.00 | N/A | N/A | N/A |
| Primary Antenna TBD | \$263,300.00 | \$252,575.00 | | \$8,475.00 | |
| UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized | \$247,000.00 | \$235,000.00 | N/A | N/A | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$8,475.00 | The contractor needed to add adapters to connect to the existing line to perform the Sweep measurements. The adapters are in the quote. | \$8,475.00 | t |
| Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed) | \$9,570.00 | \$9,100.00 | N/A | N/A | N/A |
| Sub-total | \$395,440.00 | \$378,375.00 | N/A | \$8,475.00 | N/A |

| | | | | | |
|------------------------------|----------------|----------------|-----|-------------|-----|
| Total for all systems | \$2,031,970.00 | \$1,958,835.00 | N/A | \$22,206.29 | N/A |
|------------------------------|----------------|----------------|-----|-------------|-----|

Components

| Actual Information | |
|--|--|
| Description | File Name |
| 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) | Information not provided. |
| Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed) | Information not provided. |
| Sweep test of existing antenna | Information not provided. |
| UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized | Information not provided. |
| UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized | Information not provided. |
| Sweep test of existing antenna | <p>Component Description: Adapters to facilitate Sweep tests</p> <p>Amount: \$2,075.00</p> <p>Component Description: Sweep of existing Myat broadband line and MCI panel antenna</p> <p>Amount: \$6,400.00</p> |

Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed)

Information not provided.

Cost Information

Transmission Line

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|-----------------------|------------------------------|--------------------|---------------------------|
| Interim Transmission Line | \$22,420.00 | \$21,280.00 | | \$0.00 | |
| Flexible Air Transmission Line - dielectric, 3" | \$22,420.00 | \$21,280.00 | N/A | N/A | N/A |
| Primary Transmission Line | \$68,160.00 | \$64,800.00 | | \$0.00 | |
| Rigid Transmission Line - copper, 4 1/16" | \$68,160.00 | \$64,800.00 | N/A | N/A | N/A |
| Sub-total | \$90,580.00 | \$86,080.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$2,031,970.00 | \$1,958,835.00 | N/A | \$22,206.29 | N/A |

Components

Information not provided.

Cost Information

Tower Equipment and Rigging Costs

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|-----------------------|------------------------------|--------------------|---------------------------|
| Primary Tower TOWER | \$531,500.00 | \$505,000.00 | | \$1,991.40 | |
| 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 | \$1,991.40 | Tower Structural Analysis |
| Short Tower (less than 500') | \$84,200.00 | \$80,000.00 | N/A | N/A | N/A |
| Major tower reinforcement /modifications | \$421,000.00 | \$400,000.00 | N/A | N/A | N/A |
| Sub-total | \$531,500.00 | \$505,000.00 | N/A | \$1,991.40 | N/A |
| Total for all systems | \$2,031,970.00 | \$1,958,835.00 | N/A | \$22,206.29 | 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 | <p>Component Description: Legal services related to Tower Structural Analysis. Please refer to attachment "Sheehan Tower 2 (rev)".</p> <p>Amount: \$136.50</p> |
| | <p>Component Description: Structural Analysis for proposed antenna loading</p> <p>Amount: \$1,500.00</p> |
| | <p>Component Description: Legal services related to Tower Structural Analysis. Please refer to attachment "Sheehan Tower (rev)".</p> <p>Amount: \$354.90</p> |
| Short Tower (less than 500') | Information not provided. |
| Major tower reinforcement /modifications | 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 | \$169,100.00 | \$162,780.00 | | \$11,611.00 | |
| Other Legal Services | <i>\$15,000.00</i> | \$15,000.00 | N/A | \$0.00 | N/A |
| Other Engineering Services | <i>\$20,870.00</i> | \$20,870.00 | N/A | \$795.00 | N/A |
| Additional Field Engineering Service, 6 Days | <i>\$12,000.00</i> | \$12,000.00 | N/A | N/A | N/A |
| Comprehensive coverage verification via field study, if needed | \$84,200.00 | \$80,000.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | \$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 | \$90.00 | 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 | \$2,000.00 | FCC CP application |
| Project management of the transition | \$6,320.00 | \$6,160.00 | N/A | \$2,065.00 | N/A |
| Prepare and or review reimbursement form | \$2,630.00 | \$2,500.00 | N/A | \$50.00 | N/A |
| Address transition timing and coordination issues w/ other stations and wireless | \$2,630.00 | \$2,500.00 | N/A | \$3,361.00 | Prep Original Form 399. Includes additional consultation regarding reimbursable items. |

| | | | | | |
|--|----------------|----------------|-----|-------------|-----|
| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$7,000.00 | N/A | \$3,250.00 | N/A |
| Sub-total | \$169,100.00 | \$162,780.00 | N/A | \$11,611.00 | N/A |
| Total for all systems | \$2,031,970.00 | \$1,958,835.00 | N/A | \$22,206.29 | N/A |

Components

| Actual Information | |
|--|--|
| Description | File Name |
| Other Legal Services | Information not provided. |
| Other Engineering Services | <p>Component Description: Prep and submit actual cost invoices</p> <p>Amount: \$530.00</p> <p>Component Description: RF calculations for new equipment selection</p> <p>Amount: \$265.00</p> |
| Additional Field Engineering Service, 6 Days | Information not provided. |
| Comprehensive coverage verification via field study, if needed | 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. |

| | |
|---|---|
| <p>Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application</p> | <p>Component Description: 4 items on invoice for various Legal services related to Repack for WEKW.</p> <p>Amount: \$119.25</p> |
| <p>Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application</p> | <p>Component Description: Legal services related to the 2100 Main CP application for WEKW</p> <p>Amount: \$90.00</p> |
| <p>Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application</p> | <p>Component Description: Legal services related to Quarterly report for WEKW</p> <p>Amount: \$30.00</p> |
| <p>Prepare request for Special Temporary Authorization</p> | <p>Information not provided.</p> |
| <p>Prepare engineering section of FCC Form 2100 (main), License to Cover Application</p> | <p>Information not provided.</p> |
| <p>Prepare engineering section of FCC Form 2100 (main), Construction Permit Application</p> | <p>Component Description: FCC CP application for main facility</p> <p>Amount: \$2,000.00</p> |
| <p>Project management of the transition</p> | <p>Component Description: Preliminary design of RF transmission facilities for planning</p> <p>Amount: \$315.00</p> |
| <p>Project management of the transition</p> | <p>Component Description: Proj Mgmt 399 Actual Cost invoices</p> <p>Amount: \$300.00</p> |

Component Description: Prepare and submit
Sched 387
Amount: \$225.00

Component Description: KGA inv #211-43
Other Eng Srvc
UL20190301jgv2
Amount: \$315.00

Component Description: KGA inv #211-69
Form 387 2019 Q1
UL20190424jgv1
Amount: \$150.00

Component Description: KGA inv #211-31
Form 387 2017 Q3
UL20190301jgv2
Amount: \$300.00

Component Description: Prepare and submit
Sched 399 actual
charges
Amount: \$375.00

Component Description: KGA inv #211-33
Actual Cost
UL20190301jgv2
Amount: \$300.00

Component Description: One half the cost of
checks for the
reimbursement
bank account,
shared between
repack stations
WEKW and WLED
Amount: \$25.00

Component Description: Prep and submit
Form 387 3Q18
Amount: \$150.00

Component Description: KGA inv #211-45
Form 387 2018 Q1
UL20190301jgv2
Amount: \$225.00

Component Description: KGA inv #211-38
Form 387 2017 Q4
UL20190301jgv2
Amount: \$225.00

Component Description: Proj Mgmt for
3Q2017 Prog Rept
Amount: \$300.00

Component Description: KGA inv #211-40
Actual Cost
UL20190301jgv2
Amount: \$375.00

Component Description: Prepare and submit
Sched 387
Amount: \$225.00

Prepare and or review
reimbursement form

Component Description: KGA inv #211-71
Actual Cost invoices
by RG March 2019
UL20190424jgv1
Amount: \$50.00

| | |
|---|--|
| <p>Address transition timing and coordination issues w/ other stations and wireless</p> | <p>Component Description: Prep of original Form 399 for reimbursement</p> <p>Amount: \$2,500.00</p> <p>Component Description: Additional consultation regarding reimbursable items.</p> <p>Amount: \$861.00</p> |
| <p>Perform engineering study for new channel assignment and antenna development</p> | <p>Component Description: Engineering study for new channel assignment and antenna development</p> <p>Amount: \$3,250.00</p> |

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 | | \$0.00 | |
| DTV Medical Facility Notification | \$11,550.00 | \$11,000.00 | N/A | N/A | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$10,000.00</i> | \$10,000.00 | N/A | N/A | N/A |
| Equipment Delivery and Handling Charges | <i>\$60,000.00</i> | \$60,000.00 | 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 |
| MVPD Notification of Channel Change | <i>\$2,000.00</i> | \$2,000.00 | N/A | N/A | N/A |
| Sub-total | \$83,550.00 | \$83,000.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$2,031,970.00 | \$1,958,835.00 | N/A | \$22,206.29 | N/A |

Components

Information not provided.

Cost Information **Grand Total**

| | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
|------------------------------|------------------------------------|-----------------------|--------------------|
| Total for all systems | \$2,031,970.00 | \$1,958,835.00 | \$22,206.29 |

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 |
|---------------|---|---|----------|
| | <p>Submission of Estimated Expenses Statements</p> | <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.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Jeffrey C
Gehman**
*Engineering
Associate*

05/01/2019

| Certification | Section | Question | Response |
|---------------|--|--|----------|
| | <p>Submission of Actual Cost Documentation Statements</p> | <p>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).</p> | |
| | | <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.

8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

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.

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Jeffrey C
Gehman**
*Engineering
Associate*

05/01/2019

Attachments