

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

| Facility ID: | 71023 | Service: DTV | Call Sign: | KTNW | Channel: 22 (UHF) |
|-----------------|----------|--------------------|----------------|------|-------------------|
| File Number: | 00000 | 28348 | | | |
| FRN: 00 | 01563949 | Date Submitted: | 04/22 /2019 | | |

Applicant Name, Type, and Contact Information

Information

| Applicant | Address | Phone | Email | Applicant Type |
|--|--|-----------------------------|-------------------------------|----------------------|
| WASHINGTON STATE UNIVERSITY Doing Business As: WASHINGTON STATE UNIVERSITY | Murrow Public Media. Jackson Hall rm 382, P.O. BOX 642530 PULLMAN, WA 99164 United States | +1 (509) 335- 6585 | doug. krehbiel@wsu. edu | Government Entity |

Reimbursement Contact Name and Information Reimbursement Contact Information

| Applicant | Address | Phone | Email |
|----------------|---------|-------|-------|
| [Confidential] | | | |

Preparer Preparer Contact Name and Information

| Contact Information | Applicant | Address | Phone | Email |
|------------------------|---|------------------------|---------------|-------------------|
| | Martin L. Gibbs | 2710 Crimson | +1 (509) 948- | m. |
| | FCC Planning Engineer Washington State University Murrow | Way Richland, WA | 1496 | gibbs@wsu. edu |
| | Public Media | 99354 United States | | |
| | | | | |

| Broadcaster | Question | Response |
|--|--|---|
| Information and Transition Plan | 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 analog antenna at top of tower with new antenna; install new transmitter. This will allow parallel operation during the testing phase without additional expenses for temporary facilities. Ref: Attachment 1 |

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

| Primary | Existing Transmitter Information | | | | |
|-------------|-------------------------------------|--|-------------------|--|--|
| Fransmitter | 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 | | | |
| | Manufacturer and Type | Model | Magnum | | |
| | | Year | 2003 | | |
| | | Туре | Solid State | | |
| | | Solid State Cooling | Air Cooled | | |
| | | Solid State Power Capacity | 2 kW | | |

Existing Transmitter Information

| Primary | New Transmitter Costs | | | | | |
|-------------|-----------------------|---|--|--|--|--|
| Transmitter | Section | Question | Response | | | |
| | New Transmitter | Use | Primary (Main) | | | |
| | | Change Type | Purchase New | | | |
| | | Is this a request for upgraded equipment? | Yes | | | |
| | | Manufacturer | | | | |
| | | Model | THU9-EVO | | | |
| | | Transmitter Type | Solid State | | | |
| | | Solid State Cooling | Liquid Cooled | | | |
| | | Solid State Power capacity | 8.2 kW | | | |
| | | Justification for New Transmitter | Larcan Magnum transmitter is no longer supported and has many obsolete parts. Current manufacturer does not have documentation for re-tune. In addition, a higher TPO (4.9kW) is necessary to support the proposed antenna, 7.6 kW is an upgrade | | | |

| Primary Transmitter | Other Transmitter Costs | | | | | |
|------------------------|-------------------------|---------------------------------------|----------|--|--|--|
| | Section | Question | Response | | | |
| | Electrical Service | Service Entrance (3 phases 800A 208V) | No | | | |
| | | Switchgear (industrial 800 amp) | No | | | |
| | | | | | | |

| | Transformer (480V) | No |
|---|--|------------------------------------|
| | Power | N/A |
| | Rigid Conduit and Wiring | Yes |
| | Size | 2 inches |
| | Length | 25.0 feet |
| | Other Electrical Service | Yes |
| | Description | Branch panel with disconnect |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Туре | 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 leashold 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 Other Transmitter Cost Not Listed

Transmitter Information not provided.

| Antennas Section | | Question | Response |
|------------------|---------------|---------------------------------------|----------|
| Antenna Rela | ated Expenses | Do you have antenna related expenses? | Yes |

| Primary | Existing Antenna Information | | | | | |
|---------|---------------------------------|--|--------------------|--|--|--|
| Antenna | 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? | Yes | | | |
| | Existing Antenna | Class | Full Power | | | |
| | Manufacturer and Type | Mounting | Side Mount | | | |
| | | Antenna position in stack | Not in Stack | | | |
| | | Polarization | Horizontal | | | |
| | | Туре | 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) | 47.6 kW | | | |
| | | | - | | | |

| | Manufacturer | |
|--|--------------|--------|
| | Model | TLP-8L |
| | Year | 2003 |

| Primary | New Antenna Costs | | | |
|---------|---------------------------------------|--|--------------------|--|
| Antenna | 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? | Yes | |
| | | Will antenna be located on or in close proximity to an antenna farm? | Yes | |
| | New Antenna Manufacturer and Types | Class | Full Power | |
| | | Mounting | Side Mount | |
| | | Antenna position in stack | Not in Stack | |
| | | Polarization | Horizontal | |
| | | Туре | 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) | 29.5 kW | |
| | | Manufacturer | | |
| | | Model | SFN-3030-2 | |
| | | | | |

| Year | 2018 |
|-------------------------------|---|
| Justification for New Antenna | Old antenna cannot be retuned from channel 38 to channel 22. Ref: Attachment 1 |

Primary Other Antenna Costs

Antenna

| Section | Question | Response |
|--------------------------------|---|----------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | No |
| | Туре | |
| | 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? | No |
| | Broadband or Single Channel? | N/A |
| | Feed Line Size | N/A |
| 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? | No |

| Primary | Other Antenna Cost Not Listed |
|---------|-------------------------------|
| Antenna | Information not provided. |

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

| ransmissio | n 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 | Manufacturer | |
| | Line Manufacturer and Type | Туре | Flexible Ai |
| | | Diameter | 1 5/8 inches |
| | | Other Diameter | N/A |
| | | Segment Length | N/A |
| | | Other Segment Length | N/A |
| | | Number of parallel runs | 1 |
| | | Length | 120 feet per run |

Primary Existing Transmission Line

| Primary | New Transmission Line | | | |
|--------------|--------------------------------|---|---|--|
| Transmission | n Line Section | Question | Response | |
| | New Transmission Line Costs | Use | Primary (Main) | |
| | | Description of Use | N/A | |
| | | Change Type | Purchase New | |
| | | Is this a request for upgraded equipment? | No | |
| | | Туре | Flexible Air | |
| | | Diameter | 1 5/8 inches | |
| | | Other Diameter | N/A | |
| | | Segment Length | N/A | |
| | | Other Segment Length | N/A | |
| | | Number of parallel runs | 1 | |
| | | Length | 140 feet per run | |
| | | Justification for New Transmission Line | Enable parallel operation during testing period. Ref: Attachment 1 | |

Primary Other Transmission Line Expenses Not Listed

Transmission to me tion not provided.

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

| Primary Tower | Add Tower | | | |
|------------------|---|---|----------------------|--|
| | Section | Question | Response | |
| | Existing Tower Description | Type of change | Modify Existing | |
| | | Tower Use | Primary (Main) | |
| | | Description of Use | N/A | |
| | | Ownership | Owned | |
| | | Is this tower consider Complex? | No | |
| | | Is this tower currently shared with any other stations? | No | |
| | | One or more FM, AM or TV radio broadcaster(s) | N/A | |
| | | Others Types of Users | N/A | |
| | | Is tower documented for structural analysis? | Yes | |
| | | Is tower compliant with Rev G? | Unknown | |
| | Existing Tower Structure Registration | Do you have a tower registration number? | No | |
| | Registration | ASR Number | | |
| | Coordinates (<u>NAD83</u> (North American Datum of 1983)) | Latitude (NAD83) | 46° 06' 12.8" N- | |
| | | Longitude (NAD83) | 119° 07' 44.6" W- | |
| | | Overall Structure Height | 62.00 feet | |
| | | Support Structure Height | 62.00 feet | |
| | | Ground Elevation Above Mean Sea Level (AMSL) | 2182.00 feet | |
| | | | | |

| Structure Type | UTOWER - Unguyed - Free Standing Tower |
|------------------|--|
| Tower Owner | Washington State University |
| Date Constructed | 06/02/2003 |

Το Primary

| | - |
|-------|---|
| Tower | |
| | |

| wer Modification Co | sts |
|---------------------|-----|
|---------------------|-----|

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

Tower Rigging Costs Primary Tower

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

Other Tower Expenses Not Listed Primary

Tower Information not provided.

| Outside | Section | Question | Response |
|--------------|--|--|--|
| Professional | I Services Costs Outside Project Management Services | Do you require outside project management services? | Yes |
| | | Number of Hours | 400 |
| | | Explanation | Planning and coordination of project to assure adherence to Phase 1 schedule. See Attachment 1 |
| | 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 | No |
| | | Quantity | N/A |
| | | Do you have Distributed Transmission System engineering services? | N/A |
| | | Critical Facility | N/A |
| | | Terrain-Shielded Facility | N/A |
| | Attorney and Other Outside Consulting | Prepare and file Form FCC Construction Permit Application | Yes |
| | Services | 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 | No |
| | Quantity | N/A |
| | 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 | Yes |
| | Additional Field Engineering Service | No |
| | Number of Days | N/A |
| | Justification | N/A |

Other Professional Services Expenses Not Listed Professional Services roostsided.

| Other | Section | Question | Response |
|----------|---------------------------------|--|----------|
| Expenses | 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 | Yes |
| | | 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 Not Listed

Expenses Information not provided.

Transmitters

Cost Information

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 THU9-EVO | \$781,725.00 | \$497,705.00 | | \$266,618.43 | |
| UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW | \$273,500.00 | \$239,405.00 | ***System Notice: Estimate adjusted and locked because line has been superseded. *** | \$0.00 | A smaller transmitter would have been sufficient and is reflected in the attached quote. We chose to purchase a larger transmitter to enhance our coverage and understand that we are responsible for the difference in cost. |
| Other Electrical Service: Branch panel with disconnect | \$13,075.00 | \$13,075.00 | N/A | \$6,624.60 | N/A |
| 2" Rigid Conduit and Wiring (Cost per foot) | \$650.00 | \$625.00 | N/A | N/A | N/A |

| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | \$494,500.00 | \$244,600.00 | N/A | \$259,993.83 | Estimate revised to include parts required for transmitter that were not included on original estimate. |
|--|----------------|--------------|-----|--------------|---|
| Sub-total | \$781,725.00 | \$497,705.00 | N/A | \$266,618.43 | N/A |
| Total for all systems | \$1,249,925.00 | \$946,795.00 | N/A | \$356,378.35 | N/A |

| Actual Information Description | File Name | |
|--|-----------------------------------|--|
| UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW | Component Description: | THU9-EVO 8.2 KW ATSC / 7.5 KW OFDM transmitter |
| | Amount: | \$239,405.00 |
| Other Electrical Service: Branch panel with disconnect | Component Description: Amount: | material and labor to upgrade electrical system for new KTNW transmitter \$6,624.60 |
| 2" Rigid Conduit and Wiring (Cost per foot) | Information not provided. | |

| UHF - Liquid Cooled Solid | | |
|-------------------------------|-------------------------------|--------------------|
| State Transmitter 8.2 - 13 kW | Component Description: | Various parts and |
| | | assembly |
| | | hardware |
| | Amount: | \$5,192.17 |
| | Component Descriptions | |
| | Component Description: | KTNW |
| | | Transmitter - |
| | | portion of invoice |
| | | based on bid for |
| | | smaller unit. |
| | Amount: | \$259,993.83 |
| | | |
| | | |

Antennas

Cost Information

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 (| Actual Cost Cost Justification |
|---|--------------------------------|-------------------|---|-----------------------------------|
| Primary Antenna SFN-3030-2 | \$50,000.00 | \$50,000.00 | \$19,04 | 5.65 |
| UHF - High Power, Side Mount, basic slot antenna, 30 kW input, directional,, horizontally polarized | \$50,000.00 | \$50,000.00 | N/A \$19,04 | 5.65 N/A |
| Sub-total | \$50,000.00 | \$50,000.00 | N/A \$19,04 | 5.65 N/A |
| Total for all systems | \$1,249,925.00 | \$946,795.00 | N/A \$356,37 | 78.35 N/A |

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

| UHF - High Power, Side Mount, basic slot antenna, 30 kW input, directional,, horizontally polarized | Component Description: Amount: | Sales Tax paid by WSU directly to state. Not included in Invoice 9874- Magnum Towers. \$711.68 |
|--|-----------------------------------|--|
| | Component Description: | rods, washers and bolts for antenna installation |
| | Amount: | \$190.54 |
| | Component Description: | DTV Channel 22 UHF Slotted antenna with 10 full wave spaced |
| | Amount: | bays. \$18,136.20 |
| | Component Description: | Hex cap screws for antenna |
| | Amount: | installation \$7.23 |

Transmission Line

Cost Information

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|--------------------------------|-------------------|------------------------------------|--------------|--|
| Primary Transmission Line | \$4,620.00 | \$4,340.00 | | \$9,853.96 | |
| Flexible Air Transmission Line - dielectric, 1 5 /8" | \$4,620.00 | \$4,340.00 | N/A | \$9,853.96 | Additional line and fittings required to attach antenna to transmitter than originally estimated. |
| Sub-total | \$4,620.00 | \$4,340.00 | N/A | \$9,853.96 | N/A |
| Total for all systems | \$1,249,925.00 | \$946,795.00 | N/A | \$356,378.35 | N/A |

| Actual Information Description | File Name | |
|--|------------------------|--|
| Flexible Air Transmission Line - dielectric, 1 5/8" | Component Description: | Transmission Line plus assembly parts. |
| | Amount: | \$9,853.96 |

Tower Equipment and Rigging Costs

Cost Information

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 UTOWER | \$254,800.00 | \$242,000.00 | | \$20,376.30 | |
| Short Tower (less than 500') | \$84,200.00 | \$80,000.00 | N/A | \$10,230.30 | N/A |
| Minor tower reinforcement /modifications | \$158,000.00 | \$150,000.00 | N/A | \$8,896.00 | N/A |
| Structural engineering tower load study for well documented tower | \$12,600.00 | \$12,000.00 | N/A | \$1,250.00 | N/A |
| Sub-total | \$254,800.00 | \$242,000.00 | N/A | \$20,376.30 | N/A |
| Total for all systems | \$1,249,925.00 | \$946,795.00 | N/A | \$356,378.35 | N/A |

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

| | Component Description: | Labor and crane |
|------------------------------|--|-----------------------|
| | Component Description: | to install pole |
| | | mount for new |
| | | antenna at |
| | | KTNW. |
| | Amount: | \$9,828.00 |
| | Amount. | \$ 9,020.00 |
| | Component Description: | Review of project |
| | | site, determine |
| | | materials and |
| | | process |
| | Amount: | \$402.30 |
| Minor tower reinforcement | | |
| /modifications | Component Description: | Pole Mount for |
| | •••••••••••••••••••••••••••••••••••••• | antenna |
| | Amount: | \$8,896.00 |
| | | |
| Structural engineering tower | | |
| load study for well | Component Description: | Tower Structural |
| documented tower | | analysis |
| | Amount: | \$1,250.00 |
| | | <i><i><i></i></i></i> |

Outside Professional Services

Cost Information

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 | \$109,230.00 | \$103,750.00 | | \$30,364.41 | |
| RF Exposure Measurements | \$21,050.00 | \$20,000.00 | 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 | \$2,250.00 | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00 | \$5,000.00 | N/A | \$4,784.50 | N/A |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | \$1,580.00 | \$1,500.00 | N/A | \$482.34 | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00 | \$3,000.00 | N/A | \$920.00 | N/A |

| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$7,000.00 | N/A | \$2,125.20 | N/A |
|--|----------------|--------------|-----|--------------|-----|
| 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 | \$599.84 | N/A |
| Project management of the transition | \$63,200.00 | \$60,000.00 | N/A | \$19,202.53 | N/A |
| Sub-total | \$109,230.00 | \$103,750.00 | N/A | \$30,364.41 | N/A |
| Total for all systems | \$1,249,925.00 | \$946,795.00 | N/A | \$356,378.35 | N/A |

| Actual Information Description | File Name |
|-----------------------------------|---------------------------|
| RF Exposure Measurements | Information not provided. |

Attorney Fees -Prepare and File FCC (main), Licer Application

| Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application | Component Description: Amount: | Attorney Fees - Construction portion of invoice \$42.50 |
|---|-----------------------------------|---|
| | Component Description: | Attorney service related to licensing and form 399 |
| | Amount: | \$990.50 |
| | Component Description: | Attorney service related to application, licensing and form 399 |
| | Amount: | \$349.00 |
| | Component Description: | Attorney service for licensing and form 399 |
| | Amount: | \$212.00 |
| | Component Description: | Attorney service related to licensing and form 399 |
| | Amount: | \$317.00 |
| | Component Description: | Attorney services related to licensing and form 399 |
| | Amount: | \$339.00 |
| Attorney Fees - Prepare and File FCC Form 2100 | Component Description: | Attorney fees for |
| (main), Construction Permit Application | Amount: | July 2018 \$427.50 |
| | | |

| Component Description: Amount: | portion of invoice related to construction permit application \$37.00 |
|-----------------------------------|--|
| Component Description: Amount: | FCC licensing and filing \$227.00 |
| Component Description: | Attorney Fees - Construction Permit application - April \$712.50 |
| Component Description: | Attorney service related to construction permit |
| Amount: | preparation and submission \$1,548.00 |
| Component Description: Amount: | Attorney service related to construction permit preparation and submission \$301.00 |
| Component Description: | Attorney fees - Construction permit application - Dec 17 |
| Amount: | \$47.50 |
| Component Description: Amount: | Attorney fees August 2018 \$522.50 |

| | Component Description: | Attorney Fees - Construction permit application - March |
|--|------------------------|--|
| | Amount: | \$242.50 |
| | Component Description: | Attorney Fees - Construction permit application June |
| | Amount: | \$185.00 |
| | Component Description: | Attorney service related to construction permit preparation and submission |
| | Amount: | \$375.00 |
| | Component Description: | Attorney Fees - Construction permit application - February |
| | Amount: | \$159.00 |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | Component Description: | portion of invoice related to license to cover |
| | Amount: | \$216.00 |
| | Component Description: | portion of wages attributed to FCC form 2100 |
| | Amount: | \$266.34 |

| Prepare engineering | | |
|--|---------------------------|---|
| section of FCC Form 2100 (main), Construction Permit Application | Component Description: | prepare engineering section |
| , application | | of Form 2100, |
| | | construction permit application. wages |
| | | during 2nd qtr 2017 |
| | Amount: | \$690.00 |
| | | |
| | Component Description: | prepare |
| | | engineering section of Form 2100, |
| | | construction permit |
| | | application. Portion |
| | | of wages allocated |
| | | during 3rd quarter |
| | Amount: | 2017 \$220.00 |
| | Amount: | \$230.00 |
| Perform engineering study for new channel | | |
| assignment and antenna | Component Description: | portion of wages |
| development | | attributed to |
| | | engineering study |
| | | and antenna |
| | Amount: | development \$285.20 |
| | | φ200.20 |
| | Component Description: | Engineering Study |
| | | portion of 2nd |
| | | quarter wages. |
| | Amount: | \$1,840.00 |
| Address transition timing and coordination issues w/ other stations and wireless | Information not provided. | |
| Prepare and or review | | |
| reimbursement form | _ | |
| | Component Description: | portion of wages |
| | | attributed to reimbursement |
| | | form review |
| | Amount: | \$599.84 |
| | | |
| Draight management of the | | |

| project management - wages allocated during 3rd quarter 2017 \$1,334.00 |
|--|
| Transmitter line resubmit form 399 \$142.50 |
| Progress reports and updates \$530.00 |
| project management of February \$130.00 |
| Portion of wages allocated to Project Management during 4th quarter 2017 \$1,061.68 |
| July - September portion of wages related Repack \$2,716.30 |
| portion of invoice related to general transition management \$1,307.50 |
| |

| Component Description: Amount: | Attorney service related to management of overall project. \$1,156.00 |
|-----------------------------------|---|
| Component Description: Amount: | Portion of 2nd quarter wages allocated to general project management \$2,205.70 |
| Component Description: Amount: | Portion of First Quarter 2018 wages applicable to Project Management \$4,010.28 |
| Component Description: Amount: | Portion of M. Gibbs time on Project Management of Repack for 2nd quarter of year. \$2,656.04 |
| Component Description: Amount: | wages attributed to transition management \$92.00 |
| Component Description: Amount: | Progress reports and FCC filings \$737.50 |
| Component Description: Amount: | Progress reports \$265.00 |

| Component Description: | Project management - |
|------------------------|---------------------------|
| | wages for 1st quarter. |
| Amount: | \$782.00 |
| Component Description: | portion of wages |
| | attributed to project |
| | management |
| Amount: | \$76.03 |

Other Expenses

Cost Information

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 | \$49,550.00 | \$49,000.00 | | \$10,119.60 | |
| MVPD Notification of Channel Change | \$2,000.00 | \$2,000.00 | N/A | N/A | N/A |
| Develop and air announcement of upcoming channel change | \$3,000.00 | \$3,000.00 | N/A | N/A | N/A |
| Equipment Storage | \$4,000.00 | \$4,000.00 | N/A | \$900.00 | N/A |
| Equipment Delivery and Handling Charges | \$25,000.00 | \$25,000.00 | N/A | \$5,089.60 | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | \$2,000.00 | \$2,000.00 | N/A | N/A | N/A |
| Non-zoning permits | \$2,000.00 | \$2,000.00 | N/A | N/A | N/A |
| DTV Medical Facility Notification | \$11,550.00 | \$11,000.00 | N/A | \$4,130.00 | N/A |
| Sub-total | \$49,550.00 | \$49,000.00 | N/A | \$10,119.60 | N/A |
| Total for all systems | \$1,249,925.00 | \$946,795.00 | N/A | \$356,378.35 | N/A |

| Actual Information Description | File Name | |
|--|-----------------------------------|---------------------------------------|
| MVPD Notification of Channel Change | Information not provided. | |
| Develop and air announcement of upcoming channel change | Information not provided. | |
| Equipment Storage | | |
| | Component Description: Amount: | Storage of transmitter \$900.00 |
| | | |
| Equipment Delivery and | | |
| Handling Charges | Component Description: | rental of front loader |
| | Amount: | \$380.10 |
| | | |
| | Component Description: | Rental of portable toilet |
| | Amount: | \$91.00 |
| | Component Description: | Transmitter handling and |
| | Amount: | delivery \$2,718.00 |
| | Component Description: | Pole mount handling and |
| | Amount: | delivery \$1,900.50 |
| Disposal Costs (for equipment and other waste, net of any salvage value) | Information not provided. | |
| Non-zoning permits | Information not provided. | |

| DTV Medical Facility | | |
|----------------------|-------------------------------|--------------------|
| Notification | Component Description: | Notification of |
| | | Cable and |
| | | Satellite MVPD |
| | | Providors of new |
| | | RF Chanel & |
| | | Transport Stream |
| | | parameters |
| | Amount: | \$1,755.00 |
| | Component Description: | Notification of |
| | | Medical Facilities |
| | Amount: | \$2,375.00 |
| | | |

| Cost Information | Grand Total | | | |
|---------------------|-----------------------|--------------------------------|----------------|--------------|
| | | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
| | Total for all systems | \$1,249,925.00 | \$946,795.00 | \$356,378.35 |

| Reimbursem | enrestanus | 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 | 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. | |
| | | 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. 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).
- 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. | |
|---------------|--|---|
| an au name | are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ied above. | Denise Crossler , Crossler . Grant & Contract Specialist 04/22/2019 |

| 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 IMPRISIONMENT (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). | |
| | | 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).
- 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.

| | 9. | The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 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. | |
|--|------------------|--|---|
| | an auti named | re, under penalty of perjury, that I am horized representative of the above- I applicant for the Authorization(s) ed above. | Denise Crossler , Crossler . Grant & Contract Specialist 04/22/2019 |

Attachments