Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility ID: **34204** | Service: **DTV** | Call Sign: **WCVN-TV** | Channel: **22 (UHF)**

File Number: **0000026897**

FRN: **0001790583** | Date Submitted: **10/21/2020**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|---|---|---|---|---|
| **KENTUCKY AUTHORITY FOR EDUCATIONAL TV**<br>Doing Business As:<br>KENTUCKY AUTHORITY FOR EDUCATIONAL TV | Shae Hopkins<br>600 COOPER DR<br>LEXINGTON, KY 40502<br>United States | +1 (859) 258-7000 | SHOPKINS@KET.ORG | Government Entity |

## 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 |
|---|---|---|---|
| **Greg Best**<br>*Consulting Engineer*<br>*Greg Best Consulting, Inc.* | Greg Best<br>16100 Outlook Avenue<br>Stilwell, KS 66085<br>United States | +1 (816) 792-2913 | gbconsulting54@gmail.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 | Please see attached repack plan exhibit. |

## 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 | DHD20P1 |
| | Year | 2001 |
| | 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 | Maxiva UAXTE-8 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Air Cooled |
| | Solid State Power capacity | 5 kW |
| | Justification for New Transmitter | Pre-auction transmitter no longer supported by supplier; not re-tunable. |

## Primary Transmitter

### Other Transmitter Costs

| Section | Question | Response |
|---|---|---|
| **Electrical Service** | Service Entrance (3 phases 800A 208V) | Yes |
| | Switchgear (industrial 800 amp) | Yes |
| | Transformer (480V) | No |
| | Power | N/A |
| | Rigid Conduit and Wiring | Yes |
| | Size | 3 inches |
| | Length | 50.0 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 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 Transmitter

### Other Transmitter Cost Not Listed

Information not provided.

## Antennas

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

## Primary Antenna

### Existing Antenna Information

| Section | Question | Response |
|---|---|---|
| **Existing Antenna Description** | Type of change | Purchase New |
| | Antenna Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | No |
| | Is the existing antenna directional? | Yes |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | No |
| **Existing Antenna Manufacturer and Type** | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels | N/A |
| | Design power capacity in use | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 53.5 kW |
| | | |

| | |
|---|---|
| Manufacturer | |
| Model | TLP-16B (24) |
| Year | 2001 |

## 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) | 39.9 kW |
| | Manufacturer | |

| | |
|---|---|
| Model | ATW17H3-ETO-22H |
| Year | 2017 |
| Justification for New Antenna | Primary antenna is not broadband or able to be tuned to a new channel. New top mount reduces overall repack cost. Please see Repack Plan Exhibit for details. |

**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 | 3 1/8 inches 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

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 | Flexible Air |
| | Diameter | 3 inches |
| | Other Diameter | N/A |
| | Segment Length | N/A |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 300 feet per run |

## Primary Transmission Line

### New Transmission 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? | Yes |
| | Type | Rigid |
| | Diameter | 3 1/8 inches |
| | Other Diameter | N/A |
| | Segment Length | Broadband |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 370 feet per run |
| | Justification for New Transmission Line | Installation of new broadband line makes possible the operation of the current facility while the tower is rigged and the construction of the new facility is underway. Licensee has chosen to upgrade to 3" rigid T-Line. |

| Primary 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? | 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? | No |
| | Is tower compliant with Rev G? | No |
| **Existing Tower Structure Registration** | Do you have a tower registration number? | Yes |
| | ASR Number | 1044039 |
| **Coordinates (NAD83 ( North American Datum of 1983))** | Latitude (NAD83) | 39° 01' 51.0" N- |
| | Longitude (NAD83) | 084° 30' 23.0" W- |
| | Overall Structure Height | 312.33 feet |
| | Support Structure Height | 297.57 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 828.40 feet |
| | Structure Type | TOWER - Free Standing or Guyed Structure |

| | |
|---|---|
| Tower Owner | KENTUCKY AUTHORITY FOR EDUCATIONAL TELEVISION DBA = WCVN TV |
| Date Constructed | 01/01/1968 |

**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: | Minor Reinforcements needed |

**Primary Tower**

### Tower Rigging Costs

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

**Primary Tower**

### Other Tower Expenses Not Listed

| Name | Description |
|---|---|
| **Crane Services** | Crane was required to displace fiber cable that prevented antenna installation. |
| **Load Study** | Structural engineering tower load study is required to design tower reinforcements and rigging. |

## Outside Professional Services Costs

| Section | Question | Response |
|---|---|---|
| **Outside Project Management Services** | Do you require outside project management services? | Yes |
| | Number of Hours | 80 |
| | Explanation | KET Staff require outside services to manage the upgrades. |
| **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 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 | No |
| | Quantity | N/A |
| | 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 | No |
| **RF Field Engineering Services** | Comprehensive coverage verification via field study | No |
| | RF exposure measurements | No |
| | Additional Field Engineering Service | No |
| | Number of Days | N/A |
| | Justification | N/A |

## Outside Professional Services Costs

### Other Professional Services Expenses Not Listed

| Name | Description |
|---|---|
| **Progress and Transition Reports** | Engineering consultant costs not otherwise listed. |

## Other Expenses

| Section | Question | Response |
|---|---|---|
| **AM Pattern Disturbance** | Is an Impact Study needed? | Yes |
| | Is Remediation needed? | Yes |
| **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? | No |
| | Does this relocation require Equipment Storage? | Yes |
| | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change? | Yes |
| | Does this relocation require MVPD Notification of a Channel Change? | Yes |

## Other Expenses

### Other Expenses Not Listed

| Name | Description |
| --- | --- |
| **Internal Labor** | FCC Reimbursement Clerk hired for repack reimbursement ONLY |

## 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 Maxiva UAXTE-8** | **$291,700.00** | **$292,511.00** | | **$131,615.13** | |
| Service entrance 3 phase/800 amp/208 volt | $14,400.00 | $28,761.00 | Estimated costs were based on catalog and actual costs exceeded estimated costs. | $3,661.50 | 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 | $127,953.63 | N/A |
| 3" Rigid Conduit and Wiring (Cost per foot) | $2,600.00 | $2,450.00 | N/A | N/A | N/A |
| **Sub-total** | $291,700.00 | $292,511.00 | N/A | $131,615.13 | N/A |
| **Total for all systems** | $1,040,100.00 | $1,273,000.29 | N/A | $775,196.07 | N/A |

### Components

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

Service entrance 3 phase /800 amp/208 volt

| | |
|---|---|
| **Component Description:** | KET transmitter building electrical upgrade |
| **Amount:** | $415.00 |
| **Component Description:** | KET transmitter building electrical upgrades |
| **Amount:** | $120.00 |
| **Component Description:** | KET transmitter building electrical upgrade |
| **Amount:** | $60.00 |
| **Component Description:** | KET Transmitter building electrical upgrade |
| **Amount:** | $400.00 |
| **Component Description:** | KET Transmitter building electrical upgrade |
| **Amount:** | $650.00 |
| **Component Description:** | DECA Projects $100k-$500k (.3% of contract price) (includes eComm admnistration and support, and distribution services at the time of bidding.) Packs Inc contract |
| **Amount:** | $500.00 |

| | |
|---|---|
| **Component Description:** | KET transmitter building electrical upgrades |
| **Amount:** | $25,513.75 |
| **Component Description:** | KET Transmitter Building Electrical Upgrade |
| **Amount:** | $6.00 |
| **Component Description:** | KET Transmitter building electrical upgrade |
| **Amount:** | $50.00 |
| **Component Description:** | KET Transmitter building electrical upgrade |
| **Amount:** | $730.00 |
| **Component Description:** | KET transmitter building electrical upgrade |
| **Amount:** | $445.50 |
| **Component Description:** | KET transmitter building electrical upgrade |
| **Amount:** | $205.00 |
| **Component Description:** | KET transmitter building electrical upgrade |
| **Amount:** | $30.00 |

| | | |
|---|---|---|
| | **Component Description:**<br><br>**Amount:** | KET transmitter building electrical upgrade<br>$50.00 |
| Switchgear - industrial 800 amp | Information not provided. | |
| UHF - Air Cooled Solid State Transmitter 4 - 6 kW | **Component Description:**<br><br><br><br>**Amount:** | transmitter, rf system, electrical system, installation & proof, freight<br>$127,153.25 |
| | **Component Description:**<br><br><br><br>**Amount:** | eComm admin and support, distribution services at time of bidding - GatesAir, RFP-48-19<br>$362.88 |
| | **Component Description:**<br><br>**Amount:** | Antenna & line spec<br>$437.50 |
| 3" Rigid Conduit and Wiring (Cost per foot) | Information not provided. | |

## Cost Information

### Antennas

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|---|---|---|---|---|
| **Primary Antenna ATW17H3-ETO-22H** | **$303,830.00** | **$254,900.00** | | **$147,046.25** | |
| Sweep test of existing antenna | $6,730.00 | $12,500.00 | the third sweep was to confirm the performance of the existing transmission line, before it was disconnected from the current DTV antenna. This was included at every site where the existing DTV transmission line was reused to feed the new main antenna | $12,500.00 | N/A |
| UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized | $289,500.00 | $235,000.00 | Cost estimate adjusted for reimbursement of horizontal-polarized antenna like the pre-repack primary antenna. | $134,546.25 | 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 |
| **Sub-total** | $303,830.00 | $254,900.00 | N/A | $147,046.25 | N/A |
| **Total for all systems** | $1,040,100.00 | $1,273,000.29 | N/A | $775,196.07 | N/A |

## Components

| Actual Information Description | File Name |
|---|---|
| Sweep test of existing antenna | **Component Description:** system sweep (35%)<br>**Amount:** $4,375.00<br><br>**Component Description:** system sweep (5%)<br>**Amount:** $625.00<br><br>**Component Description:** system sweep (10%)<br>**Amount:** $1,250.00<br><br>**Component Description:** system sweep (50%)<br>**Amount:** $6,250.00 |

| | | |
|---|---|---|
| UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized | **Component Description:**<br><br><br><br>**Amount:** | antenna (less vpol) and replacement lighting (35%)<br>$46,984.00 |
| | **Component Description:**<br><br><br><br>**Amount:** | antenna (less vpol) and replacement lighting (10%)<br>$13,424.00 |
| | **Component Description:**<br><br><br><br>**Amount:** | antenna (less vpol) and replacement lighting (5%)<br>$6,712.00 |
| | **Component Description:**<br><br><br><br>**Amount:** | antenna (less vpol) and replacement lighting (50%)<br>$67,120.00 |
| | **Component Description:**<br><br><br><br>**Amount:** | Antenna gain and TPO Evaluation and revision of specifications<br>$306.25 |
| Elbow complex, single channel, at antenna input, per 3 1/8. 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 |
|---|---|---|---|---|---|
| **Primary Transmission Line** | **$44,400.00** | **$78,832.29** | | **$39,720.16** | |
| Rigid Transmission Line - copper, 3 1 /8" broadband | $44,400.00 | $78,832.29 | See quotation from ERI based upon required work and supplemental information regarding transmission line upgrade costs. Cost includes T-Line and dryer. Licensee confirms it is responsible for upgrade cost. | $39,720.16 | N/A |
| **Sub-total** | $44,400.00 | $78,832.29 | N/A | $39,720.16 | N/A |
| **Total for all systems** | $1,040,100.00 | $1,273,000.29 | N/A | $775,196.07 | N/A |

### Components

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

| | | |
|---|---|---|
| Rigid Transmission Line - copper, 3 1/8" broadband | **Component Description:** | transmission line (less additional cost of rigid) and air dryer (35%) |
| | **Amount:** | $13,902.07 |
| | **Component Description:** | transmission line (less additional cost for rigid) and air dryer (10%) |
| | **Amount:** | $3,972.02 |
| | **Component Description:** | transmission line (5%) |
| | **Amount:** | $1,986.00 |
| | **Component Description:** | transmission line (less additional cost for rigid) and air dryer (50%) |
| | **Amount:** | $19,860.07 |

## 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** | **$308,980.00** | **$563,980.00** | | **$437,462.26** | |
| Short Tower (less than 500') | $84,200.00 | $345,000.00 | KET obtained quotation of realistic scope of tower rigging work from reputable supplier. Please see attached Tower Work exhibit. | $236,372.88 | N/A |
| Minor tower reinforcement /modifications | $158,000.00 | $153,500.00 | N/A | $145,659.38 | N/A |
| 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 | $17,400.00 | N/A |
| Crane Services | ***$28,480.00*** | $28,480.00 | Crane was required to displace backhaul fiber line in order to allow antenna installation to occur. | $28,480.00 | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Load Study | ***$12,000.00*** | $12,000.00 | Structural engineering tower load study is required to design tower reinforcements and rigging. | $9,550.00 | N/A |
| **Sub-total** | $308,980.00 | $563,980.00 | N/A | $437,462.26 | N/A |
| **Total for all systems** | $1,040,100.00 | $1,273,000.29 | N/A | $775,196.07 | N/A |

## Components

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

| | | |
|---|---|---|
| Short Tower (less than 500') | **Component Description:** | installation services (35%) |
| | **Amount:** | $82,191.45 |
| | **Component Description:** | installation services (10%) |
| | **Amount:** | $23,483.27 |
| | **Component Description:** | installation services (5%) |
| | **Amount:** | $11,741.64 |
| | **Component Description:** | installation services (50%) |
| | **Amount:** | $117,416.35 |
| | **Component Description:** | 3rd submission: eComm administration and support, distribution services at time of bidding -- Electronics Research, Inc. contract - RFP-96-19 |
| | **Amount:** | $1,540.17 |

| | | |
|---|---|---|
| Minor tower reinforcement /modifications | **Component Description:** | Second Installment Tower Modification |
| | **Amount:** | $2,475.00 |
| | **Component Description:** | tower mod |
| | **Amount:** | $142,500.00 |
| | **Component Description:** | eComm administration and support, distribution services at time of bidding -- Allstate Tower contract RFB-198-18 |
| | **Amount:** | $46.88 |
| | **Component Description:** | First Installment Tower Modification |
| | **Amount:** | $4,500.00 |
| | **Component Description:** | eComm administration and support, distribution services at time of bidding -- Allstate Tower contract |
| | **Amount:** | $637.50 |

| | | |
|---|---|---|
| Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study | **Component Description:**<br>**Amount:** | First Installment Tower Mapping<br>$1,023.00 |
| | **Component Description:**<br>**Amount:** | Second Installment Tower Mapping<br>$2,077.00 |
| | **Component Description:**<br>**Amount:** | First Installment Foundation Mapping<br>$3,500.00 |
| | **Component Description:**<br>**Amount:** | mapping complete<br>$7,500.00 |
| | **Component Description:**<br>**Amount:** | First Installment Tower Inspections<br>$1,189.00 |
| | **Component Description:**<br>**Amount:** | Second Installment Tower Inspections<br>$2,111.00 |
| Crane Services | **Component Description:**<br>**Amount:** | crane services to swap top antenna (50%)<br>$14,240.00 |
| | **Component Description:**<br>**Amount:** | crane services to swap top antenna (remaining 50%)<br>$14,240.00 |

| | | |
|---|---|---|
| Load Study | **Component Description:** | Second Installment Tower Structural Analysis |
| | **Amount:** | $450.00 |
| | **Component Description:** | First Installment Geotechnical Studies |
| | **Amount:** | $2,310.00 |
| | **Component Description:** | First Installment Tower Structural Analysis |
| | **Amount:** | $2,550.00 |
| | **Component Description:** | Second Installment Geotechnical Studies |
| | **Amount:** | $4,690.00 |

## 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** | **$43,200.00** | **$42,777.00** | | **$16,211.99** | |
| Progress and Transition Reports | ***$4,000.00*** | $4,000.00 | Engineering consultant costs not otherwise listed. | $787.50 | 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 | $668.93 | N/A |
| ASR modification (prepare FCC Form 854) | $2,105.00 | $2,000.00 | N/A | $481.25 | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application | $2,365.00 | $3,777.00 | Estimated costs were based on catalog, and actual costs exceeded estimates. | $3,626.50 | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | $5,260.00 | $5,000.00 | N/A | $1,235.00 | 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 | $2,712.50 | N/A |
| Perform engineering study for new channel assignment and antenna development | $7,360.00 | $7,000.00 | N/A | $721.87 | N/A |
| Prepare and or review reimbursement form | $2,630.00 | $2,500.00 | N/A | $1,487.50 | N/A |
| Project management of the transition | $12,640.00 | $12,000.00 | KET Staff require outside services to manage the upgrades. | $4,490.94 | N/A |
| **Sub-total** | $43,200.00 | $42,777.00 | N/A | $16,211.99 | N/A |
| **Total for all systems** | $1,040,100.00 | $1,273,000.29 | N/A | $775,196.07 | N/A |

## Components

| Actual Information Description | File Name |
|---|---|
| Progress and Transition Reports | **Component Description:** quarterly progress report<br>**Amount:** $350.00<br><br>**Component Description:** quarterly progress report<br>**Amount:** $437.50 |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | **Component Description:** FAA Inquiry<br>**Amount:** $350.00<br><br>**Component Description:** FAA follow up with project status report<br>**Amount:** $175.00<br><br>**Component Description:** notice of proposed tower height increase in newspaper & online<br>**Amount:** $143.93 |
| ASR modification (prepare FCC Form 854) | **Component Description:** ASR mod app followup<br>**Amount:** $131.25<br><br>**Component Description:** ASR Issue Resolution<br>**Amount:** $350.00 |
| Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover | |

Application

| | |
|---|---|
| **Component Description:** | reminder and research re: quarterly repack report and progress reports |
| **Amount:** | $134.00 |
| **Component Description:** | repack issues re: tower work disrupting FM stations |
| **Amount:** | $148.50 |
| **Component Description:** | email reminder re: repack progress report; prepare summary and email re: dependencies |
| **Amount:** | $70.00 |
| **Component Description:** | repack issues re: reimbursement process; engaging a project manager; email re: same |
| **Amount:** | $198.00 |
| **Component Description:** | email re: FCC shutdown, repack filings, other repack related work during shutdown; work on MVPD notifications and obligations |
| **Amount:** | $544.50 |
| **Component Description:** | Repack phase 6 legal expenses |
| **Amount:** | $1,526.50 |

**Component Description:** prepare chart re: WCVN's repack dependencies and linked station set

**Amount:** $105.00

**Component Description:** public notice; repack & coordination of linked station for testing and sequence of transitioning stations

**Amount:** $134.00

**Component Description:** Second Installment Attorney Fees 2100

**Amount:** $320.50

**Component Description:** First Installment Attorney Fees 2100

**Amount:** $49.50

**Component Description:** work on transition timing and other issues for repack

**Amount:** $148.50

**Component Description:** Environmental review

**Amount:** $49.50

**Component Description:** work on review and analysis of RFP for repack reimbursement assistance

**Amount:** $198.00

| | | |
|---|---|---|
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | **Component Description:**<br>**Amount:** | Third Installment Attorney Fees<br>$99.00 |
| | **Component Description:**<br>**Amount:** | First Installment Attorney Fees<br>$99.00 |
| | **Component Description:**<br>**Amount:** | Fourth Installment Attorney Fees<br>$198.00 |
| | **Component Description:**<br>**Amount:** | Second Installment Attorney Fees<br>$839.00 |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | Information not provided. | |

| | | |
|---|---|---|
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | **Component Description:** | Hitachi and GatesAir response review, new antenna and line specs |
| | **Amount:** | $525.00 |
| | **Component Description:** | new antenna and line specs |
| | **Amount:** | $87.50 |
| | **Component Description:** | Antenna and transmission line bid spec review and bid response review |
| | **Amount:** | $700.00 |
| | **Component Description:** | First Installment CP Prepare |
| | **Amount:** | $1,400.00 |

| | | |
|---|---|---|
| Perform engineering study for new channel assignment and antenna development | **Component Description:** | Review of site documentation and antennas, facility planning |
| | **Amount:** | $459.37 |
| | **Component Description:** | First Installment Engineering Study |
| | **Amount:** | $459.37 |
| | **Component Description:** | Linked station neighbor analysis |
| | **Amount:** | $262.50 |
| | **Component Description:** | Non-Reimbursable, $0.00 requested |
| | **Amount:** | N/A |
| | **Component Description:** | Third Installment Engineering Study |
| | **Amount:** | $2,100.00 |
| Prepare and or review reimbursement form | **Component Description:** | Second Installment 399 Form |
| | **Amount:** | $87.50 |
| | **Component Description:** | First Installment 399 Form |
| | **Amount:** | $1,400.00 |
| Project management of the transition | **Component Description:** | project management |
| | **Amount:** | $262.50 |

| | |
|---|---|
| **Component Description:** | project management |
| **Amount:** | $525.00 |
| **Component Description:** | Roy Paxton travel for electrical work with generator, Aug 25-30, 2019 |
| **Amount:** | $755.91 |
| **Component Description:** | project management |
| **Amount:** | $43.75 |
| **Component Description:** | project management tasks |
| **Amount:** | $87.50 |
| **Component Description:** | project management |
| **Amount:** | $175.00 |
| **Component Description:** | travel expenses |
| **Amount:** | $294.50 |
| **Component Description:** | project management |
| **Amount:** | $43.75 |
| **Component Description:** | Travel expenses - invoice number highlighted and labeled |
| **Amount:** | $156.25 |

| | |
|---|---|
| **Component Description:** | project management |
| **Amount:** | $175.00 |
| **Component Description:** | project management |
| **Amount:** | $481.25 |
| **Component Description:** | travel expenses |
| **Amount:** | $10.78 |
| **Component Description:** | project management |
| **Amount:** | $831.25 |
| **Component Description:** | Travel expenses - INVOICE NUMBER noted on travel voucher |
| **Amount:** | $561.00 |
| **Component Description:** | project management |
| **Amount:** | $87.50 |

## 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** | **$47,990.00** | **$40,000.00** | | **$3,140.28** | |
| Internal Labor | ***$2,000.00*** | $2,000.00 | N/A | $434.03 | N/A |
| Develop and air announcement of upcoming channel change | ***$1,500.00*** | $1,500.00 | KET estimate for developing and airing announcement. | N/A | N/A |
| Equipment Storage | ***$500.00*** | $500.00 | GBC estimate | N/A | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | ***$2,000.00*** | $2,000.00 | KET estimate based on known costs. | N/A | N/A |
| DTV Medical Facility Notification | $11,550.00 | $5,000.00 | GBC estimate based on known quotations | $1,587.50 | N/A |
| AM Pattern Disturbance -- Remedy | $21,050.00 | $20,000.00 | N/A | N/A | N/A |
| AM Pattern Disturbance -- Impact study | $7,890.00 | $7,500.00 | N/A | N/A | N/A |
| MVPD Notification of Channel Change | ***$1,500.00*** | $1,500.00 | KET estimate to search for and notify all cable companies. | $1,118.75 | N/A |
| **Sub-total** | $47,990.00 | $40,000.00 | N/A | $3,140.28 | N/A |

| | | | | | |
|---|---|---|---|---|---|
| **Total for all systems** | $1,040,100.00 | $1,273,000.29 | N/A | $775,196.07 | N/A |

## Components

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

| | |
|---|---|
| Internal Labor | **Component Description:** payroll expenses for internal labor<br>**Amount:** $57.54<br><br>**Component Description:** payroll expenses for internal labor<br>**Amount:** $37.85<br><br>**Component Description:** payroll expenses for internal labor<br>**Amount:** $37.55<br><br>**Component Description:** payroll expenses for internal labor<br>**Amount:** $69.49<br><br>**Component Description:** payroll expenses for internal labor<br>**Amount:** $71.75<br><br>**Component Description:** payroll expenses for internal labor<br>**Amount:** $58.43<br><br>**Component Description:** payroll expenses for internal labor<br>**Amount:** $34.51<br><br>**Component Description:** payroll expenses for internal labor<br>**Amount:** $66.91 |
| Develop and air announcement of upcoming channel change | Information not provided. |
| Equipment Storage | Information not provided. |

| | | |
|---|---|---|
| Disposal Costs (for equipment and other waste, net of any salvage value) | Information not provided. | |
| DTV Medical Facility Notification | **Component Description:**<br>**Amount:** | medical notification<br>$1,587.50 |
| AM Pattern Disturbance -- Remedy | Information not provided. | |
| AM Pattern Disturbance -- Impact study | Information not provided. | |
| MVPD Notification of Channel Change | **Component Description:**<br>**Amount:** | prepare letters to MVPDs, research and contact all MVPDs, prepare report for station<br>$1,118.75 |

## Cost Information

### Grand Total

| | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
|---|---|---|---|
| **Total for all systems** | $1,040,100.00 | $1,273,000.29 | $775,196.07 |

## 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** | 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. | |
| | 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.<br>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.<br>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. | **Shae Hopkins**<br>*Executive Director*<br><br>10/21/2020 |

## 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). | |
| | 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.<br>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.<br>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.<br>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. | **Shae Hopkins**<br>*Executive Director*<br><br>10/21/2020 |

## Attachments