## FCC Form 399:

Reimbursement Request

| Facility 34196 | Service: DTV | Call | WKHA | Channel: 33 (UHF) |
| :---: | :---: | :---: | :---: | :---: |
| ID: |  | Sign: |  |  |
| File 00000 | 6906 |  |  |  |
| Number: |  |  |  |  |
| FRN: 0001790583 | Date | 08/28 |  |  |
|  | Submitted: | /2019 |  |  |


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

## Reimbursement Contact Name and Information <br> Reimbursement Contact information

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

Preparer Contact Information

Preparer Contact Name and Information

| Applicant | Address | Phone | Email |
| :--- | :--- | :--- | :--- |
| Greg Best | 16100 Outlook | $+1(816) 792-$ | gbconsulting54@gmail. |
| Consulting Engineer | Avenue | 2913 | com |
| Greg Best Consulting, | Stilwell, KS 66085 |  |  |
| Inc. | United States |  |  |


| 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 <br> Expenses | Do you have transmitter related expenses? | Yes |  |

Primary
Transmitter
Existing Transmitter Information

| Section | Question | Response |
| :---: | :---: | :---: |
| Existing Transmitter Description | Type of change | Purchase <br> 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 <br> (Main) |
|  |  | Change Type | Purchase New |
|  |  | Is this a request for upgraded equipment? | No |
|  |  | Manufacturer |  |
|  |  | Model | Maxiva <br> 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 retunable. |

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 | $\mathrm{N} / \mathrm{A}$ |
| :--- | :--- | :--- |
|  | Does the replacement transmitter require <br> HVAC Service? | No |
|  | Type | $\mathrm{N} / \mathrm{A}$ |
|  | Size | $\mathrm{N} / \mathrm{A}$ |
| Other Size | $\mathrm{N} / \mathrm{A}$ |  |
| Transmitter Building <br> Addition/Modification or <br> Leasehold Improvement | Does the Transmitter Building require an <br> addition, modification, other leashold <br> improvement? | No |
|  | Size | $\mathrm{N} / \mathrm{A}$ |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | $\mathrm{N} / \mathrm{A}$ |
|  | Is a channel 14 Mask Filer needed? | $\mathrm{N} / \mathrm{A}$ |
| Is additional field engineering time needed? | $\mathrm{N} / \mathrm{A}$ |  |
| Number of Days | $\mathrm{N} / \mathrm{A}$ |  |

Primary
Transmitter 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 <br> 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 <br> Manufacturer and Type | Class | Full Power |
|  | Mounting | Top Mount |
|  | Antenna position in stack | Not in Stack |
|  | Polarization | Horizontal |
|  | Type | Slotted <br> 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) | 38.2 kW |


| Manufacturer |  |
| :--- | :--- |
| Model | TFU-20JTH- <br> R S170 |
| Year | 2015 |


| Section | Question | Response |
| :---: | :---: | :---: |
| New Antenna Description | Use | Primary <br> (Main) |
|  | Description of Use | N/A |
|  | Change Type | Purchase <br> 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 <br> Manufacturer and Types | Class | Full Power |
|  | Mounting | Top Mount |
|  | Antenna position in stack | Not in Stack |
|  | Polarization | Elliptical |
|  | Type | Slotted <br> 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) | 55.9 kW |
|  | Manufacturer |  |


| Model | ATW22H4- <br> ETO-33H |
| :--- | :--- |
| Year | 2017 |
| Justification for New Antenna | Primary <br> antenna is <br> not <br> broadband <br> or able to <br> be tuned to <br> a new <br> channel. |

Primary Antenna

## Other Antenna Costs

| Section | Question | Response |
| :--- | :--- | :--- |
| Combiner for Shared <br> Antenna | Do you need a Combiner for a Shared <br> 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 <br> /switcher for dual feed lines? | N/A |
| Elbow Complex | Do you require the separate purchase of <br> the Elbow Complex? | Yes |
|  | Broadband or Single Channel? | Single <br> Channel |
|  | Feed Line Size | $61 / 8$ <br> inches <br> inches |
| Side Mount Brackets | Do you require the separate purchase of <br> side mount brackets for a high power <br> antenna? | No |
| Pattern Scatter Analysis | Do you require separate purchase of <br> pattern scatter analysis for a side mount <br> high or medium power antenna? | No |
|  |  |  |


| Sweep Test | Do you require the sweep testing of <br> transmission line and antenna? | Yes |
| :--- | :--- | :--- |

Primary Other Antenna Cost Not Listed

Antenna Information not provided.

| TransmissionSeffiien | Question | Response |
| :---: | :--- | :--- |
| Transmission Line <br> Related Expenses | Do you have transmission line related <br> expenses? | Yes |


| Primary Existing Transmission Line |  |  |
| :---: | :---: | :---: |
| Transmission Setition $^{\text {a }}$ | Question | Response |
| Existing Transmission Line Description | Type of change | Purchase <br> 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 | $6 \text { 1/8 }$ <br> inches |
|  | Other Diameter | N/A |
|  | Segment Length | Broadband |
|  | Other Segment Length | N/A |
|  | Number of parallel runs | 0 |
|  | Length | 560 feet <br> per run |


| Primary New Transmission Line |  |  |
| :---: | :---: | :---: |
| Transmissionseition | 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 |
|  | Type | Rigid |
|  | Diameter | $61 / 8$ <br> inches |
|  | Other Diameter | N/A |
|  | Segment Length | Broadband |
|  | Other Segment Length | N/A |
|  | Number of parallel runs | 0 |
|  | Length | 560 feet per run |
|  | Justification for New Transmission Line | For those sites that already have 6 1/8 broadband line, a section or two of additional line is needed to connect to the antenna /elbow complex. |


| Tower | Section | Question | Response |
| :--- | :--- | :--- | :--- |
| Equipment | Tower Equipment or | Do you have tower equipment or rigging |  |
| And |  |  |  |
| Rigging |  |  |  |
| Costs | Rigging Costs Changes | 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 | No |
|  | Is tower documented for structural analysis? | No |
|  | Is tower compliant with Rev G? | No |
| Existing Tower <br> Structure Registration | Do you have a tower registration number? | Yes |
|  | ASR Number | 1044020 |
| Coordinates (NAD83 ( <br> North American <br> Datum of 1983)) | Latitude (NAD83) | $37^{\circ} 11^{\prime} 35.0^{\prime \prime} \mathrm{N}$ - |
|  | Longitude (NAD83) | $\begin{aligned} & 083^{\circ} 11^{\prime} 17.0^{\prime \prime} \\ & W- \end{aligned}$ |
|  | Overall Structure Height | 606.62 feet |
|  | Support Structure Height | 559.38 feet |
|  | Ground Elevation Above Mean Sea Level (AMSL) | 1997.02 feet |
|  | Structure Type | TOWER - Free <br> Standing or <br> Guyed Structure |


| Tower Owner | KENTUCKY <br> AUTHORITY <br> FOR <br> EDUCATIONAL <br> TELEVISION <br> DBA $=$ WKHA |
| :--- | :--- |
| Date Constructed | $01 / 01 / 1968$ |

# 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 |
| :--- | :--- | :--- |
| 18306 | WEKH | FM |

## Tower Modification Costs

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

Primary
Tower
Tower Rigging Costs

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


| Name | Description |
| :--- | :--- |
| Load Study | Structural engineering tower load study is <br> required to design tower reinforcements <br> and rigging. |


| Outside | Section | Question | Response |
| :---: | :---: | :---: | :---: |
| Professiona | 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 | Yes |
|  |  | Quantity | 1 |
|  |  | Do you have Distributed Transmission System engineering services? | N/A |
|  |  | Critical Facility | N/A |
|  |  | Terrain-Shielded Facility | N/A |
|  | Attorney and Other Outside Consulting Services | Prepare and file Form FCC Construction Permit Application | Yes |
|  |  | For Auxiliary Facility | No |
|  |  | For Main Facility | Yes |
|  |  | Prepare and file Form FCC License to Cover Application | Yes |


|  | For Auxiliary Facility | No |
| :--- | :--- | :--- |
| For Main Facility | Yes |  |
| Prepare request for Special Temporary | Yes |  |
|  | Authority | Quantity |$|$| ( |
| :--- |

Outside Other Professional Services Expenses Not Listed
Professional §ehyeces Costs Description
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? | 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 <br> Expenses | Other Expenses Not Listed |  |
| :--- | :--- | :--- |
|  | Name | Description |
|  | Internal Labor | FCC Reimbursement Clerk hired for repack <br> reimbursement ONLY |

## Transmitters

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 <br> Cost | Estimated <br> Cost Justification | Actual Cost | Actual Cost Justification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary <br> Transmitter <br> Maxiva <br> UAXTE-8 | \$291,700.00 | \$277,450.00 |  | \$133,141.13 |  |
| Service entrance 3 <br> phase/800 <br> amp/208 <br> volt | \$14,400.00 | \$13,700.00 | N/A | \$5,625.00 | N/A |
| 3" Rigid <br> Conduit and Wiring (Cost per foot) | \$2,600.00 | \$2,450.00 | N/A | N/A | N/A |
| Switchgear <br> - industrial <br> 800 amp | \$38,200.00 | \$36,300.00 | N/A | N/A | N/A |
| UHF - Air <br> Cooled <br> Solid State <br> Transmitter <br> 4-6 kW | \$236,500.00 | \$225,000.00 | N/A | \$127,516.13 | N/A |
| Sub-total | \$291,700.00 | \$277,450.00 | N/A | \$133,141.13 | N/A |
| Total for all systems | \$1,116,511.00 | \$1,230,790.50 | N/A | \$832,078.71 | N/A |

## Components

## Actual Information

Description
File Name
Service entrance 3 phase
/800 amp/208 volt

| Component Description: | KET Transmitter building electrical upgrade |
| :---: | :---: |
| Amount: | \$530.00 |
| Component Description: | KET Transmitter building electrical upgrade |
| Amount: | \$200.00 |
| Component Description: | KET transmitter building electrical upgrade |
| Amount: | \$1,900.00 |
| Component Description: | KET Transmitter building electrical upgrade |
| Amount: | \$105.00 |
| Component Description: | KET Transmitter building electrical upgrade |
| Amount: | \$705.00 |
| Component Description: | KET Transmitter building electrical upgrade |
| Amount: | \$1,540.00 |
| Component Description: | eComm admin and support, distribution services at time of bidding -- KLH (RFB-183-19) |
| Amount: | \$375.00 |


|  | Component Description: <br> Amount: | KET Transmitter building electrical upgrade $\$ 270.00$ |
| :---: | :---: | :---: |
| 3" Rigid Conduit and Wiring (Cost per foot) | Information not provided. |  |
| Switchgear - industrial 800 amp | Information not provided. |  |
| UHF - Air Cooled Solid State Transmitter 4-6 kW | Component Description: <br> Amount: <br> Component Description: <br> Amount: | transmitter <br> \$127,153.25 <br> eComm admin <br> and support, <br> distribution <br> services at time of <br> bidding -- <br> GatesAir (RFP-48- <br> 19) <br> \$362.88 |

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

| Description | Predetermined Cost Estimate | Estimated <br> Cost | Estimated <br> Cost <br> Justification | Actual Cost | Actual Cost Justification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary <br> Antenna <br> ATW22H4- <br> ETO-33H | \$308,530.00 | \$266,660.00 |  | \$191,962.20 |  |
| Sweep <br> test of existing antenna | $\$ 6,730.00$ | $\$ 19,960.00$ | Transition requires two sweeps of transmission equipment. <br> Please see attached <br> Repack Plan Exhibit for details. The additional cost for sweep is due to using existing line for the interim services that required sweep testing before using. | $\$ 19,959.78$ | More than two sweeps were required to confirm the performance of the existing transmission line, before it was disconnected from the current DTV antenna |
| UHF - <br> High <br> Power <br> Top <br> Mount <br> (200-1000 <br> kW), One <br> station <br> antenna, <br> elliptically <br> or <br> circularly <br> polarized | \$289,500.00 | \$235,000.00 | Cost estimate adjusted for reimbursement of horizontalpolarized antenna like the pre-repack primary antenna. | \$172,002.42 | N/A |


| Elbow <br> complex, <br> single <br> channel, <br> at antenna <br> input, per <br> $61 / 8$. <br> feedline (if <br> needed) | \$12,300.00 | \$11,700.00 | N/A | N/A | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sub-total | \$308,530.00 | \$266,660.00 | N/A | \$191,962.20 | N/A |
| Total for all systems | \$1,116,511.00 | \$1,230,790.50 | N/A | \$832,078.71 | N/A |

## Components

| Actual Information <br> Description | File Name |  |
| :--- | :--- | :--- |
| Sweep test of existing <br> antenna |  |  |
|  | Component Description: | sweep test $10 \%$ <br> $\$ 1,995.98$ |
|  | Amount: |  |
|  |  |  |
|  | Component Description: | system sweep - <br> $50 \%$ |
|  | Amount: | $\$ 9,979.89$ |

\(\left.$$
\begin{array}{l|ll}\hline \begin{array}{l}\text { UHF - High Power Top } \\
\text { Mount (200-1000 kW), One } \\
\text { station antenna, elliptically } \\
\text { or circularly polarized }\end{array} & \text { Component Description: } & \begin{array}{l}\text { antenna }-50 \% \\
\text { (less vertical }\end{array}
$$ <br>
polarization <br>
component) <br>

\$85,629.33\end{array}\right]\)| Amount: |
| :--- |
|  |

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

| Description | Predetermined Cost Estimate | Estimated <br> Cost | Estimated <br> Cost <br> Justification | Actual Cost | Actual Cost Justification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary <br> Transmission Line | \$0.00 | \$32,046.00 |  | \$32,045.35 |  |
| Rigid <br> Transmission Line copper, 61 /8" broadband | \$0.00 | \$32,046.00 | For those sites that already have 6 1/8" broadband line, a section or two of additional line is needed to connect to the antenna /elbow complex. | \$32,045.35 | N/A |
| Sub-total | \$0.00 | \$32,046.00 | N/A | \$32,045.35 | N/A |
| Total for all systems | \$1,116,511.00 | \$1,230,790.50 | N/A | \$832,078.71 | N/A |

## Components

Actual Information
Description
File Name

Rigid Transmission Line copper, 6 1/8" broadband

| Component Description: | transmission line <br> $(50 \%)$ <br> $\$ 16,022.68$ |
| :--- | :--- |
| Amount: |  |
|  |  |
| Component Description: | transmission line |
|  | $10 \%$ |
| Amount: | $\$ 3,204.54$ |
|  |  |
| Component Description: | transmission line |
|  | $5 \%$ |
| Amount: | $\$ 1,602.26$ |
|  |  |
|  |  |
| Component Description: | transmission line |
|  | $(35 \%)$ |
|  | $\$ 11,215.87$ |
|  |  |
|  |  |

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

| Description | Predetermined Cost Estimate | Estimated <br> Cost | Estimated <br> Cost <br> Justification | Actual Cost | Actual Cost Justification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Tower TOWER | \$406,800.00 | \$552,000.00 |  | \$434,058.75 |  |
| Tall Tower (greater than 500') | \$210,500.00 | \$365,000.00 | KET obtained quotation of realistic scope of tower rigging work from reputable supplier. <br> Please see attached Tower Work exhibit. | \$283,374.37 | N/A |
| Minor tower reinforcement /modifications | \$158,000.00 | \$150,000.00 | N/A | \$143,184.38 | N/A |
| Load Study | \$12,000.00 | \$12,000.00 | Structural engineering tower load study is required to design tower reinforcements and rigging. | \$0.00 | 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 | \$7,500.00 | N/A |


| Sub-total | $\$ 406,800.00$ | $\$ 552,000.00$ | $\mathrm{~N} / \mathrm{A}$ | $\$ 434,058.75$ | $\mathrm{~N} / \mathrm{A}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Total for all <br> systems | $\$ 1,116,511.00$ | $\$ 1,230,790.50$ | $\mathrm{~N} / \mathrm{A}$ | $\$ 832,078.71$ | $\mathrm{~N} / \mathrm{A}$ |

## Components

| Actual Information Description | File Name |  |
| :---: | :---: | :---: |
| Tall Tower (greater than 500') | Component Description: Amount: | installation (50\%) $\$ 140,917.10$ |
|  | Component Description: <br> Amount: | installation <br> services $10 \%$ <br> \$28,183.42 |
|  | Component Description: <br> Amount: | installation services 35\% \$98,641.97 |
|  | Component Description: <br> Amount: | installation <br> services 5\% $\$ 14,091.71$ |
|  | Component Description: Amount: | eComm <br> admnistration and support, and distribution services at the time of bidding Electronics Research Inc contract \$1,540.17 |


| Minor tower reinforcement /modifications | Component Description: Amount: | Tower Modification $\$ 142,500.00$ |
| :---: | :---: | :---: |
|  | Component Description: <br> Amount: | Master Agreement for eComm administration and support, distribution services at time of bidding <br> ATTACHED -Allstate Tower contract \$637.50 |
|  | Component Description: <br> Amount: | Bid Phase Only -RFB-198-18 billed for rebid distribution services only (Allstate Tower contract) \$46.88 |
| Load Study | Component Description: <br> Amount: | Geotechnical <br> Studies $\$ 2,310.00$ |

Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study

| Component Description: | TIA Tower |
| :---: | :---: |
|  | Inspections and |
|  | Load Audits |
| Amount: | \$1,189.00 |
| Component Description: | Tower Mapping |
| Amount: | \$1,023.00 |
| Component Description: | Mapping |
|  | Completion |
| Amount: | \$7,500.00 |
| Component Description: | Foundation |
|  | Mapping |
| Amount: | \$3,500.00 |

## Outside Professional Services

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

|  |  | Estimated <br> Predetermined <br> Cost Estimate |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | | Estimated |
| :--- |
| Cost |$\quad$| Cost |
| :--- |
| Justification | Actual Cost | Actual Cost |
| :--- |
| Justification |


| Attorney Fees - | \$2,365.00 | \$3,813.50 | actual legal | \$3,813.50 | actual costs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prepare and |  |  | fees for |  | exceed |
| File FCC Form |  |  | phase 3 |  | estimated |
| 2100 (main), |  |  | exceeded |  | costs for |
| License to |  |  | estimated |  | this |
| Cover |  |  | costs |  | category of |
| Application |  |  |  |  | professional services |
| Progress and | \$4,000.00 | \$4,000.00 | Engineering | \$262.50 | N/A |
| Transition |  |  | consultant |  |  |
| Reports |  |  | costs not |  |  |
|  |  |  | otherwise |  |  |
|  |  |  | listed. |  |  |
| RF Exposure | \$21,050.00 | \$20,000.00 | KET | N/A | N/A |
| Measurements |  |  | requires |  |  |
|  |  |  | RFR study |  |  |
|  |  |  | of this site |  |  |
|  |  |  | with co- |  |  |
|  |  |  | located |  |  |
|  |  |  | broadcast |  |  |
|  |  |  | facilities. |  |  |
| FAA <br> consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |
|  |  |  |  |  |  |
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| ASR <br> modification <br> (prepare FCC <br> Form 854) | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Attorney Fees <br> - Prepare and <br> File request <br> for Special <br> Temporary <br> Authorization | \$3,680.00 | \$3,500.00 | N/A | N/A | N/A |
| Attorney Fees <br> - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00 | \$5,000.00 | N/A | \$2,186.00 | 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 | \$3,070.00 | N/A | \$3,062.50 | N/A |
| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$7,000.00 | N/A | \$896.87 | N/A |


| Prepare and or review reimbursement form | \$2,630.00 | \$4,300.00 | Additional engineering was required during the antenna design phase. | \$4,287.50 | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Project management of the transition | \$12,640.00 | \$12,000.00 | KET Staff require outside services to manage the upgrades. | \$448.28 | N/A |
| Sub-total | \$69,980.00 | \$69,683.50 | N/A | \$14,957.15 | N/A |
| Total for all systems | \$1,116,511.00 | \$1,230,790.50 | N/A | \$832,078.71 | N/A |

## Components

## Actual Information <br> Description

Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application

File Name

| Component Description: | prepare email re: <br> upcoming repack <br> deadlines; <br> research and <br> analysis re: PSA <br> scripts |
| :---: | :---: |
| Amount: | \$210.00 |
| Component Description: Amount: | First Installment \$49.50 |
| Component Description: | progress report email, timing of phase 3, permit expiration deadline and status, planning, review, emailing |
| Amount: | \$663.00 |


|  | Component Description: <br> Amount: | repack phase 3 legal fees $\$ 1,402.50$ |
| :---: | :---: | :---: |
|  | Component Description: Amount: | Phase 3 repack; COALS database with MVPD notices; analysis re: repack status \$1,150.50 |
|  | Component Description: <br> Amount: | phase 3 deadline emails and followup $\$ 198.00$ |
|  | Component Description: <br> Amount: | public notice; analysis re: linked station set and upstream and downstream dependencies \$140.00 |
| Progress and Transition Reports | Component Description: <br> Amount: | quarterly progress report $\$ 87.50$ |
|  | Component Description: <br> Amount: | quarterly progress report $\$ 175.00$ |
| RF Exposure Measurements | Information not provided. |  |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | Information not provided. |  |


| ASR modification (prepare FCC Form 854) | Information not provided. |  |
| :---: | :---: | :---: |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | Information not provided. |  |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | Component Description: Amount: | Sixth Installment $\$ 389.50$ |
|  | Component Description: <br> Amount: | Second Attorney <br> Fee $\$ 839.00$ |
|  | Component Description: Amount: | Fifth Installment \$320.50 |
|  | Component Description: Amount: | Third Installment \$191.50 |
|  | Component Description: <br> Amount: | First Installment Attorney $\$ 99.00$ |
|  | Component Description: Amount: | Fourth Installment $\$ 346.50$ |
| Prepare request for Special <br> Temporary Authorization | Information not provided. |  |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | Information not provided. |  |

\(\left.$$
\begin{array}{l|ll}\hline \begin{array}{l}\text { Prepare engineering } \\
\text { section of FCC Form 2100 } \\
\text { (main), Construction Permit } \\
\text { Application }\end{array}
$$ \& Component Description: \& <br>
\& Amount: \& New antenna and <br>
line specs <br>

\$87.50\end{array}\right]\)|  |  |
| :--- | :--- |
|  | Component Description: |


| Prepare and or review reimbursement form | Component Description: <br> Amount: | 399 form input and support $\$ 1,575.00$ |
| :---: | :---: | :---: |
|  | Component Description: <br> Amount: | 399 form response <br> and support $\$ 2,712.50$ |
| Project management of the transition | Component Description: <br> Amount: | project <br> management $\$ 87.50$ |
|  | Component Description: Amount: | Project <br> Management Tasks <br> \$43.75 |
|  | Component Description: Amount: | project <br> management <br> \$175.00 |
|  | Component Description: Amount: | travel expenses \$10.78 |
|  | Component Description: <br> Amount: | project <br> management <br> \$43.75 |
|  | Component Description: <br> Amount: | project <br> management tasks $\$ 87.50$ |

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

| Description | Predetermined Cost Estimate | Estimated <br> Cost | Estimated <br> Cost <br> Justification | Actual Cost | Actual Cost Justification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Other Expenses | \$39,501.00 | \$32,951.00 |  | \$25,914.13 |  |
| Develop and air announcement of upcoming channel change | \$23,951.00 | \$23,951.00 | In order to run a notification crawl to viewers, it was necessary for KET to purchase a device that would insert the crawl into the ASI stream. Since KET has multiple video channels <br> (1 HD \& 3 <br> SD) in the ASI stream, it required a device at WKHA \& WKMR. | \$23,950.14 | N/A |
| Internal Labor | \$2,000.00 | \$2,000.00 | N/A | \$376.49 | N/A |
| DTV Medical <br> Facility <br> Notification | \$11,550.00 | \$5,000.00 | GBC <br> estimate <br> based on <br> known <br> quotations | \$1,587.50 | N/A |


| Disposal <br> Costs (for equipment and other waste, net of any salvage value) | \$0.00 | \$0.00 | KET <br> estimate <br> based on <br> known <br> costs. <br> WKHA is <br> located in an area difficult to access. | N/A | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equipment Storage | \$500.00 | \$500.00 | GBC <br> estimate | N/A | N/A |
| MVPD <br> Notification of Channel <br> Change | \$1,500.00 | \$1,500.00 | KET <br> estimate to search for and notify all cable companies. | N/A | N/A |
| Sub-total | \$39,501.00 | \$32,951.00 | N/A | \$25,914.13 | N/A |
| Total for all systems | \$1,116,511.00 | \$1,230,790.50 | N/A | \$832,078.71 | N/A |

## Components

| Actual Information <br> Description | File Name |  |
| :--- | :--- | :--- |
| Develop and air <br> announcement of upcoming <br> channel change | Component Description: | device for <br> notification crawl <br> Amount: |
|  |  |  |
|  |  |  |


| Internal Labor |  |  |
| :---: | :---: | :---: |
|  | Component Description: Amount: | payroll expenses for internal labor \$66.91 |
|  | Component Description: | payroll expenses for internal labor |
|  | Amount: | \$71.75 |
|  | Component Description: Amount: | payroll expenses for internal labor \$69.49 |
|  | Component Description: Amount: | payroll expenses for internal labor $\$ 58.43$ |
|  | Component Description: Amount: | payroll expenses for internal labor \$37.55 |
|  | Component Description: <br> Amount: | payroll expenses for internal labor \$37.85 |
|  | Component Description: <br> Amount: | payroll expenses for internal labor \$34.51 |
| DTV Medical Facility Notification | Component Description: <br> Amount: | medical notification $\$ 1,587.50$ |
| Disposal Costs (for equipment and other waste, net of any salvage value) | Information not provided. |  |
| Equipment Storage | Information not provided. |  |

Total for all systems $\quad \$ 1,116,511.00 \quad \$ 1,230,790.50 \quad \$ 832,078.71$

## Reimbursemefriestatus

The facility has ceased operating on its preauction channel.

Construction of final facilities or all necessary modifications are complete.

All receipts for reimbursement have been
No 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.

## Response

No

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.
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. |$\quad$| I |
| :--- |


| Certification | Section | Question | Response |
| :---: | :---: | :---: | :---: |
|  | Submission of Actual <br> Cost Documentation <br> 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.
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. $\quad$| Shae |
| :--- |
| I declare, under penalty of perjury, that I am |
| an authorized representative of the above- |
| named applicant for the Authorization(s) |
| specified above. |

## Attachments

