



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **34196** | Service: **DTV** | Call **WKHA** | Channel: **33 (UHF)** |  
ID: | Sign:  
File **0000026906**  
Number:  
FRN: **0001790583** | Date **10/09**  
Submitted: **/2019**

## Applicant Information

### Applicant Name, Type, and Contact Information

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

## 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
<b>Greg Best</b> <i>Consulting Engineer</i> <i>Greg Best Consulting,</i> <i>Inc.</i>	16100 Outlook Avenue Stilwell, KS 66085 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
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	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
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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
<b>Existing Antenna Description</b>	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
<b>Existing Antenna Manufacturer and Type</b>	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power) .....	38.2 kW

Manufacturer	
Model	TFU-20JTH- R S170
Year	2015



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) .....	55.9 kW
	Manufacturer	

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

## Primary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	No
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No

<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes
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**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
<b>Existing Transmission Line Description</b>	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
<b>Existing Transmission Line Manufacturer and Type</b>	Manufacturer	
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	0
	Length	560 feet per run

**Primary** **New Transmission Line**  
**Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	6 1/8 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.

**Primary** **Other Transmission Line Expenses Not Listed**  
**Transmission Line**

Information not provided.

**Tower  
Equipment  
And  
Rigging  
Costs**

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

**Primary  
Tower**

**Existing Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	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	1044020
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	37° 11' 35.0" N-
	Longitude (NAD83)	083° 11' 17.0" W-
	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 Standing or Guyed Structure

	Tower Owner	KENTUCKY AUTHORITY FOR EDUCATIONAL TELEVISION 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

## 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
Load Study	Structural engineering tower load study is required to design tower reinforcements and rigging.

**Outside  
Professional**

Section	Question	Response
<b>Services Costs Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	80
	Explanation	KET Staff require outside services to manage the upgrades.
<b>Outside RF consulting Engineering Services</b>	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
<b>Attorney and Other Outside Consulting Services</b>	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes

	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	No
<b>RF Field Engineering Services</b>	Comprehensive coverage verification via field study	No
	RF exposure measurements	Yes
	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 Fees

## Other Expenses

Section	Question	Response
<b>AM Pattern Disturbance</b>	Is an Impact Study needed?	No
	Is Remediation needed?	No
<b>Facility Expenses</b>	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
<b>Permit and Filing Costs</b>	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
<b>Other Miscellaneous Expenses</b>	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
<b>Primary Transmitter Maxiva UAXTE-8</b>	<b>\$291,700.00</b>	<b>\$287,356.50</b>		<b>\$151,122.63</b>	
3" Rigid Conduit and Wiring (Cost per foot)	\$2,600.00	\$2,450.00	N/A	N/A	N/A
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	\$236,500.00	\$225,000.00	N/A	\$127,516.13	N/A
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$23,606.50	Actual costs exceeded estimated costs. Quotes for electrical work attached to invoice 3750. Quotes obtained AFTER 399 was created.	\$23,606.50	Actual costs exceeded estimated costs. See attached quote. Quotes were obtained after 399 was created.
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
<b>Sub-total</b>	<b>\$291,700.00</b>	<b>\$287,356.50</b>	<b>N/A</b>	<b>\$151,122.63</b>	<b>N/A</b>

<b>Total for all systems</b>	\$1,116,511.00	\$1,240,907.00	N/A	\$851,755.25	N/A
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## Components

Actual Information Description	File Name
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	<div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> transmitter  \$127,153.25 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> eComm admin and support, distribution services at time of bidding -- GatesAir (RFP-48-19)  \$362.88 </div> </div>
Service entrance 3 phase /800 amp/208 volt	<div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> KET Transmitter building electrical upgrade  \$17,981.50 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> KET Transmitter building electrical upgrade  \$200.00 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> KET Transmitter building electrical upgrade  \$1,540.00 </div> </div>

	<b>Component Description:</b>	KET transmitter building electrical upgrade
	<b>Amount:</b>	\$1,900.00
	<b>Component Description:</b>	KET Transmitter building electrical upgrade
	<b>Amount:</b>	\$530.00
	<b>Component Description:</b>	eComm admin and support, distribution services at time of bidding -- KLH (RFB-183-19)
	<b>Amount:</b>	\$375.00
	<b>Component Description:</b>	KET Transmitter building electrical upgrade
	<b>Amount:</b>	\$105.00
	<b>Component Description:</b>	KET Transmitter building electrical upgrade
	<b>Amount:</b>	\$705.00
	<b>Component Description:</b>	KET Transmitter building electrical upgrade
	<b>Amount:</b>	\$270.00
Switchgear - industrial 800 amp	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
<b>Primary Antenna ATW22H4-ETO-33H</b>	<b>\$308,530.00</b>	<b>\$266,660.00</b>		<b>\$191,962.20</b>	
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	N/A	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.	\$172,002.42	N/A

Sweep test of existing antenna	\$6,730.00	\$19,960.00	Transition requires two sweeps of transmission equipment. Please see attached 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
<b>Sub-total</b>	\$308,530.00	\$266,660.00	N/A	\$191,962.20	N/A
<b>Total for all systems</b>	\$1,116,511.00	\$1,240,907.00	N/A	\$851,755.25	N/A

## Components

Actual Information	
Description	File Name
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.

UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	<b>Component Description:</b>		antenna - 50% (less vertical polarization component)
	<b>Amount:</b>		\$85,629.33
	<b>Component Description:</b>		antenna (less vpol component) 10%
	<b>Amount:</b>		\$17,125.86
	<b>Component Description:</b>		antenna (less vpol component) 5%
	<b>Amount:</b>		\$8,562.94
	<b>Component Description:</b>		antenna - 35% (less vertical polarization component)
	<b>Amount:</b>		\$59,940.54
	<b>Component Description:</b>		Antenna and Line Spec
	<b>Amount:</b>		\$437.50
	<b>Component Description:</b>		Antenna gain and TPO evaluation and revision of specifications
	<b>Amount:</b>		\$306.25

Sweep test of existing antenna		
	<b>Component Description:</b>	system sweep - 50%
	<b>Amount:</b>	\$9,979.89
	<b>Component Description:</b>	sweep test 10%
	<b>Amount:</b>	\$1,995.98
	<b>Component Description:</b>	sweep test 5%
	<b>Amount:</b>	\$997.99
	<b>Component Description:</b>	system sweep - 35%
	<b>Amount:</b>	\$6,985.92

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	\$0.00	\$32,046.00		\$32,045.35	
Rigid Transmission Line - copper, 6 1/8" 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	\$1,240,907.00	N/A	\$851,755.25	N/A

Components

Actual Information	
Description	File Name

Rigid Transmission Line -  
copper, 6 1/8" broadband

**Component Description:** transmission line  
(50%)  
**Amount:** \$16,022.68

**Component Description:** transmission line  
5%  
**Amount:** \$1,602.26

**Component Description:** transmission line  
10%  
**Amount:** \$3,204.54

**Component Description:** transmission line  
(35%)  
**Amount:** \$11,215.87

## 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
<b>Primary Tower TOWER</b>	<b>\$406,800.00</b>	<b>\$552,000.00</b>		<b>\$434,058.75</b>	
Tall Tower (greater than 500')	\$210,500.00	\$365,000.00	KET obtained quotation of realistic scope of tower rigging work from reputable supplier. 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	<i>\$12,000.00</i>	\$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

<b>Sub-total</b>	\$406,800.00	\$552,000.00	N/A	\$434,058.75	N/A
<b>Total for all systems</b>	\$1,116,511.00	\$1,240,907.00	N/A	\$851,755.25	N/A

## Components

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



Minor tower reinforcement /modifications	<div data-bbox="715 174 1369 488"> <p><b>Component Description:</b> Bid Phase Only - RFB-198-18 billed for rebid distribution services only (Allstate Tower contract)</p> <p><b>Amount:</b> \$46.88</p> </div> <div data-bbox="715 595 1369 672"> <p><b>Component Description:</b> Tower Modification</p> <p><b>Amount:</b> \$142,500.00</p> </div> <div data-bbox="715 779 1369 1205"> <p><b>Component Description:</b> Master Agreement for eComm administration and support, distribution services at time of bidding ATTACHED -- Allstate Tower contract</p> <p><b>Amount:</b> \$637.50</p> </div>
Load Study	<div data-bbox="715 1344 1305 1456"> <p><b>Component Description:</b> Geotechnical Studies</p> <p><b>Amount:</b> \$2,310.00</p> </div>

Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	<b>Component Description:</b> Foundation Mapping <b>Amount:</b> \$3,500.00
	<b>Component Description:</b> Tower Mapping <b>Amount:</b> \$1,023.00
	<b>Component Description:</b> Mapping Completion <b>Amount:</b> \$7,500.00
	<b>Component Description:</b> TIA Tower Inspections and Load Audits <b>Amount:</b> \$1,189.00

## 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
<b>Outside Professional Services</b>	<b>\$69,980.00</b>	<b>\$69,893.50</b>		<b>\$15,175.90</b>	
Project management of the transition	\$12,640.00	\$12,000.00	KET Staff require outside services to manage the upgrades.	\$667.03	N/A
Progress and Transition Reports	<i>\$4,000.00</i>	\$4,000.00	Engineering consultant costs not otherwise listed.	\$262.50	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	KET requires RFR study of this site with co-located broadcast facilities.	N/A	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A

Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$2,186.00	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	\$3,070.00	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

Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$4,023.50	actual legal fees for phase 3 exceeded estimated costs	\$3,813.50	actual costs exceed estimated costs for this category of professional services
<b>Sub-total</b>	\$69,980.00	\$69,893.50	N/A	\$15,175.90	N/A
<b>Total for all systems</b>	\$1,116,511.00	\$1,240,907.00	N/A	\$851,755.25	N/A

## Components

### Actual Information

Description	File Name
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Project management of the transition

**Component Description:** project management  
**Amount:** \$43.75

**Component Description:** Project Management Tasks  
**Amount:** \$43.75

**Component Description:** project management  
**Amount:** \$43.75

**Component Description:** project management  
**Amount:** \$175.00

**Component Description:** project management  
**Amount:** \$87.50

**Component Description:** travel expenses  
**Amount:** \$10.78

**Component Description:** project management tasks  
**Amount:** \$87.50

**Component Description:** project management  
**Amount:** \$175.00

Progress and Transition Reports	<div> <div> <b>Component Description:</b> </div> <div> quarterly progress report </div> </div> <div> <b>Amount:</b> </div> <div> \$87.50 </div> <div> <b>Component Description:</b> </div> <div> quarterly progress report </div> <div> <b>Amount:</b> </div> <div> \$175.00 </div>
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	<b>Component Description:</b> Fourth Installment <b>Amount:</b> \$346.50	
	<b>Component Description:</b> Second Attorney Fee <b>Amount:</b> \$839.00	
	<b>Component Description:</b> Fifth Installment <b>Amount:</b> \$320.50	
	<b>Component Description:</b> Third Installment <b>Amount:</b> \$191.50	
	<b>Component Description:</b> First Installment Attorney <b>Amount:</b> \$99.00	
	<b>Component Description:</b> Sixth Installment <b>Amount:</b> \$389.50	
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	<b>Component Description:</b> <b>Amount:</b>	First Installment \$1,750.00
	<b>Component Description:</b> <b>Amount:</b>	New antenna and line specs \$87.50
	<b>Component Description:</b> <b>Amount:</b>	Hitachi and GatesAir response review, new antenna and line specs \$525.00
	<b>Component Description:</b> <b>Amount:</b>	Antenna and transmission line bid spec review and bid response review \$700.00
Perform engineering study for new channel assignment and antenna development	<b>Component Description:</b> <b>Amount:</b>	Review of site documentation and antennas, facility planning \$459.37
	<b>Component Description:</b> <b>Amount:</b>	linked station analysis \$175.00
	<b>Component Description:</b> <b>Amount:</b>	Linked station neighbor analysis - see attached letter \$262.50

Prepare and or review reimbursement form	<table> <tr> <td data-bbox="710 174 1013 208"><b>Component Description:</b></td><td data-bbox="1150 174 1370 246">399 form input and support</td></tr> <tr> <td data-bbox="710 257 818 291"><b>Amount:</b></td><td data-bbox="1150 257 1267 291">\$1,575.00</td></tr> <tr> <td data-bbox="710 398 1013 432"><b>Component Description:</b></td><td data-bbox="1150 398 1370 470">399 form response and support</td></tr> <tr> <td data-bbox="710 481 818 515"><b>Amount:</b></td><td data-bbox="1150 481 1267 515">\$2,712.50</td></tr> </table>	<b>Component Description:</b>	399 form input and support	<b>Amount:</b>	\$1,575.00	<b>Component Description:</b>	399 form response and support	<b>Amount:</b>	\$2,712.50												
<b>Component Description:</b>	399 form input and support																				
<b>Amount:</b>	\$1,575.00																				
<b>Component Description:</b>	399 form response and support																				
<b>Amount:</b>	\$2,712.50																				
Prepare request for Special Temporary Authorization	Information not provided.																				
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	<table> <tr> <td data-bbox="710 761 1013 795"><b>Component Description:</b></td><td data-bbox="1150 761 1337 795">First Installment</td></tr> <tr> <td data-bbox="710 801 818 835"><b>Amount:</b></td><td data-bbox="1150 801 1230 835">\$49.50</td></tr> <tr> <td data-bbox="710 943 1013 976"><b>Component Description:</b></td><td data-bbox="1150 943 1370 1211">progress report email, timing of phase 3, permit expiration deadline and status, planning, review, emailing</td></tr> <tr> <td data-bbox="710 1218 818 1252"><b>Amount:</b></td><td data-bbox="1150 1218 1246 1252">\$663.00</td></tr> <tr> <td data-bbox="710 1359 1013 1393"><b>Component Description:</b></td><td data-bbox="1150 1359 1382 1431">phase 3 deadline emails and followup</td></tr> <tr> <td data-bbox="710 1438 818 1471"><b>Amount:</b></td><td data-bbox="1150 1438 1246 1471">\$198.00</td></tr> <tr> <td data-bbox="710 1579 1013 1612"><b>Component Description:</b></td><td data-bbox="1150 1579 1331 1650">repack phase 3 legal fees</td></tr> <tr> <td data-bbox="710 1657 818 1691"><b>Amount:</b></td><td data-bbox="1150 1657 1267 1691">\$1,402.50</td></tr> <tr> <td data-bbox="710 1798 1013 1832"><b>Component Description:</b></td><td data-bbox="1150 1798 1331 1870">repack phase 3 work</td></tr> <tr> <td data-bbox="710 1877 818 1910"><b>Amount:</b></td><td data-bbox="1150 1877 1246 1910">\$210.00</td></tr> </table>	<b>Component Description:</b>	First Installment	<b>Amount:</b>	\$49.50	<b>Component Description:</b>	progress report email, timing of phase 3, permit expiration deadline and status, planning, review, emailing	<b>Amount:</b>	\$663.00	<b>Component Description:</b>	phase 3 deadline emails and followup	<b>Amount:</b>	\$198.00	<b>Component Description:</b>	repack phase 3 legal fees	<b>Amount:</b>	\$1,402.50	<b>Component Description:</b>	repack phase 3 work	<b>Amount:</b>	\$210.00
<b>Component Description:</b>	First Installment																				
<b>Amount:</b>	\$49.50																				
<b>Component Description:</b>	progress report email, timing of phase 3, permit expiration deadline and status, planning, review, emailing																				
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<b>Component Description:</b>	phase 3 deadline emails and followup																				
<b>Amount:</b>	\$198.00																				
<b>Component Description:</b>	repack phase 3 legal fees																				
<b>Amount:</b>	\$1,402.50																				
<b>Component Description:</b>	repack phase 3 work																				
<b>Amount:</b>	\$210.00																				

<b>Component Description:</b>	prepare email re: upcoming repack deadlines; research and analysis re: PSA scripts
<b>Amount:</b>	\$210.00

<b>Component Description:</b>	Phase 3 repack; COALS database with MVPD notices; analysis re: repack status
<b>Amount:</b>	\$1,150.50

<b>Component Description:</b>	public notice; analysis re: linked station set and upstream and downstream dependencies
<b>Amount:</b>	\$140.00

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## 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
<b>Other Expenses</b>	<b>\$39,501.00</b>	<b>\$32,951.00</b>		<b>\$27,390.42</b>	
DTV Medical Facility Notification	\$11,550.00	\$5,000.00	GBC estimate based on known quotations	\$1,587.50	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$0.00</i>	\$0.00	KET estimate based on known costs. WKHA is located in an area difficult to access.	N/A	N/A
Equipment Storage	<i>\$500.00</i>	\$500.00	GBC estimate	N/A	N/A
MVPD Notification of Channel Change	<i>\$1,500.00</i>	\$1,500.00	KET estimate to search for and notify all cable companies.	\$1,418.75	N/A
Internal Labor	<i>\$2,000.00</i>	\$2,000.00	N/A	\$434.03	N/A

Develop and air announcement of upcoming channel change	<b>\$23,951.00</b>	\$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 (1 HD & 3 SD) in the ASI stream, it required a device at WKHA & WKMR.	\$23,950.14	N/A
<b>Sub-total</b>	\$39,501.00	\$32,951.00	N/A	\$27,390.42	N/A
<b>Total for all systems</b>	\$1,116,511.00	\$1,240,907.00	N/A	\$851,755.25	N/A

## Components

Actual Information	
Description	File Name
DTV Medical Facility Notification	<p><b>Component Description:</b> medical notification</p> <p><b>Amount:</b> \$1,587.50</p>
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.

Equipment Storage	Information not provided.	
MVPD Notification of Channel Change	<p><b>Component Description:</b></p> <p>Prepare letters to MVPDs. Research and contact all relevant MVPD entities impacted by station move by mail and/or email. Prepare report for station.</p> <p><b>Amount:</b></p>	<p>\$1,418.75</p>

Internal Labor	<b>Component Description:</b>	payroll expenses for internal labor
	<b>Amount:</b>	\$66.91
	<b>Component Description:</b>	payroll expenses for internal labor
	<b>Amount:</b>	\$69.49
	<b>Component Description:</b>	payroll expenses for internal labor
	<b>Amount:</b>	\$58.43
	<b>Component Description:</b>	payroll expenses for internal labor
	<b>Amount:</b>	\$57.54
	<b>Component Description:</b>	payroll expenses for internal labor
	<b>Amount:</b>	\$37.85
	<b>Component Description:</b>	payroll expenses for internal labor
	<b>Amount:</b>	\$37.55
	<b>Component Description:</b>	payroll expenses for internal labor
	<b>Amount:</b>	\$71.75
	<b>Component Description:</b>	payroll expenses for internal labor
	<b>Amount:</b>	\$34.51
Develop and air announcement of upcoming channel change	<b>Component Description:</b>	device for notification crawl
	<b>Amount:</b>	\$23,950.14





<b>Cost Information</b>	<b>Grand Total</b>		
		<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>
			<b>Actual Cost</b>
	<b>Total for all systems</b>	\$1,116,511.00	\$1,240,907.00
			\$851,755.25

<b>Reimbursement Status</b>	<b>Question</b>	<b>Response</b>
	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	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> <li>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.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>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.</li> </ol>	

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

<p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Shae Hopkins</b>  <i>Executive Director</i></p> <p>10/09/2019</p>

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

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

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Shae Hopkins</b>  <i>Executive Director</i></p> <p>10/09/2019</p>

## Attachments