

(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility 81507 Service: DTV Call KPXJ Channel: 32 (UHF)

Sign:

ID: File

0000028338

Number:

FRN: **0020203246** 

Date **08/10** 

Submitted: /2018

# Applicant Information

#### **Applicant Name, Type, and Contact Information**

Applicant	Address	Phone	Email	Applicant Type
KTBS, LLC Doing Business As: KTBS, LLC	PO Box 44227 SHREVEPORT, LA 71134 United States	+1 (318) 861-5800	dcassidy@ktbs. com	Limited Liability Company

# Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

#### Preparer Contact Information

#### **Preparer Contact Name and Information**

Applicant	Address	Phone	Email
Samuel Hariton Widelity, Inc.	Sam Hariton 4031 University Drive Suite 100 Fairfax, VA 22030 United States	+1 (339) 222- 8107	sam.hariton@widelity. com

Broadcaster Information and Transition Plan Question Response

Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	Yes
Briefly describe transition plan	KPXJ is planning a direct like-for-like swap on all equipment. KPXJ's new equipment will include upgraded equipment to add VPOL capability. See Narrative for details.

Transmitters	Section	Question	Response
	Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

# Auxiliary Transmitter

# Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup & Interim
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	ULXTD-60
	Year	2016
	Туре	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power Capacity	34.6 kW

# Auxiliary Transmitter

#### **New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47.2 kW
	Justification for New Transmitter	A replacement transmitter is necessary to maintain KPXJ's current redundancy.

#### Auxiliary Transmitter

#### **Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
		'

	Other Electrical Service	Yes
	Description	The new auxiliary transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
Improvement	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary Transmitter **Other Transmitter Cost Not Listed** 

**Transmitter** Information not provided.

## **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	
Manufacturer and Type	Model	DCXP-2 Paragon
	Year	2005
	Туре	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	50 kW

#### **New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47.2 kW
	Justification for New Transmitter	The existing transmitter is capable of being retuned, however doing so would require disconnecting the transmitter to have it retuned on site. The retuning process was quoted to take 16 to 20 weeks and during this time the transmitter would be unavailable

#### **Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	The new main transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	5 tons
	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

## **Other Transmitter Cost Not Listed**

Name	Description
Combiner 5 ton HVAC	The Combiner will need its own dedicated Cooling only HVAC
Relocating Ground equipment	Relocating existing equipment for other stations to make room for new transmitter
Building Reconfiguration	The existing building will need to be reconfigured (walls removed/added) to allow for the new transmitter combiner configuration

#### **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?	Yes
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	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)	1000.0 kW

Manufacturer	
Model	TFU- 30DSC-R S20000
Year	2006

#### 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?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Bottom
	Polarization	Elliptical
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW
	Manufacturer	

Model	TFU-30DSC /VP-R S200
Year	2017
Justification for New Antenna	A New antenna is necessary because the existing antenna cannot support the new channel. Additionally, KPXJ needs to replace the un-used bottomstack antenna at the top of the tower due to structural limitations.

## Primary Antenna

#### **Other Antenna Costs**

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	3
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	Yes
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
Elbow Complex	Do you require the separate purchase of	Yes

	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

# Enter a list of RF channel numbers.

32
21
28

#### Primary Antenna

**Other Antenna Cost Not Listed** 

Information not provided.

#### Interim Antenna

#### **New Antenna Costs**

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Broadband Slot
	Number of Stations Supported	2
	Number of Panels/Bays	24
	Lower Limit	512.00 MHz
	Upper Limit	584.00 MHz
	Design power capacity in use	50.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	800.0 kW
	Manufacturer	
	Model	TFU-24WB C160
	Year	2017

Justification for New Antenna  This broadband antenna will cover KTBS's channel 28, as well both KPXJ's pre- transition channel 21 and post- transition channel 32. This will drastically reduce the risk of delays or risk of KPXJ not being able to transition channels on schedule.		
	Justification for New Antenna	broadband antenna will cover KTBS's channel 28, as well both KPXJ's pre- transition channel 21 and post- transition channel 32. This will drastically reduce the risk of delays or risk of KPXJ not being able to transition channels on

#### Interim Antenna

#### **Other Antenna Costs**

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	3
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	No
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	В
	Feed Line Size	6 1/8 inches

Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

# Enter a list of RF channel numbers.

RF Channel Number		
21		
28		
32		

#### Interim Antenna

#### **Other Antenna Cost Not Listed**

Information not provided.

Transmission <sup>Seffien</sup>	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

# Primary Transmission Line

#### **Existing Transmission Line**

on 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	
	Туре	Rigid
	Diameter	4 1/16 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1731 feet per run

#### **New Transmission Line**

Primary Transmission

New Transmission Line			
on 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	
	Туре	Rigid	
	Diameter	6 1/8 inches	
	Other Diameter	N/A	
	Segment Length	19 1/2 inches	
	Other Segment Length	N/A	
	Number of parallel runs	1	
	Length	1760 feet per run	
	Justification for New Transmission Line	The existing line is not capable of supporting the new channel. Additionally, the new main antenna will be installed in a different location than the existing main antenna.	

# Other Transmission Line Expenses Not Listed Primary Other Transmission Transmission Internation not provided.

#### **New Transmission Line**

# Interim Transmission Line

New Transmission Line
Costs

Question	Response
Use	Interim
Description of Use	N/A
Change Type	Purchase New
Туре	Rigid
Diameter	6 1/8 inches
Segment Length	Broadband
Other Segment Length	
Number of parallel runs	1
Length	1560 feet per run
Justification for New Transmission Line	The interim line is needed to connect the combiner system on the ground with the new interim antenna. The Line needs to support two stations of power as well as be broadband to allow all channel combinations to operate on the same line.

**Other Transmission Line Expenses Not Listed** 

Transmission loine tion 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?	Terrain Constrained
	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?	Yes
	Is tower compliant with Rev G?	No
Existing Tower	Do you have a tower registration number?	Yes
Structure Registration	ASR Number	1020877
Coordinates (NAD83 (	Latitude (NAD83)	32° 41' 08.5" N
North American Datum of 1983))	Longitude (NAD83)	093° 56' 00.6" W-
	Overall Structure Height	1825.77 feet
	Support Structure Height	1822.48 feet
	Ground Elevation Above Mean Sea Level (AMSL)	249.01 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	KTBS, LLC
Date Constructed	06/25/2013

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
1304	KRMD-FM	FM
35652	KTBS-TV	DTV

#### Primary Tower

#### **Tower Modification Costs**

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

#### Primary Tower

#### **Tower Rigging Costs**

Section	Question	Response
Tower Rigging Costs	Complex Tower	Terrain constrained
Helicopter Services Required	Are helicopter services required?	No

## Primary Tower

## Other Tower Expenses Not Listed

Name	Description
Field Verifications	Field Verification for Actual mechanicals for existing antennas prior to antenna ordering.

#### Outside Professional

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	2562
	Explanation	See attached Narrative
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	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No

	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	Yes
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	Yes
	Number of Days	20
	Justification	Field investigation of tower site and building status will be needed in order to design and scope project.

Outside
Outside
Professional Services Expenses Not Listed
Professional Services ©pstsided.

# 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	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	Yes
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD  Notification of a Channel Change?	Yes

Other Expenses Not Listed

**Expenses** Information not provided.

# **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 ULXTE-72	\$1,660,383.33	\$1,956,802.30		\$681,486.00	
5 Ton system	\$20,250.00	\$19,250.00	N/A	N/A	N/A
Transformer 3 phase/480v - 300 KVA	\$36,800.00	\$35,000.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,772,218.97	See attached TSG Quote "Sec 1 Main TX"	\$681,486.00	N/A
Other Electrical Service: The new main transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	\$75,000.00	\$75,000.00	N/A	N/A	N/A

Combiner 5 ton HVAC	\$15,333.33	\$15,333.33	See attached TSG Quote "Sec 1 Main TX" line 63	N/A	N/A
Relocating Ground equipment	\$20,000.00	\$20,000.00	N/A	N/A	N/A
Building Reconfiguration	\$20,000.00	\$20,000.00	N/A	N/A	N/A
Auxiliary Transmitter ULXTE-72	\$1,584,800.00	\$1,769,583.04		\$0.00	
Other Electrical Service: The new auxiliary transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	\$75,000.00	\$75,000.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,659,583.04	See attached TSG Quote "Sec 2 Aux TX"	N/A	N/A
Transformer 3 phase/480v - 300 KVA	\$36,800.00	\$35,000.00	N/A	N/A	N/A

Total for all	\$7,051,334.33	\$8,781,231.17	N/A	\$2,515,943.53	N/A
systems					

#### Components

Actual Information Description	File Name	
5 Ton system	Information not provided.	
Transformer 3 phase/480v - 300 KVA	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Component Description: Amount:	7/29/2018 \$681,486.00
Other Electrical Service: The new main transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	Information not provided.	
Combiner 5 ton HVAC	Information not provided.	
Relocating Ground equipment	Information not provided.	
Building Reconfiguration	Information not provided.	
Other Electrical Service: The new auxiliary transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Information not provided.	
Transformer 3 phase/480v - 300 KVA	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 Interim Antenna TFU-24WB	Predetermined Cost Estimate \$333,040.00	Estimated Cost \$515,229.30	Estimated Cost Justification	Actual Cost \$134,414.65	Actual Cost Justification
New combiner, cost per channel (without antenna)	\$84,200.00	\$268,829.30	Based on Quote.	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 800 kW input, horizontally polarized	\$200,000.00	\$200,000.00	N/A	\$134,414.65	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$13,000.00	N/A	N/A	N/A

Side mount \$23,150.00 \$22,000.00 N/A N/A brackets for high power antennas (if not included in antenna base cost)  Pattern \$5,260.00 \$5,000.00 N/A N/A scatter analysis for	N/A
scatter	
side mount high/med power antennas (if not included in antenna base cost)	N/A
Primary \$523,990.00 \$498,100.00 \$136,935.45 Antenna TFU-30DSC /VP-R S200	
UHF - High \$289,500.00 \$275,000.00 N/A \$136,935.45  Power Top  Mount (200-1000 kW), One station	N/A
antenna , elliptically or circularly polarized	
antenna , elliptically or circularly	N/A

Combiner	\$126,000,00	\$120,000.00	N/A	N/A	N/A
output splitting /switching for dual feed lines,	\$126,000.00	φ120,000.00	IVA	IVA	IV/A
if applicable					
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
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Sub-total	\$857,030.00	\$1,013,329.30	N/A	\$271,350.10	N/A
Total for all	\$7,051,334.33	\$8,781,231.17	N/A	\$2,515,943.53	N/A

Actual Information Description	File Name
New combiner, cost per channel (without antenna)	Information not provided.
Sweep test of existing antenna	Information not provided.

UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 800 kW input, horizontally polarized	Component Description: Amount:	Interim Antenna Purchase \$134,414.65
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Component Description: Amount:	Main Antenna Purchase \$136,935.45
Sweep test of existing antenna	Information not provided.	
New combiner, cost per channel (without antenna)	Information not provided.	
Combiner output splitting /switching for dual feed lines, if applicable	Information not provided.	
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	

#### **Transmission Line**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$361,920.00	\$539,143.35		\$256,726.07	
Rigid Transmission Line - copper, 6 1 /8" broadband	\$361,920.00	\$539,143.35	See attached TSG "Sec 9 Interim Coax" price quote;	\$256,726.07	N/A
Primary Transmission Line	\$355,520.00	\$565,433.18		\$237,491.66	
Rigid Transmission Line - copper, 6 1/8"	\$355,520.00	\$565,433.18	See attached TSG "Sec 7 Main Coax" price quote;	\$237,491.66	N/A
Sub-total	\$717,440.00	\$1,104,576.53	N/A	\$494,217.73	N/A
Total for all systems	\$7,051,334.33	\$8,781,231.17	N/A	\$2,515,943.53	N/A

Actual Information Description	File Name	
Rigid Transmission Line - copper, 6 1/8" broadband	Component Description:	Transmission Line Coax Interim
	Amount:	Purchase \$256,726.07

Rigid Transmission Line - copper, 6 1/8"

Component Description: Transmission Line

Coax Main

**Amount:** \$237,491.66

### **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 GTOWER	\$1,490,600.00	\$2,226,200.00		\$1,017,007.90	
Serious tower reinforcement /modifications	\$1,052,000.00	\$1,146,540.00	TCI proposal TCI-17- 149E	\$836,974.20	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$13,820.00	Invoices total this amount.	\$13,820.00	N/A
Field Verifications	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$1,060,840.00	Based on quote from installation Vendor.	\$166,213.70	N/A
Sub-total	\$1,490,600.00	\$2,226,200.00	N/A	\$1,017,007.90	N/A
Total for all systems	\$7,051,334.33	\$8,781,231.17	N/A	\$2,515,943.53	N/A

Actual Information	
Description	File Name

# Serious tower reinforcement /modifications

**Component Description:** 

Amount:

Tower modification

\$28,800.00

**Component Description:** 

Tower Modifications

Amount:

Amount:

\$550,339.20

Component Description:

Tower

Modification:

Engineering,

materials, labor

services, project

management and

insurance to

preform the

complex tower

modifications on

the 1,693-ft guyed

Kline Tower

\$286,635.00

Component Description:  Amount:	Analysis prepared for one (1) additional Load Case to determine conformance with the ANSI/TIA?EIA Standard 222-G with basic wind speeds required for the tower location. \$1,800.00
Component Description:	for one (1) additional Load
documented tower  Component Description:  Amount:	Analysis prepared for one additional Load Case to determine conformance with the ANSI/TIA?EIA Standard 222-G \$1,800.00

Complex Tower (includes, for example, those with candelabras and/or stacked antennas)

**Component Description:** 2. Existing Primary

Tower, Complex Tower, Tower Equipment and Rigging, Repack

Antenna Installation,

Mobilization 25%,

**Amount:** \$56,922.50

Component Description: Repack Antenna

Installation

**Amount:** \$109,291.20

### **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	\$607,001.00	\$577,550.00		\$51,881.80	
Additional Field Engineering Service, 20 Days	\$40,000.00	\$40,000.00	N/A	N/A	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$10,000.00	N/A	N/A	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$6,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$7,360.00	\$7,000.00	N/A	N/A	N/A

Prepare and File FCC Form 2100 (main), License to Cover Application         \$5,260.00         \$5,000.00         N/A         \$3,500.00         Identify Speak and File FC Form 2100 (main), Construction Permit Application           RF Consulting Engineer Feeshaux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application         \$1,580.00         \$1,500.00         N/A         \$1,631.80         Identify Speak and						
Prepare and File FCC Form 2100 (main), Construction Permit Application         \$1,580.00         \$1,500.00         N/A         N/A         N/A         Premit Application         \$1,580.00         \$1,500.00         N/A         N/A         N/A         Image: Note of the permit Application         N/A         N/A         N/A         Image:	Prepare and File FCC Form 2100 (main), License to Cover	\$2,365.00	\$2,250.00	N/A	\$1,475.00	N/A
Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application  Project \$404,796.00 \$384,300.00 N/A \$41,631.80 management of the transition  Prepare and or review reimbursement form  Address \$2,630.00 \$2,500.00 N/A N/A N/A N/A transition  Address \$2,630.00 \$2,500.00 N/A	Prepare and File FCC Form 2100 (main), Construction Permit	\$5,260.00	\$5,000.00	N/A	\$3,500.00	N/A
management of the transition  Prepare and or \$2,630.00 \$2,500.00 N/A \$2,500.00 review reimbursement form  Address \$2,630.00 \$2,500.00 N/A N/A transition timing and coordination issues w/ other stations and wireless  Perform \$7,360.00 \$7,000.00 N/A \$650.00 engineering study for new channel assignment	Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover	\$1,580.00	\$1,500.00	N/A	N/A	N/A
review reimbursement form  Address \$2,630.00 \$2,500.00 N/A N/A transition timing and coordination issues w/ other stations and wireless  Perform \$7,360.00 \$7,000.00 N/A \$650.00 engineering study for new channel assignment	management of	\$404,796.00	\$384,300.00	N/A	\$41,631.80	N/A
transition timing and coordination issues w/ other stations and wireless  Perform \$7,360.00 \$7,000.00 N/A \$650.00 engineering study for new channel assignment	review reimbursement	\$2,630.00	\$2,500.00	N/A	\$2,500.00	N/A
engineering study for new channel assignment	transition timing and coordination issues w/ other stations and	\$2,630.00	\$2,500.00	N/A	N/A	N/A
development	engineering study for new channel assignment and antenna	\$7,360.00	\$7,000.00	N/A	\$650.00	N/A

Prenare	\$3,155.00	\$3,000.00	N/A	\$1,750.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	<b> 9 9 9 9 9 9 9 9 9 </b>	<b>\$</b> 3,000.00	IV/A	φ1,7 ου.υυ	IV/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,000.00	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	\$375.00	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	N/A	N/A	N/A
Sub-total	\$607,001.00	\$577,550.00	N/A	\$51,881.80	N/A
Total for all systems	\$7,051,334.33	\$8,781,231.17	N/A	\$2,515,943.53	N/A

Actual Information Description	File Name
Additional Field Engineering Service, 20 Days	Information not provided.
RF Exposure Measurements	Information not provided.

Comprehensive coverage verification via field study, if needed	Information not provided.	
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	Information not provided.	
NEPA Section 106 environmental review, if needed	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Component Description:	Attorney fees to assist with Post Auction Repack
	Amount:	\$950.00
	Component Description:	Attorney Fees for Regarding Channel Change
	Amount:	\$525.00
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Attorney Fees associated with Construction Permit \$3,500.00
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.	

Project management of the transition		
i di londi	Component Description: Amount:	Legal services \$1,375.00
	Component Description: Amount:	Legal services \$1,625.00
	Component Description:	Professional services
	Amount:	\$35,486.65
	Component Description:	Project
	Amount:	Management \$375.00
	Component Description:	Project
	Amount:	management \$2,770.15
Prepare and or review reimbursement form		
	Component Description:	Attorney fees for Public Notice Reminder and
	Amount:	Filings \$250.00
	Component Description:	Attorney Fees Associated with
		Reimbursements
	Amount:	\$625.00
	Component Description:	Attorney fees for
		discussing Channel
		Reassignment, Cores Registration and Form 1876

Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Perform engineering study for new channel assignment and antenna development	Component Description: Amount:	Engineering RF Analysis \$650.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	Engineering Work for Construction Permit
	Amount:	\$1,750.00
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Component Description:	Attorney Fees Associated with FCC Form 399
	Amount:	\$375.00
Prepare request for Special Temporary Authorization	Information not provided.	

### **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	\$134,080.00	\$133,190.00		\$0.00	
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$0.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
Local Zoning	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Non-zoning permits	\$5,000.00	\$5,000.00	N/A	\$0.00	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$50,000.00	\$50,000.00	See attached TSG "Sec 11 Other Expenses" quote, item 9;	N/A	N/A
Equipment Delivery and Handling Charges	\$20,000.00	\$20,000.00	See attached TSG "Sec 11 Other Expenses" quote, Item 11;	N/A	N/A
Equipment Storage	\$20,000.00	\$20,000.00	N/A	N/A	N/A

Develop and air announcement of upcoming channel change	\$15,000.00	\$15,000.00	N/A	N/A	N/A
MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	N/A	\$0.00	N/A
Sub-total	\$134,080.00	\$133,190.00	N/A	\$0.00	N/A
Total for all systems	\$7,051,334.33	\$8,781,231.17	N/A	\$2,515,943.53	N/A

### Components

Information not provided.

### **Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$7,051,334.33	\$8,781,231.17	\$2,515,943.53

Reimbursem	envestiatus	Response
	The facility has ceased operating on its pre- auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

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.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Dale E.
Cassidy
Chief
Engineer

08/10/2018

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.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.

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

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Dale Edward Cassidy Chief Engineer

08/10/2018

#### **Attachments**