

Federal Communications Commission

## (REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

ID: File 000002	Service: <b>DTV</b> 8338	Call Sign:	KPXJ	Channel: <b>32 (UHF)</b>
Number:	1	_		
FRN: <b>0020203246</b>	Date Submitted:	08/10 /2018		

# Applicant Name, Type, and Contact Information

Information	Applicant	Address	Phone	Email	Applicant Type
	<b>KTBS, LLC</b> 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	Question	Response
Information and		
Transition		
Plan		

Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	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	Add Transmitter Information				
Transmitter	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	New Transmitter Costs				
Transmitter	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.		

#### Other Transmitter Costs Auxiliary

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Transm	itter

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itter	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 Other Transmitter Cost Not Listed

**Transmitter** Information not provided.

Primary	Existing Transmitter Information		
Transmitter	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

### **Existing Transmitter Information**

Primary	New Transmitter Costs		
Transmitter	Section	Question	Response
New Transmitter	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

Section         Question         Response           Electrical Service         Service Entrance (3 phases 800A 208V)         No           Switchgear (industrial 800 amp)         No         No           Transformer (480V)         Yes         Power         300 kVA           Rigid Conduit and Wiring         No         No           Size         N/A         Size         N/A           Other Electrical Service         Yes         Yes           Description         The new main transmitter will require reconfiguratio of the electrical service on site. The electrical serv	Primary	Other Transmitter Costs			
Switchgear (industrial 800 amp)       No         Transformer (480V)       Yes         Power       300 kVA         Rigid Conduit and Wining       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 service on site on service o	Transmitter	Section	Question	Response	
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 service on service on site. The electrical service on		Electrical Service	Service Entrance (3 phases 800A 208V)	No	
Power       300 kVA         Rigid Conduit and Wiring       No         Size       N/A         Length       N/A         Other Electrical Service       Yes         Description       The new mair transmitter will require reconfiguration of the electrical service on site. The electrical service on setter and based on verbal guidance from local electrical service.         HVAC Service       Does the replacement transmitter require HVAC Service?       Yes         Type       Cooling Only			Switchgear (industrial 800 amp)	No	
Rigid Conduit and Wiring       No         Size       N/A         Length       N/A         Other Electrical Service       Yes         Description       The new mair transmitter will require reconfiguration of the electrical service on site. The electrical service on site. The electrical work cost has been estimated based on verbal guidance from tocal electrical contractors.         HVAC Service       Does the replacement transmitter require require reconfiguration of the electrical contractors.         Type       Cooling Only			Transformer (480V)	Yes	
Size       N/A         Size       N/A         Length       N/A         Other Electrical Service       Yes         Description       The new mair transmitter will require reconfiguration of the electrical service on site. The electrica			Power	300 kVA	
Length       N/A         Other Electrical Service       Yes         Description       The new main transmitter will require reconfiguration of the electrical service on site. The electrical service on site. The electrical vervice constrated based on verbal guidance from local electrical contractors.         HVAC Service       Does the replacement transmitter require HVAC Service?       Yes         Type       Cooling Only			Rigid Conduit and Wiring	No	
Other Electrical Service       Yes         Description       The new main transmitter will reconfiguratio of the electrical service on site. The electrical service on site. The electrical vort cost has been estimated based on verbal guidance from local electrical contractors.         HVAC Service       Does the replacement transmitter require reconfiguration of the electrical service on site. The electrical vort cost has been estimated based on verbal guidance from local electrical contractors.         HVAC Service       Does the replacement transmitter require HVAC Service?       Yes         Type       Cooling Only			Size	N/A	
HVAC Service       Description       The new main transmitter will require reconfiguration of the electrical service on site. The electrical service on site. The electrical vort cost has been estimated based on verbal guidance from local electrica. Contractors.         HVAC Service       Does the replacement transmitter require HVAC Service?       Yes         Type       Cooling Only			Length	N/A	
HVAC Service       Does the replacement transmitter require reconfiguration of the electrical service on site. The electrical vorticity cost has been estimated based on verbal guidance from local electrical contractors.         HVAC Service       Does the replacement transmitter require HVAC Service?       Yes         Type       Cooling Only			Other Electrical Service	Yes	
HVAC Service?     Type     Cooling Only			Description	reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical	
		HVAC Service		Yes	
Size 5 tons			Туре	Cooling Only	
			Size	5 tons	
Other Size N/A			Other Size	N/A	
Transmitter Building Addition/Modification or Leasehold ImprovementDoes the Transmitter Building require an addition, modification, other leashold improvement?No		Addition/Modification or Leasehold	addition, modification, other leashold	No	
Size N/A		Improvement	Size	N/A	
Channel 14 Costs       Is an RF Consulting Engineer needed?       N/A		Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A	

Is a channel 14 Mask Filer needed?	N/A
Is additional field engineering time needed?	N/A
Number of Days	N/A

Primary	Other Transmitter Cost Not Listed		
Transmitter	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 Rela	ated Expenses	Do you have antenna related expenses?	Yes

Primary	Existing Antenna Information			
Antenna	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing antenna shared with another station or stations?	No	
		Is the existing antenna directional?	Yes	
		Is antenna in operating condition?	Yes	
Existing Antenna		Is antenna located on or in close proximity to an antenna farm?	Yes	
	-	Class	Full Power	
	Manufacturer and Type	Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels	N/A	
		Design power capacity in use	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	

Manufacturer	
Model	TFU- 30DSC-R S20000
Year	2006

Primary	New Antenna Costs			
Antenna	Section	Question	Response	
New Antenna New Antenna Manufacturer and Types	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	
		Class	Full Power	
	Manufacturer and Types	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 bottom- stack antenna at the top of the tower due to structural limitations.

#### **Other Antenna Costs** Primary

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

	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.

RF Channel Number			
32			
21			
28			

Primary<br/>AntennaOther Antenna Cost Not ListedInformation not provided.

Interim	New Antenna Costs		
Antenna	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 Manufacturer and Type	Class	Full Power
		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
			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.

# Interim Other Antenna Costs

Antenna

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			

# InterimOther Antenna Cost Not ListedAntennaInformation not provided.

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

ransmissio	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

# Primary Existing Transmission Line

Primary	New Transmission Line		
Transmission	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 Transmission

Interim	New Transmission Line		
Transmissio	n Line Section	Question	Response
	New Transmission Line	Use	Interim
	Costs	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 not provided.

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

## **Existing Tower**

Primary Tower	Existing Tower			
	Section	Question	Response	
	Existing Tower	Type of change	Modify Existing	
	Description	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 Structure Registration	Do you have a tower registration number?	Yes	
		ASR Number	1020877	
	Coordinates ( <u>NAD83</u> ( North American Datum of 1983))	Latitude (NAD83)	32° 41' 08.5" N-	
		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 Modification Costs

Tower

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 Rigging Costs

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

Primary	Other Tower Expenses Not Listed			
Tower	Name	Description		
	Field Verifications	Field Verification for Actual mechanicals for existing antennas prior to antenna ordering.		

Outside	Section	Question	Response
Professional	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.

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	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.

## Transmitters

### Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter 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	\$36,800.00	\$35,000.00	N/A	N/A	N/A
phase/480v - 300 KVA					

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:         7/29/2018           Amount:         \$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.

### Antennas

### Cost Information

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

Description Interim Antenna TFU-24WB C160	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 brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	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
Primary Antenna TFU-30DSC /VP-R S200	\$523,990.00	\$498,100.00		\$136,935.45	
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$275,000.00	N/A	\$136,935.45	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
New	\$84,200.00	\$80,000.00	N/A	N/A	N/A

Combiner output splitting /switching for dual feed lines, if applicable	\$126,000.00	\$120,000.00	N/A	N/A	N/A
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 systems	\$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**

#### Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
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**

#### Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification		Actual Cost 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: Amount:	Tower Modifications \$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	

Structural engineering tower load study for well 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
	Component Description:	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: Amount:	Second Tower Analysis \$1,800.00
	Component Description: Amount:	Tower Analysis \$8,420.00
Field Verifications	Information not provided.	

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: Amount:	Repack Antenna Installation \$109,291.20

## **Outside Professional Services**

#### Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$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

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

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$1,750.00	N/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 Channe Change
	Amount:	\$525.00
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description:	Attorney Fees associated with
	Amount:	Construction Permi \$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	Component Descriptions	
	Component Description: Amount:	Legal services \$1,375.00
	Component Description: Amount:	Legal services \$1,625.00
	Component Description:	Professional
	Amount:	services \$35,486.65
	Component Description:	Project
	Amount:	Management \$375.00
	Component Description:	Project
	Amount:	management \$2,770.15
Prepare and or review eimbursement form	Component Description:	Attorney fees for
		Public Notice Reminder and Filings
	Amount:	\$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
	Amount:	\$1,625.00

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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: Amount:	Engineering Work for Construction Permit \$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: Amount:	Attorney Fees Associated with FCC Form 399 \$375.00
Prepare request for Special Temporary Authorization	Information not provided.	

## **Other Expenses**

## Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$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.

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

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		<ol> <li>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>The above-named entity acknowledges that all certifications and attached documentation are</li> </ol>	
		considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

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

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.	Dale E. Cassidy Chief Engineer 08/10/2018

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		<ol> <li>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> </ol>	
		2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.	
		3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	

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

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.	
an aut nameo	are, under penalty of perjury, that I am horized representative of the above- d applicant for the Authorization(s) ied above.	Dale Edward Cassidy Chief Engineer 08/10/2018

#### Attachments

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