

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility	147	Service: DTV	Call	WTIC-TV	Channel: 34 (UHF)
ID:	147		Sign:		
File	0000	028235	-		
Number:					
FRN: 00	2835845	5 Date	10/08		
		Submitted:	/2021		

Applicant Name, Type, and Contact Information

Information	Applicant	Address	Phone	Email	Applicant Type
	TEGNA BROADCAST HOLDINGS, LLC	Denise A. Branson, Sr. Paralegal 8350 BROAD STREET SUITE 2000 TYSONS, VA 22102 United States	+1 (703) 873- 6606	DBRANSON@TEGNA. COM	Limited Liability Company

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Preparer Contact Name and Information

Contact Information	Applicant	Address	Phone	Email
	Bill Vanduynhoven , Vanduynhov . Director of Engineering operations Tribune Broadcasting	Bill Vanduynhoven 2211 Rabbit Hill Cir Dacula, GA 30019 United States	+1 (404) 312- 8693	BillV@Tribunemedia. 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.	No
	Briefly describe transition plan	Replace Antenna via Helicopter and transmission line Replace transmitter Install Interim antenna

Transmitter RelatedDo you have transmitter related expenses?YesExpenses	Transmitters	Section	Question	Response
			Do you have transmitter related expenses?	Yes

Auxiliary	Add Transmitter Information					
Fransmitter	Section	Question	Response			
	Existing Transmitter Description	Type of change	Purchase New			
		Use	Auxiliary (Backup)			
		Description of Use	BAckup			
		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	Inovator HU5000BD			
		Year	2009			
		Туре	Solid State			
		Solid State Cooling	Air Cooled			
		Solid State Power Capacity	5 kW			

Add Transmitter Information

Auxiliary	New Transmitter Costs					
Transmitter	Section	Question	Response			
	New Transmitter	Use	Auxiliary (Backup)			
		Change Type	Purchase New			
		Is this a request for upgraded equipment?	No			
		Manufacturer				
		Model	UAXTE-8R44			
		Transmitter Type	Solid State			
		Solid State Cooling	Air Cooled			
		Solid State Power capacity	4.8 kW			
		Justification for New Transmitter	Manufacturer support limited see justification			

Auxiliary Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	No
		Transformer (480V)	No
		Power	N/A
		Rigid Conduit and Wiring	No
		Size	N/A
		Length	N/A
		Other Electrical Service	Yes
		Description	100 Amp electrical

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 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

Auxiliary	Other Transmitter Cost Not Listed			
Transmitter	Name	Description		
	Other Transmitter Costs	Other Transmitter Costs		

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	PowerCD P1			
		Year	2005			
		Туре	Inductive Output Tube			
		IOT Power Type	Single			
		Power Capacity	30 kW			

Existing Transmitter Information

Primary Transmitter	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	44 kW	
		Justification for New Transmitter	Current transmitter can not make the required power, adding additional PA cabinets is not an option since they are no longer manufactured.	

Other Transmitter Costs

Primary	Other Transmitter Costs			
Transmitter	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	2 inches	

	Length	200.0 feet
	Other Electrical Service	No
	Description	N/A
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 Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Other Transmitter Cost Not Listed Transmitter Name

er	Name	Description
	Other Electrical Services	Other Electrical Services
	Other Building Addition Size: 0.0	Other Building Addition Size: 0.0
	Other Transmitter Costs	Other Transmitter Costs

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	
		Is antenna located on or in close proximity to an antenna farm?	No	
	Existing Antenna	Class	Full Power	
	Manufacturer and Type	Mounting	Top Mount	
		Antenna position in stack	Bottom	
		Polarization	Elliptical	
		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)	495.0 kW	

Manufacturer	
Model	TFU-18DSC /VP-R O4 C170
Year	2004

Primary	New Antenna Costs			
Antenna	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?	No	
		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?	No	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Side 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)	565.0 kW	
		Manufacturer		
			1	

Model	TFU-18DS0 /VP-R C170
Year	2019
Justification for New Antenna	Current antenna wil not operate on assigned channel

Primary Antenna	Other Antenna Costs			
	Section	Question	Response	
	Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No	
		Туре		
		Number of channels supported	N/A	
		Frequencies of channels supported	N/A	
		Frequency	N/A	
		Do you need a combiner output splitter /switcher for dual feed lines?	N/A	
	Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes	
		Broadband or Single Channel?	Broadband	
		Feed Line Size	7 3/16 inches inches	
	Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes	
	Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No	
	Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes	

PrimaryOther Antenna Cost Not ListedAntennaInformation 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?	Yes	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	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	3	
		Number of Panels/Bays	16	
		Lower Limit	470.00 MHz	
		Upper Limit	665.00 MHz	
		Design power capacity in use	95.0 %	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1500.0 kW	
		Manufacturer		
		Model	TFU-WB16	
		Year	2020	

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?	No	
	Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No	
	Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes	

Enter a list of RF channel numbers.

RF Channel Number

45 20 31

Interim

Other Antenna Cost Not Listed

Antenna

Name	Description
Interim Instantiation	Install interim antenna
Interim WX delays	Weather delays during install
Lease cost	Temporary lease for Interim antenna
Insurance	Additional charge to meet Owner insurance requirement
Combiner connection	Connection to Combiner

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

Primary	Existing Transmission Line			
Transmissio	n 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?	Yes	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission Line Manufacturer and Type	Manufacturer		
		Туре	Rigid	
		Diameter	7 3/16 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	1375 feet per run	

Facility ID's and Call Signs of all stations with whom the transmission line is shared.

Existing Transmission Line

Facility ID	Call Sign
14050	WCCT-TV

Primary	New Transmission Line				
Transmissio	n 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?	No		
		Туре	Rigid		
		Diameter	7 3/16 inches		
		Other Diameter	N/A		
		Segment Length	19 1/2 inches		
		Other Segment Length	N/A		
		Number of parallel runs	1		
		Length	1375 feet per run		
		Justification for New Transmission Line	Current shared transmission line is no longer supported by manufacturer and will not work on new channel. Station cannot share with line with WCCT on new assigned channels.		

Other Transmission Line Expenses Not Listed Transmission Line Description

Harmonic bouncing line remediation Harmonic bouncing line remediation

Interim	New Transmission Line		
Transmissio	on Section	Question	Response
	New Transmission Line Costs	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	1200 feet per run
		Justification for New Transmission Line	Transmission line for temporary operation during antenna changes.

Interim	Other Transmission Line Expenses Not Listed			
Transmissio	Name	Description		
	Other Transmission Line Costs	Other Transmission Line Costs		

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

Primary Existing Tower

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Section	Question	Response
Existing Tower	Type of change	Modify Existing
Description	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	Candelabra
	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?	Yes
Existing Tower	Do you have a tower registration number?	No
Structure Registration	ASR Number	
Coordinates (Latitude (NAD83)	41° 42' 13.0" N-
NAD83 (North American Datum	Longitude (NAD83)	072° 49' 55.0" W-
of 1983))	Overall Structure Height	1338.89 feet
	Support Structure Height	1291.98 feet
	Ground Elevation Above Mean Sea Level (AMSL)	709.97 feet
	Structure Type	TOWER - Free Standing or Guyed Structure

Tower Owner	COMMUNICATIONS SITE MANAGEMENT, LLC
Date Constructed	09/01/1984

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
1910	WRCH	FM
66465	WTIC-FM	FM
14050	WCCT-TV	DTV
1900	WZMX	FM
13602	WEDH	DTV

Primary 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:	Minor Reinforcements needed

Primary Tower Rigging Costs

Tower

Tower

Section	Question	Response
Tower Rigging Costs	Complex Tower	Candelabra
Helicopter Services Required	Are helicopter services required?	Yes

Primary	Other Tower Expenses Not Listed	
Tower	Name	Description
	Weather delays	Days the crew can not work due to weather

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	100
		Explanation	Management services by Landlord
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare request for Special Temporary Authority	Yes
		Quantity	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	No
	Services	For Auxiliary Facility	N/A
		For Main Facility	N/A
		Prepare and file Form FCC License to Cover Application	No
		For Auxiliary Facility	N/A

	For Main Facility	N/A
	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	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	No
RF Field Engineering Services	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	ide Other Professional Services Expenses Not Listed	
Professional	sional Services Costs Description	Description
	Security Guard	Security Guard

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	Yes
		Is Remediation needed?	Yes
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	Yes
		Non-zoning permits	No
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	No
		FCC License to Cover Application	No
		FCC Special Temporary Authority Application	No
	Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
		Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	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

Other Expenses	Name Description		
	Build-out, Various	Build-out, Various	

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	\$1,598,986.50	\$1,523,186.50		\$1,059,936.56	
Other Transmitter Costs	\$1,095.78	\$1,095.78	N/A	\$1,095.78	N/A
Other Building Addition Size: 0.0	\$18,979.72	\$18,979.72	N/A	\$18,979.72	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$13,700.00	N/A	\$0.00	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,400,000.00	N/A	\$991,750.06	N/A
Other Electrical Services	\$48,111.00	\$48,111.00	N/A	\$48,111.00	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$5,000.00	N/A	N/A	N/A

Auxiliary Transmitter UAXTE- 8R44	\$244,128.29	\$141,944.70		\$136,944.70	
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	\$236,500.00	\$134,316.41	N/A	\$134,316.41	N/A
Other Transmitter Costs	\$2,628.29	\$2,628.29	N/A	\$2,628.29	N/A
Other Electrical Service: 100 Amp electrical	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Sub-total	\$1,843,114.79	\$1,665,131.20	N/A	\$1,196,881.26	N/A
Total for all systems	\$4,245,395.94	\$4,036,348.60	N/A	\$3,294,718.16	N/A

Components

Actual Information Description	File Name	
Other Transmitter Costs		
	Component Description:	Amazon 114-
		0749622-6737850
		v210803pmv1
	Amount:	\$1,095.78

Other Building Addition Size: 0.0	Component Description: Amount:	D'Amato 09967 v200402pmv1 \$18,658.00
	Component Description: Amount:	Airgas 9091306783 v200402pmv1 \$321.72
Switchgear - industrial 800 amp	Information not provided.	
Service entrance 3 phase /800 amp/208 volt	Component Description: Amount:	Eastside 166489 v200501pmv1 \$1,020.00
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Component Description: Amount:	3rd payment for primary transmitter \$297,183.13
	Component Description: Amount:	Gates US0327243 v200211jgv1 \$20,833.49
	Component Description: Amount:	Transmitter Deposit \$342,317.91
	Component Description: Amount:	second payment for ULXTE-72 \$352,249.02
	Component Description:	Gates GO10004879- Install v200211jgv1
	Amount:	\$75,671.20

Other Electrical Services		
	Component Description:	Eastside 165058
	•	v210831pmv1
	Amount:	\$8,711.00
	Component Description:	Eastside 165666
	Component Description:	v210831pmv1
	Amount:	\$8,711.00
	Component Description:	Eastside 164867-3
	Amounti	v210831pmv1
	Amount:	\$8,711.00
	Component Description:	Eastside 165972
		v210903pmv1
	Amount:	\$4,556.00
	Component Description:	Factoida 165170
	Component Description:	Eastside 165176 v210831pmv1
	Amount:	\$8,711.00
	Component Description:	Eastside 166091
	Amount:	v210831pmv1 \$8,711.00
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2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
UHF - Air Cooled Solid		
State Transmitter 4 - 6 kW	Component Description:	Gates
		JW30004637-
		Install
	Amount:	v200211jgv1 \$12.362.49
	Amount:	\$12,362.49
	Amount: Component Description:	
		\$12,362.49

Other Transmitter Costs		
	Component Description:	Grainger
		9129725934
		v210818pmv1
	Amount:	\$182.27
	Component Description:	Grainger
		9127110626
		v210818pmv1
	Amount:	\$9.58
	Component Description:	Eastside 166489
		v200501pmv1
	Amount:	\$1,020.00
	Component Description:	Grainger
	component zooon phone	9130932677
		v210818pmv1
	Amount:	\$546.82
	Component Description:	Grainger
		9129725918
		v210818pmv1
	Amount:	\$869.62
Other Electrical Service: 100 Amp electrical	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).

			Estimated		
Description	Predetermined Cost Estimate	Estimated Cost	Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna	\$635,233.30	\$617,003.30	Justification	\$605,453.30	Justification
TFU-WB16					
Combiner connection	\$24,503.30	\$24,503.30	N/A	\$24,503.30	N/A
Insurance	\$75,000.00	\$75,000.00	Tower owner requested insurance above the standard amount. This is an additional cost.	\$73,090.00	N/A
Lease cost	\$65,000.00	\$65,000.00	Tower lease for Interim antenna	\$65,000.00	N/A
Interim WX delays	\$15,525.00	\$15,525.00	Actual cost	\$15,525.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00	N/A
UHF - High Power, Side Mount, basic slot antenna, 16 bay,, 1500 kW input, directional,, horizontally polarized	\$101,925.00	\$101,925.00	N/A	\$101,925.00	N/A

Interim Instantiation	\$248,650.00	\$248,650.00	Installation and tower upgrade to accommodate Interim antenna will be used by 3 stations	\$248,650.00	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$13,000.00	N/A	\$3,360.00	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$67,000.00	N/A	\$67,000.00	N/A
Primary Antenna TFU-18DSC /VP-R C170	\$182,730.00	\$175,400.00		\$170,357.50	
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$17,000.00	N/A	\$16,425.00	N/A
Elbow complex,	\$16,850.00	\$16,000.00	N/A	\$12,382.50	N/A

Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00	N/A
UHF - High Power, Side Mount, basic slot antenna, 565 kW input, directional,, elliptically or circularly polarized	\$136,000.00	\$136,000.00	N/A	\$135,150.00	N/A
Sub-total	\$817,963.30	\$792,403.30	N/A	\$775,810.80	N/A
Total for all systems	\$4,245,395.94	\$4,036,348.60	N/A	\$3,294,718.16	N/A

Actual Information Description	File Name	
Combiner connection	Component Description: Amount:	RF Analy 1437 v210831pmv1 \$6,500.00
	Component Description: Amount:	Die 223003 v210806pmv1 \$18,003.30
Insurance	Component Description: Amount:	Insurance Increase \$18,150.00
	Component Description: Amount:	project insurance \$54,940.00

Lease cost	Component Description: Amount:	one time lease cost for aux \$65,000.00
Interim WX delays	Component Description: Amount:	weather days \$15,525.00
Sweep test of existing antenna	Component Description: Amount:	Die 257006 v200313pmv1 \$640.00
	Component Description:	Engineer on site for sweep test 2nd payment
	Amount: Component Description:	\$2,880.00 Engineer on site for sweep test deposit
	Amount:	\$2,880.00

UHF - High Power, Side Mount, basic slot antenna, 16 bay,, 1500 kW input, directional,, horizontally polarized	Component Description: Amount:	Die 214031 v200313pmv1 \$778.50
	Component Description:	Die 257006 v200313pmv1
	Amount:	\$5,760.00
	Component Description:	deposit for interim Antenna
	Amount:	\$45,866.25
	Component Description:	2nd payment for Interim Antenna
	Amount:	1nterim Antenna \$45,866.25
	Component Description:	Die 229003
	Amount:	v200313pmv1 \$3,654.00
Interim Instantiation	Component Description:	deposit and
	Amount:	mobilization \$87,027.50
	Component Description: Amount:	down payment \$62,162.50
	Component Description: Amount:	in progress billing \$49,730.00
	Component Description:	in progress, completion and
		acceptance

Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	Component Description: Amount:	this was put here by mistake and I can't delete it. That is why the dollar amount is zero. N/A
	Component Description: Amount:	Die 225016 v210607pmv2 \$3,360.00
New combiner, cost per channel (without antenna)	Component Description: Amount:	Die 214031 v200313pmv1 \$6,700.00
	Component Description:	Combiners for Interim Antenna deposit \$30,150.00
	Component Description:	Combiners for Interim Antenna 2nd payment
	Amount:	\$30,150.00

Side mount brackets for high power antennas (if not ncluded in antenna base cost)	Component Description:	Deposit for Side mount brackets
	Amount:	\$7,391.25
	Component Description:	3rd payment side
		mount brackets
	Amount:	\$1,642.50
	Component Description:	2nd payment for
		Side mount
	Amount:	brackets \$7,391.25
Elbow complex, broadband, at antenna input, per 7 3	Component Description:	Die 443001
/16. feedline (if needed)		v200228pmv1
	Amount:	\$1,238.24
	Component Description:	Elbow Complex 7 3 /16 75 OHM
		feedline deposit.
	Amount:	\$5,572.13
	Component Description:	Elbow Complex 7 3
		/16 75 OHM
		feedline - 2nd
		payment
	Amount:	\$5,572.13

Sweep test of existing antenna	Component Description:	3rd payment sweep test \$640.00
	Amount.	ψ0+0.00
	Component Description:	Eng. for sweep test on site - 2nd payment
	Amount:	\$2,880.00
	Component Description:	Eng. for sweep
	Amount:	test on site deposit \$2,880.00

UHF - High Power, Side Mount, basic slot antenna, 565 kW input, directional,, elliptically or circularly polarized	Component Description: Amount:	Die 449042 v200228pmv1 \$11,820.00
	Component Description: Amount:	Die 449042 v200228pmv1 \$1,695.00
	Component Description: Amount:	2nd payment for Primary Antenna \$53,190.00
	Component Description: Amount:	2nd payment VPOL Components \$7,627.50
	Component Description: Amount:	deposit for VPOL Components \$7,627.50
	Component Description: Amount:	Deposit for Primary Antenna \$53,190.00
	Component Description: Amount:	Die 563051 v200312pmv2 N/A

Transmission Line

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Co Justificati
Interim Transmission Line	\$278,952.60	\$240,552.60		\$196,348.50	
Other Transmission Line Costs	\$552.60	\$552.60	N/A	\$552.60	N/A
Rigid Transmission Line - copper, 6 1 /8" broadband	\$278,400.00	\$240,000.00	N/A	\$195,795.90	N/A
Primary Transmission Line	\$425,481.43	\$288,709.68		\$288,709.68	
Rigid Transmission Line - copper, 7 3 /16"	\$398,750.00	\$261,978.25	See attached / uploaded PDF files titled, "Die 443001 v200228pmv1" and "Die 449042 v200228pmv1". See attached / uploaded PDF files titled, "Die 563051 v200312pmv2".	\$261,978.25	N/A

Harmonic bouncing line remediation	\$26,731.43	\$26,731.43	See attached / uploaded PDF file titled "Bouncing TX line v210813jgv1. pdf" and attached / uploaded PDF files titled "Die 1934372 v210929jgv1. pdf" and "NE Twrs 210135CTS3 v211005jgv2. pdf"	\$26,731.43	N/A
Sub-total	\$704,434.03	\$529,262.28	N/A	\$485,058.18	N/A
Total for all systems	\$4,245,395.94	\$4,036,348.60	N/A	\$3,294,718.16	N/A

Actual Information Description	File Name	
Other Transmission Line Costs	Component Description: Amount:	Grainger 9129725926 v210818pmv1 \$73.68
	Component Description: Amount:	Grainger 9127110634 v210818pmv1 \$478.92
Rigid Transmission Line - copper, 6 1/8" broadband	Component Description: Amount:	Die 229003 v200313pmv1 \$406.00

Component Description: Amount:	Die 214031 v200313pmv1 (\$1,827.00)
Component Description: Amount:	Die 214031 v200313pmv1 \$406.00
Component Description: Amount:	Die 214031 v200313pmv1 \$18,290.44
Component Description: Amount:	Die 214031 v200313pmv1 \$1,356.60
Component Description: Amount:	Die 229003 v200313pmv1 \$246.40
Component Description: Amount:	Die 225016CR v210607pmv1 (\$20.00)
Component Description:	Deposit payment for T/L 6-75 EIA Length 15' to 20' fixed flg 1 end
Amount:	/swivel \$4,567.50
Component Description: Amount:	Die 225016 v210607pmv2 \$1,368.50

	Component Description: Amount:	Die 235014 v210610pmv1 \$1,820.00
	Component Description:	2nd payment for T /L 6-75 EIA Length 15' to 20' fixed flg 1 end/swivel
	Amount:	\$4,567.50
	Component Description: Amount:	2nd payment for Rigid Transmission Line - Copper
	Amount:	\$82,306.98
	Component Description:	Deposit for Rigid Transmission line - copper 6 1/8
	Amount:	\$82,306.98
Rigid Transmission Line - copper, 7 3/16"	Component Description: Amount:	TLSCR's for install \$4,470.00
	Component Description: Amount:	Die 563051 v200312pmv2 \$330.00
	Component Description: Amount:	Die 443001 v200228pmv1 \$24,300.83
	Component Description: Amount:	TLSCR - Cut piece \$2,235.00

Component Description: Amount:	Die 449042 v200228pmv1 (\$6,034.50)
Component Description: Amount:	through complex WTIC 6-1/8" 50 OHM EIA feed - deposit \$5,370.75
Component Description:	deposit for fixed flg 1 and end/swivel
Amount:	\$3,017.25
Component Description:	through complex WTIC 6-1/8" 50 OHM EIA feed -
Amount:	3rd payment \$1,193.50
Component Description:	through complex WTIC 6-1/8" 50 OHM EIA feed - 2nd poyment
Amount:	2nd payment \$5,370.75
Component Description: Amount:	2nd payment for Transmission line \$109,353.71
Component Description: Amount:	Deposit for Transmission line \$109,353.71
Component Description:	2nd payment for fixed flg 1 and end
Amount:	/swivel \$3,017.25

remediation	Component Description:	NE Twrs 210135CTS3
		v211005jgv2
	Amount:	\$8,029.43
	Component Description:	Die 1934372
		v210929jgv1
	Amount:	\$18,702.00

Tower Equipment and Rigging Costs

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cos Justificatio
Primary Tower TOWER	\$605,687.50	\$763,537.50		\$674,097.50	
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	\$2,560.00	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$80,000.00	N/A	N/A	N/A
Tower Helicopter Lift	\$0.00	\$0.00	Included in Tower quote	N/A	N/A
Weather delays	\$14,087.50	\$14,087.50	See attached / uploaded PDF file titled, "Turris TE- 6842 v200331pmv1".	\$14,087.50	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$657,450.00	See attached / uploaded pdf files titled, "Turris TE- 6580 v210729pmv1"," Turris TE-6604 v210729pmv1"," Turris TE-6618 v210729pmv1", and "Turris TE- 6650 v210729pmv1".	\$657,450.00	N/A
Sub-total	\$605,687.50	\$763,537.50	N/A	\$674,097.50	N/A
Total for all systems	\$4,245,395.94	\$4,036,348.60	N/A	\$3,294,718.16	N/A

Actual Information Description	File Name	
Structural engineering tower load study for well documented tower	Component Description: Amount:	Turris TE-6602 v211004pmv1 \$2,560.00
Minor tower reinforcement /modifications	Information not provided.	
Tower Helicopter Lift	Information not provided.	
Weather delays	Component Description: Amount:	Turris TE-6768 v210928pmv1 \$9,775.00
	Component Description: Amount:	Turris TE-6842 v210719pmv2 \$4,312.50

	Component Description: Amount:	Turris TE-6650 v210729pmv1 \$49,730.00
	Amount:	\$102,200.00
	Component Description:	Materials and Mobilization
	Amount:	v210729pmv1 \$87,027.50
	Component Description:	Turris TE-6604
	Component Description: Amount:	in progress \$81,760.00
	Amount:	v210729pmv1 \$62,162.50
	Component Description:	Turris TE-6580
	Amount:	v210729pmv1 \$49,730.00
	Component Description:	Turris TE-6618
	Component Description: Amount:	down payment \$102,200.00
	Component Description: Amount:	completion \$40,880.00
candelabras and/or stacked antennas)	Component Description: Amount:	Mobilization \$40,880.00

Outside Professional Services

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justificatior
Outside Professional Services	\$59,171.26	\$72,979.26		\$24,754.26	
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	N/A	\$1,125.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	N/A	N/A
Project management of the transition	\$15,800.00	\$15,000.00	N/A	\$150.00	N/A

Prepare and or review reimbursement form	\$2,630.00	\$19,983.00	The Estimated Cost includes Form 399 submissions including ongoing Actual Cost invoice prep and submission, and amendments as needed.	\$19,983.00	N/A
Security Guard	\$3,496.26	\$3,496.26	N/A	\$3,496.26	N/A
Sub-total	\$59,171.26	\$72,979.26	N/A	\$24,754.26	N/A
Total for all systems	\$4,245,395.94	\$4,036,348.60	N/A	\$3,294,718.16	N/A

Actual Information Description	File Name	
RF Exposure Measurements	Information not provided.	
Prepare request for Special Temporary Authorization	Component Description: Amount:	DLR 242649 v210728pmv1 \$1,125.00
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Perform engineering study for new channel assignment and antenna development	Information not provided.	

Project management of the transition	Component Description: Amount:	KGA 980-05 v210611jgv1 \$150.00
Prepare and or review reimbursement form	Component Description: Amount:	KGA 980-204 v210629jgv1 \$64.00
	Component Description: Amount:	KGA 980-102 v210611jgv1 \$25.00
	Component Description: Amount:	KGA 980-118 v210611jgv1 \$175.00
	Component Description: Amount:	KGA 980-72 v210611jgv1 \$890.00
	Component Description: Amount:	KGA 980-148 v210611jgv1 \$60.00
	Component Description: Amount:	KGA 980-65 v210611jgv1 \$5,240.00
	Component Description: Amount:	KGA 980-54 v210611jgv1 \$2,180.00
	Component Description: Amount:	KGA 980-268 v211005jgv1 \$1,559.00

	Component Description: Amount:	KGA 980-269 v211008jgv1 \$107.00
	Component Description: Amount:	KGA 980-81 v210611jgv1 \$210.00
	Component Description: Amount:	KGA 980-24 v210611jgv1 \$50.00
	Component Description: Amount:	KGA 980-23 v210611jgv1 \$75.00
	Component Description: Amount:	KGA 980-246 v210908pmv1 \$3,931.00
	Component Description: Amount:	KGA 980-255 v210908pmv1 \$5,417.00
Security Guard	Component Description: Amount:	Allied Univ 8754490 v210803pmv1 \$3,496.26
		40,100.20

Other Expenses

Cost Information

	Predetermined	Estimated	Estimated Cost		Actual Co
Description	Cost Estimate	Cost	Justification	Actual Cost	Justificati
Other Expenses	\$215,025.06	\$213,035.06		\$138,116.16	
MVPD Notification of Channel Change	\$11,000.00	\$11,000.00	N/A	N/A	N/A
Build-out, Various	\$74,212.97	\$74,212.97	N/A	\$74,212.97	N/A
Equipment Storage	\$19,529.19	\$19,529.19	N/A	\$19,529.19	Totals an the same
Equipment Delivery and Handling Charges	\$25,000.00	\$25,000.00	N/A	\$11,306.10	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$29,792.90	\$29,792.90	See attached / uploaded PDF file titled, "D'Amato 09966 v200402pmv1".	\$29,792.90	N/A
Local Zoning	\$15,000.00	\$15,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	\$3,275.00	N/A
AM Pattern Disturbance Remedy	\$21,050.00	\$20,000.00	N/A	N/A	N/A
AM Pattern Disturbance Impact study	\$7,890.00	\$7,500.00	N/A	N/A	N/A

Develop and air announcement of upcoming channel change	\$0.00	\$0.00	N/A	N/A	N/A
Sub-total	\$215,025.06	\$213,035.06	N/A	\$138,116.16	N/A
Total for all systems	\$4,245,395.94	\$4,036,348.60	N/A	\$3,294,718.16	N/A

Actual Information Description	File Name	
MVPD Notification of Channel Change	Information not provided.	
Build-out, Various		
	Component Description: Amount:	D'Amato 09663 v210813pmv2 \$10,226.37
	Component Description: Amount:	D'Amato 09680 v210720pmv2 \$6,658.76
	Component Description: Amount:	D'Amato 10026 v210719pmv1 \$9,632.00
	Component Description: Amount:	D'Amato 10046 v210719pmv1 \$5,773.00
	Component Description: Amount:	D'Amato 09723 v210813pmv2 \$1,584.22

Component Description: Amount:	D'Amato 09666 v210730pmv1 \$2,195.48
Component Description: Amount:	D'Amato 09806 v210713pmv1 \$3,042.60
Component Description: Amount:	D'Amato 09756A v210730pmv1 \$5,867.53
Component Description: Amount:	D'Amato 09679 v210831pmv2 \$233.18
Component Description: Amount:	D'Amato 09837 v210730pmv1 \$3,205.38
Component Description: Amount:	D'Amato 09594 v210813pmv2 \$7,084.16
Component Description: Amount:	D'Amato 09758 v210730pmv1 \$865.68
Component Description: Amount:	D'Amato 09977 v210831pmv2 \$16,238.28
Component Description: Amount:	D'Amato 09836 v210811pmv2 \$25.40

	Component Description: Amount:	D'Amato 09834 v210730pmv1 \$1,580.93
Equipment Storage	Component Description: Amount:	D'Amato 09979 v210719pmv1 \$2,650.95
	Component Description: Amount:	D'Amato 09759 v210730pmv1 \$1,100.33
	Component Description: Amount:	D'Amato 09838 v210730pmv1 \$1,514.83
	Component Description: Amount:	D'Amato 09724 v210730pmv1 \$1,514.83
	Component Description: Amount:	D'Amato 10068 v210719pmv1 \$550.47
	Component Description: Amount:	D'Amato 09662 v210730pmv1 \$5,889.92
	Component Description: Amount:	D'Amato 10083 v210719pmv1 \$182.10
	Component Description: Amount:	D'Amato 09988 v210719pmv1 \$6,125.76

Equipment Delivery and Handling Charges	Component Description: Amount:	Die 563051 v200312pmv2 \$222.21
	Component Description:	Die 214031 v200313pmv1
	Amount: Component Description:	\$3,006.44 547023
	Amount:	v200305pmv2 \$754.81
	Component Description: Amount:	Die 225016 v210607pmv2 \$3,041.39
	Component Description: Amount:	Die 256021 v210806pmv1 \$556.71
	Component Description: Amount:	479031 v200305pmv2 \$2,189.00
	Component Description: Amount:	D'Amato 09680 v210713pmv1 N/A
	Component Description: Amount:	Die 235014 v210610pmv1 \$1,535.54

Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description: Amount:	CWPM 1571643 v210803pmv1b \$624.37
	Component Description: Amount:	D'Amato 09966 v200402pmv1 \$28,600.00
	Component Description: Amount:	CWPM 1487791 v210803pmv1 \$568.53
Local Zoning	Information not provided.	
DTV Medical Facility Notification	Component Description: Amount:	medical testing \$3,275.00
AM Pattern Disturbance Remedy	Information not provided.	
AM Pattern Disturbance Impact study	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$4,245,395.94	\$4,036,348.60	\$3,294,718.16	

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

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.	
		 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 above- named applicant for the Authorization(s) specified above.	Jeffrey C Gehman Engineering Associate 10/08/2021

Attachments