

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 25 ID:	455 Service: DT	V Call Sign:	WJZ-TV	Channel:
11 (High Vł	HF) File Number:	0000027143		
FRN: 002107	79769 Date Submitted:	04/23 /2019		

Applicant Name, Type, and Contact Information

Information

Applicant	Address	Phone	Email	Applicant Type
CBS TELEVISION LICENSES LLC Doing Business As: CBS TELEVISION LICENSES LLC	Daniel G. Ryson 1725 DeSales St. NW Suite 501 Washington, DC 20036 United States	+1 (202) 457-4074	dryson@cbs. 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
	Daniel G. Ryson Associate Director of Spectrum Management CBS	Daniel G. Ryson 1725 DeSales Street NW Suite 501 Washington, DC 20036 United States	+1 (202) 457- 4074	dryson@cbs. 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	Please see attached statement.

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

		Existing Transmitter Information			
Section	Question	Response			
Existing Transmitter Description	Type of change	Purchase New			
	Use	Auxiliary (Backup)			
	Description of Use	Alternate Main			
	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	Platinum PTCD20P2i			
	Year	2009			
	Туре	Solid State			
	Solid State Cooling	Air Cooled			
	Solid State Power Capacity	8.0 kW			
	Existing Transmitter Description	Existing Transmitter Type of change Description Use Description of Use Ownership Owner Site Is this transmitter currently shared with another station? Is this transmitter currently in operating condition? Existing Transmitter Manufacturer Model Year Type Solid State Cooling			

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	VAXTE-12	
		Transmitter Type	Solid State	
		Solid State Cooling	Air Cooled	
		Solid State Power capacity	9.6 kW	
		Justification for New Transmitter	GatesAir /Harris has stipulated that it cannot and will not attempt to retune any Platinum Series transmitters. Non- Upgraded transmitter is VAXTE-8 (Attachment 20). Proposed transmitter is VAXTE- 12 (Attachment 22).	

Other Transmitter Costs Auxiliary Transmitter Section

Question

Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	70.0 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

Auxiliary Transmitter	Other Transmitter Cost Not Listed		
	Name	Description	
	Transmitter Shipping	Transmitter Shipping	
	State Sales Tax	6% Maryland State Sales Tax on Transmitter Hardware and Shipping	

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	Platinum PTCD20P2i	
		Year	2009	
		Туре	Solid State	
		Solid State Cooling	Air Cooled	
		Solid State Power Capacity	8.0 kW	

Existing Transmitter Information

Primary	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Primary (Main)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	Yes	
		Manufacturer		
		Model	VAXTE-12	
		Transmitter Type	Solid State	
		Solid State Cooling	Air Cooled	
		Solid State Power capacity	9.6 kW	
		Justification for New Transmitter	GatesAir /Harris has stipulated that it cannot and will not attempt to retune any Platinum Series transmitters. Non- Upgraded transmitter is VAXTE-8 (Attachment 2A). Proposed transmitter is VAXTE-12 (Attachment 21).	

Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	70.0 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	Description	
	Advanced Site Survey	Site survey will determine actual site conditions and determine the materials and components required for system installation /integration of the customers site with the GatesAir Equipment. Please see Attachment 29.	

Transmitter Shipping	Transmitter Shipping
State Sales Tax	6% Maryland State Sales Tax on Transmitter Hardware and Shipping

Antennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

AntennaSectionQuestionResponExisting Antenna DescriptionType of changePurcha NewAntenna UseAntenna UseAuxilia (Backu AntenDescription of UseBacku AntenOwnershipOwnerOwnerN/ASiteN/AIs the existing antenna shared with another station or stations?No	ase
Description New Antenna Use Auxilia Conception of Use Backur Ownership Owner Owner N/A Site N/A Is the existing antenna shared with another station or stations? No	
Image: Constraint of Use(Backur Backur AntenDescription of UseBackur AntenOwnershipOwnerOwnerN/ASiteN/AIs the existing antenna shared with another station or stations?No	
Anten Ownership Owner Owner N/A Site N/A Is the existing antenna shared with another station or stations? No	-
OwnerN/ASiteN/AIs the existing antenna shared with another station or stations?No	
Site N/A Is the existing antenna shared with another station or stations? No	ł
Is the existing antenna shared with another No station or stations?	
station or stations?	
Is the existing antenna directional? No	
Is antenna in operating condition? Yes	
Is antenna located on or in close proximity No to an antenna farm?	
Existing Antenna Class Full Po	ower
Manufacturer and Type Mounting Top M	ount
Antenna position in stack Middle	!
Polarization Horizo	ntal
Type Slotted Coaxia	
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)4.5 kW	1

Manufacturer	
Model	TW-9B13R
Year	1999

Auxiliary	New Antenna Costs		
Antenna	Section	Question	Response
	New Antenna Description	Use	Auxiliary (Backup)
		Description of Use	Backup Antenna
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Ownership	Owned
		Owner	N/A
		Is antenna shared?	No
		Is antenna directional?	No
		Will antenna be located on or in close proximity to an antenna farm?	No
	New Antenna	Class	Full Power
	Manufacturer and Types	Mounting	Side Mount
		Antenna position in stack	Not in Stack
		Polarization	Elliptical
		Туре	Broadband Slot
		Number of Stations Supported	1
		Number of Panels/Bays	4
		Lower Limit	167.00 MHz
		Upper Limit	213.00 MHz
		Design power capacity in use	100.0 %
		Other Antenna Type	N/A
		ERP: (Effective Radiated Power)	7.5 kW
		Manufacturer	

Model	TLS-V4BB
Year	2018
Justification for New Antenna	The existing Aux antenna is CH 13 specific and part of a stack that must be removed to install WMAR's new CH 27 antenna

Auxiliary Other Antenna Costs

Antenna

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	3 1/8 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

Auxiliary
AntennaOther Antenna Cost Not ListedInformation not provided.

Primary	Existing Antenna Inforn	ation	
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)	33.8 kW

Manufacturer	
Model	THV-9A13 /VP-R C150SP
Year	2009

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	Top Mount	
		Antenna position in stack	Not in Stack	
		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)	30.0 kW	
		Manufacturer		
			1	

Model	THV- 9A11 /VP-R O4
Year	2018
Justification for New Antenna	Please see attached statement and Attachment 23.

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?	No	
		Broadband or Single Channel?	N/A	
		Feed Line Size	N/A	
	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?	No	
	Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes	

Primary Other Antenna Cost Not Listed

Antenna Information not provided.

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

Existing Transmission Line Primary Existing Transmission

smissio	n Line Section	Question	Response
	Existing Transmission Line Description	Type of change	Utilize Existing
		Use	Primary (Main)
		Description of Use	N/A
		Ownership	Owned
		Owner	N/A
		Site	N/A
Existing Transmission Line Manufacturer and Type		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	Yes
	Line Manufacturer and	Manufacturer	Dielectric
		Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	Broadband
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	1198 feet per run

Other Transmission Line Expenses Not Listed Primary Transmission Line Description

A	Additional Rigid Line	50 Feet of 6 1/8-Inch Rigid Line

Auxiliary Existing Transmission Line Transmission Line

Transmissior	Section	Question	Response
	Existing Transmission Line Description	Type of change	Utilize Existing
		Use	Auxiliary (Backup)
		Description of Use	When main not available
		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	Dielectric
		Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	1176 feet per run

Auxiliary Other Transmission Line Expenses Not Listed Transmission

Additional Rigid Line	50 Feet of 3 1/8-Inch Rigid Line

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	Existing Tower			
Tower	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?	Yes	
	Structure Registration	ASR Number	1035558	
	Coordinates (NAD83 (North American Datum	Latitude (NAD83)	39° 20' 05.0" N-	
	of 1983))	Longitude (NAD83)	076° 39' 02.0" W-	
		Overall Structure Height	997.36 feet	
		Support Structure Height	889.10 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	318.24 feet	

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	Television Tower Inc
Date Constructed	08/26/1964

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
65696	WBAL-TV	DTV
65693	WIYY	FM
74196	WWMX	FM
1916	WJZ-FM	FM
28637	WLIF	FM
59442	WMAR-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 tower with candelabra
Tower Reinforcements	Please select whether tower reinforcements are needed:	Minor Reinforcements needed

Tower Rigging Co	osts
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Section	Question	Response
Tower Rigging Costs	Complex Tower	Candelabra
Helicopter Services Required	Are helicopter services required?	No

Other Tower Expenses Not Listed

Primary Tower

Primary Tower

Name	Description

Name	Description
Candelabra Mapping	Field mapping of candelabra to be used in Structural Analysis.
Antenna Pedestal and Mount	Main Antenna Pedestal and Interim Antenna Mount (see Attachment 9).

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	250
		Explanation	Lack of in- house resources.
	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	No
		Quantity	N/A
		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 N	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	Yes
	Prepare or Review FCC Form 399 for Reimbursement	No
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	No
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Other Professional Services Expenses Not Listed Professional Services roostsided.

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	Yes
		FCC License to Cover Application	Yes
		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?	No
		Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	No
		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).

	Predetermined	Estimated	Estimated Cost		Actual Cost
Description Primary Transmitter VAXTE-12	Cost Estimate \$365,673.88	Cost \$253,820.92	Justification	Actual Cost \$88,814.57	Justification
State Sales Tax	\$11,861.66	\$11,861.66	6% Sales Tax on Attachment 2A Items A-D and estimated transmitter shipping.	N/A	N/A
Transmitter Shipping	\$4,500.00	\$4,500.00	Estimated Transmitter Shipping	N/A	N/A
Advanced Site Survey	\$15,992.22	\$15,992.22	Per Quote from GatesAir. Please see Attachment 29.	\$15,992.22	N/A
High VHF - Air Cooled Solid State Transmitter 6.5 . 12.5 kW	\$331,500.00	\$218,467.04	Please see Attachment 2A. Includes costs for installation, shipping, and old transmitter disconnection. Shipping and Sales Tax Listed Separately.	\$72,822.35	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$1,820.00	\$3,000.00	Please see attached statement.	N/A	N/A

Auxiliary Transmitter VAXTE-12	\$348,254.67	\$212,618.48		\$64,894.60	
2" Rigid Conduit and Wiring (Cost per foot)	\$1,820.00	\$3,000.00	Please see attached statement.	N/A	N/A
High VHF - Air Cooled Solid State Transmitter 6.5 . 12.5 kW	\$331,500.00	\$194,683.81	Please see Attachment 20. Includes costs for installation, shipping, and old transmitter disconnection. Shipping and Sales Tax Listed Separately.	\$64,894.60	N/A
Transmitter Shipping	\$4,500.00	\$4,500.00	Estimated Transmitter Shipping	N/A	N/A
State Sales Tax	\$10,434.67	\$10,434.67	6% Sales Tax on Attachment 20 Items A-D and estimated transmitter shipping.	N/A	N/A
Sub-total	\$713,928.55	\$466,439.40	N/A	\$153,709.17	N/A
Total for all systems	\$1,963,001.55	\$1,576,089.40	N/A	\$434,249.19	N/A

Components

Actual Information Description	File Name
State Sales Tax	Information not provided.
Transmitter Shipping	Information not provided.

	Component Description:	Transmitter Site Survey. See quote provided in Attachment 29.
	Amount:	\$15,992.22
High VHF - Air Cooled		
Solid State Transmitter 6.5	Component Description:	Primary
. 12.5 kW		Transmitter Down
		Payment. Also
		Includes RF
		Accessories,
		Electrical,
		Installation, and
		Removal. Seeking
		reimbursement
		cost for non-
		upgraded VAXTE-
		Transmitter not
		upgraded VAXTE-
		12 Transmitter. Both shown in
		Attachment 24B.
	Amount:	\$72,822.35
	Amount.	ψ <i>ι</i> 2,022.35
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	

High VHF - Air Cooled			
Solid State Transmitter 6.5 . 12.5 kW	Component Description:	Interim Transmitter	
		Down Payment.	
		Also Includes RF	
		Accessories,	
		Electrical,	
		Installation, and	
		Removal. Seeking	
		reimbursement	
		cost for non-	
		upgraded VAXTE-8	
		Transmitter not	
		upgraded VAXTE-	
		12 Transmitter.	
		Both shown in	
		Attachment 25A.	
	Amount:	\$64,894.60	
Transmitter Shipping	Information not provided.		
State Sales Tax	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 Primary Antenna THV- 9A11 /VP-R O4	Predetermined Cost Estimate \$347,758.00	Estimated Cost \$347,428.00	Estimated Cost Justification	Actual Cost \$156,342.60	Actual Cost Justification
High VHF - High Power Top Mount One Station elliptically or circularly polarized	\$341,028.00	\$341,028.00	See Attachment 23. 3/21 /2019 Note: Sweep Test listed separately so deducted from cost shown here.	\$153,462.60	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,880.00	N/A
Auxiliary Antenna TLS-V4BB	\$98,750.00	\$96,810.00		\$54,650.52	
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

Elbow complex, broadband, at antenna input, per 3 1/8. feedline (if needed)	\$9,340.00	\$8,880.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
High VHF - High Power Side Mount One Station elliptically or circularly polarized	\$59,530.00	\$59,530.00	N/A	\$54,650.52	N/A
Sub-total	\$446,508.00	\$444,238.00	N/A	\$210,993.12	N/A
Total for all systems	\$1,963,001.55	\$1,576,089.40	N/A	\$434,249.19	N/A

Components

Actual Information Description	File Name	
High VHF - High Power Top Mount One Station elliptically or circularly polarized	Component Description:	Down Payment for Primary Antenna, Elbows, Line. See Attachment 23 for
	Amount:	quote. \$153,462.60

Sweep test of existing antenna	Component Description:	Down Payment for Sweep Test. See Attachment
	Amount:	23 for quote. \$2,880.00
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Elbow complex, broadband, at antenna input, per 3 1/8. feedline (if needed)	Information not provided.	
Sweep test of existing antenna	Information not provided.	
High VHF - High Power Side Mount One Station	Component Description:	Interim Antenna
elliptically or circularly	Component Description.	45% Down
polarized		payment
	Amount:	\$27,325.26
	Component Description:	Interim Antenna
		45% payment
		prior to shipmen

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
Primary Transmission Line	\$11,050.00	\$11,050.00		\$0.00	
Additional Rigid Line	\$11,050.00	\$11,050.00	N/A	N/A	N/A
Auxiliary Transmission Line	\$5,700.00	\$5,700.00		\$0.00	
Additional Rigid Line	\$5,700.00	\$5,700.00	N/A	N/A	N/A
Sub-total	\$16,750.00	\$16,750.00	N/A	\$0.00	N/A
Total for all systems	\$1,963,001.55	\$1,576,089.40	N/A	\$434,249.19	N/A

Components

Information not provided.

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 Primary Tower GTOWER	Predetermined Cost Estimate \$678,700.00	Estimated Cost \$553,267.00	Estimated Cost Justification	Actual Cost \$66,471.90	Actual Cost Justification
Structural engineering tower load study for a documented tower with candelabra	\$20,000.00	\$23,567.00	Estimated cost includes WJZ-TV's pro rata share shown in Attachments 7, 26, 37, 38, and 39.	\$23,100.00	Changes to primary antenna pedestal heights and auxiliary (interim) antenna mounting configuration required additional analysis and reinforcement designs.
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$400,000.00	It is believed that 100% of the Widelity Cost Catalog estimate is justifiable. Please see Statement.	\$41,371.90	N/A

Minor tower reinforcement /modifications	\$158,000.00	\$50,000.00	1/3 of Widelity Cost Catalog estimate, WJZ-TV's pro-rata amount after sharing expenses with two other repacking DTV stations.	N/A	N/A
Antenna Pedestal and Mount	\$77,700.00	\$77,700.00	Main antenna pedestal (required to maintain overall FAA /FCC tower height) and auxiliary antenna mount. See Attachment 9.	N/A	N/A
Candelabra Mapping	\$2,000.00	\$2,000.00	Please see Attachment 6. This is the WJZ-TV pro-rata anticipated cost after costs are shared with two other repacking DTV stations.	\$2,000.00	N/A
Sub-total	\$678,700.00	\$553,267.00	N/A	\$66,471.90	N/A
Total for all systems	\$1,963,001.55	\$1,576,089.40	N/A	\$434,249.19	N/A

Components

Description	File Name	
Structural engineering ower load study for a		
documented tower with candelabra	Component Description:	Update structural design to incorporate revised pedestal heights. This is WBZ-TV's cost only. Other stations billed separately.
	Amount:	\$2,000.00
	Component Description:	Design Aux Antenna Mounts and Structural Modifications. See Attachment 7 for quote. This invoice (along with Attachment 32) reflects only the WJZ-TV portion. Other tower tenants were billed separately.
	Amount:	\$9,200.00
	Component Description:	Structural Analysis of Final Loading Scenario. See quote Attachment 39.
	Amount:	\$3,000.00
	Component Description:	Structural Analysis of WJZ-TV Primary tower. This invoice reflects only the WJZ-TV portion. Other tower tenants were billed separately.
	Amount:	\$4,000.00

	Component Description:	Structural Study - Evaluates Existing (Pretransition) Antennas Plus New Auxiliary /Interim Antennas. Cost is WJZ-TV's Portion Only. \$1,200.00
	Component Description:	Tower structural reanalysis following change in antenna specifications. This cost is 100% attributable to WJZ- TV and not shared with other stations. See also Attachment 26. \$3,700.00
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Component Description: Amount:	Down payment for Aux/Interim Antenna Installation. See Quote and Invoice in Attachment 28A. \$39,851.00

	Component Description:	Participate in
		rigging logistics
		land use
		agreement review,
		permitting
		analysis, and
		aerial lift support.
		This amount is
		WJZ-TV's
		expense. Other
		stations were billed
		separately.
	Amount:	\$1,000.00
		¢.,
	Component Description:	Travel Expenses -
		Rigging Logistics
		Meeting. This
		amount is WJZ-
		TV's expense.
		Other stations
		were billed
		separately.
	Amount:	\$220.90
	Component Description:	Participate in
		rigging logistics
		land use
		agreement review,
		permitting
		analysis, and
		aerial lift support.
		This amount is
		WJZ-TV's
		expense. Other
		stations were billed
	•	separately.
	Amount:	\$300.00
Minor tower reinforcement	Information not provided.	
/modifications		
Antenna Pedestal and	Information not provided.	
Mount		
	1	

Candelabra Mapping		
	Component Description:	Structural Mapping
		of WJZ-TV Primary
		tower. This invoice
		reflects only the
		WJZ-TV portion.
		Other tower
		tenants were billed
		separately.
	Amount:	\$2,000.00

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	\$62,120.00	\$57,000.00		\$3,075.00	
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	N/A	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
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	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
Project management of the transition	\$39,500.00	\$37,500.00	N/A	N/A	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 development	\$7,360.00	\$5,000.00	N/A	\$1,700.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$1,375.00	N/A
Sub-total	\$62,120.00	\$57,000.00	N/A	\$3,075.00	N/A
Total for all systems	\$1,963,001.55	\$1,576,089.40	N/A	\$434,249.19	N/A

Components

Actual Information Description	File Name	
Attorney Fees - Negotiation of lease and other matters for shared locations	Information not provided.	
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.	
Project management of the transition	Information not provided.	
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:	Preliminary interference study to determine appropriate ERP at two elevations.
	Amount:	\$950.00
	Component Description:	Repeat channel interference study using revised version of FCC OET TVStudy Software.
	Amount:	\$750.00

Prepare engineering section of FCC Form 2100 (main),	Component Description:	Prepare
Construction Permit		Engineering
Application		Section of 90-day
		FCC Application
		for Construction
		Permit.
	Amount:	\$1,375.00

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	\$44,995.00	\$38,395.00		\$0.00	
MVPD Notification of Channel Change	\$1,000.00	\$1,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$15,000.00	\$15,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$6,000.00	\$6,000.00	N/A	N/A	N/A
Non- zoning permits	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Local Zoning	\$5,000.00	\$5,000.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A

FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$5,000.00	N/A	N/A	N/A
Sub-total	\$44,995.00	\$38,395.00	N/A	\$0.00	N/A
Total for all systems	\$1,963,001.55	\$1,576,089.40	N/A	\$434,249.19	N/A

Components

Information not provided.

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$1,963,001.55	\$1,576,089.40	\$434,249.19	

Reimbursem	enrestanus	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.	
		 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. 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).
- 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.	Andrew J Siegel Assistant Secretary
	04/23/2019

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).	
		 The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 	
		2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.	
		3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster **Relocation Fund are** necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 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.

	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 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 au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ied above.	Andrew J Siegel Assistant Secretary
		04/23/2019

Attachments