



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **71329** | Service: **DTV** | Call **WDBJ** | Channel: **30 (UHF)** |
ID: | Sign:
File **0000028727**
Number:
FRN: **0018223693** | Date **07/02**
Submitted: **/2020**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC Doing Business As: WDBJ	WDBJ 4370 PEACHTREE ROAD, NE ATLANTA, GA 30319 United States	+1 (404) 504-9828	allfccfms@gray. tv	Limited Liability Company

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Samuel Hariton <i>Widely</i>	Samuel Hariton 4031 University Dr Suite 100 Fairfax, VA 22030 United States	+1 (339) 222-8107	sam.hariton@widely.com

**Broadcaster
Information
and
Transition
Plan**

Question		Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.		No
Briefly describe transition plan		WDBJ will be replacing the existing main transmitter, antenna, and transmission line.

Transmitters

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

**Primary
Transmitter**

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	Sigma
	Year	2000
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	46 kW

**Primary
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	HPTV-PRLX-U32
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	55 kW
	Justification for New Transmitter	Harris Sigma series IOT transmitters cannot be retuned, transmitter must be replaced.

**Primary
Transmitter**

Other Transmitter Costs

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	Switch Support Frame and other electrical equipment for primary transmitter
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	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 leasehold improvement?	Yes
	Size	400.0 square feet
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 Transmitter

Other Transmitter Cost Not Listed

Name	Description
Ice Bridge	Ice Bridge
Construction	Existing building must be modified for new transmitter.
Interim Antenna RF Switch	Interim Antenna RF Switch

Antennas

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

**Primary
Antenna**

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	605.0 kW

Manufacturer	
Model	TFU-18GTH-R04
Year	1999

Primary
Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW
	Manufacturer	

Model	TFU-29JTH /VP-R 04
Year	2017
Justification for New Antenna	Repack will move WDBJ to channel 30 so the existing channel 18 antenna needs replaced.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	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?	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
Antenna**

Other Antenna Cost Not Listed

Name	Description
Top Plate Adapter	Adapter for top of tower to match bolts on antenna

**Interim
Antenna**

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	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
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels/Bays	8
	Lower Limit	470.00 MHz
	Upper Limit	700.00 MHz
	Design power capacity in use	38.5 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	100.0 kW
	Manufacturer	
	Model	SBB8C170
	Year	2019

	Justification for New Antenna	Interim antenna required in order to remain on air during repack period. Antenna needed due to delays in tower work caused by repack
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Interim Antenna

Other Antenna Costs

Section	Question	Response
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 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

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary
Transmission Line

Existing Transmission Line

Section	Question	Response
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	
	Type	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	230 feet per run

Primary **New Transmission Line**
Transmission 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
	Type	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	230 feet per run
	Justification for New Transmission Line	Utilizing existing antenna during build-out of new transmitter /antenna system. New transmission line needed.

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

Information not provided.

Interim **New Transmission Line**
Transmission Line **Section**

	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Flexible Air
	Diameter	4 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	200 feet per run
	Justification for New Transmission Line	Interim line required for interim antenna. Antenna and line needed due to delays on tower work

Interim **Other Transmission Line Expenses Not Listed**
Transmission Line **Information not provided.**

Tower Equipment And Rigging Costs

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

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	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	1024378
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	37° 11' 42.0" N-
	Longitude (NAD83)	080° 09' 22.0" W-
	Overall Structure Height	148.62 feet
	Support Structure Height	77.10 feet
	Ground Elevation Above Mean Sea Level (AMSL)	3759.80 feet

	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	Gray Television Group, Inc.
	Date Constructed	06/01/1965

Primary Tower

Tower Modification Costs

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

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	No

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

Primary Tower

Add Tower

Section	Question	Response
Existing Tower Description	Type of change	Move Equipment
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	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	1024378
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	37° 11' 42.0" N-
	Longitude (NAD83)	080° 09' 22.0" W-
	Overall Structure Height	148.62 feet
	Support Structure Height	77.10 feet
	Ground Elevation Above Mean Sea Level (AMSL)	3759.80 feet
	Structure Type	TOWER - Free Standing or Guyed Structure

	Tower Owner	Gray Television Group, Inc.
	Date Constructed	06/01/1965

**Primary
Tower**

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	No

**Primary
Tower**

Other Tower Expenses Not Listed

Name	Description
Tower Structural Analysis	Structural Analysis required to determine that existing tower will not support proposed antenna and line

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Construct New
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	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	1024378
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	37° 11' 42.0" N-
	Longitude (NAD83)	080° 09' 22.0" W-
	Overall Structure Height	148.62 feet
	Support Structure Height	77.10 feet
	Ground Elevation Above Mean Sea Level (AMSL)	3759.80 feet
	Structure Type	TOWER - Free Standing or Guyed Structure

Tower Owner	Gray Television Group, Inc.
Date Constructed	06/01/1965

Primary
Tower

Tower Construction Costs

Section	Question	Response
Construct New Tower	Use	Primary (Main)
	Description of Use	N/A
	Is this a request for upgraded equipment?	No
	Height	92.00 feet
	Justification for New Tower	Existing tower failed structural analysis. It was determined to be more cost effective to construct a new tower rather than reinforce the existing.

Primary
Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	No

Primary
Tower

Other Tower Expenses Not Listed

Information not provided.

**Outside
Professional**

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	900
	Explanation	Strategic Support
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	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 Services	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes

	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	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	No
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Attorney Fees - Other Matters	Legal Services

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	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	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?	No
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

**Other
Expenses**

Other Expenses Not Listed

Name	Description
Antenna Structure Registration Announcement	Antenna structure registration announcement in local newspaper

Cost Information

Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter HPTV-PRLX-U32	\$2,165,512.84	\$1,842,059.91		\$1,689,611.89	
Construction	<i>\$5,672.84</i>	\$5,672.84	N/A	\$5,672.84	N/A
Interim Antenna RF Switch	<i>\$43,150.00</i>	\$43,150.00	Please see WDBJ Interim Antenna - RF Switch Revision Justification Cover Letter	\$43,150.00	N/A
Ice Bridge	<i>\$7,940.00</i>	\$7,940.00	Please see WDBJ Robertson Construction Ice Bridge Quote	\$7,940.00	N/A
Other -- Building Addition Size: 400.0	<i>\$319,503.22</i>	\$319,503.22	Per Blake Construction Quote	\$212,186.00	N/A
Other Electrical Service: Switch Support Frame and other electrical equipment for primary transmitter	<i>\$1,246.78</i>	\$1,246.78	see Estimated Cost Justification WDBJ-110-New 1st Primary Transmitter-Other Electrical Expenses V0	\$1,246.78	N/A

UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	\$1,788,000.00	\$1,464,547.07	Estimated Cost Justification WDBJ-110- New 1st Primary Transmitter v1	\$1,419,416.27	N/A
Sub-total	\$2,165,512.84	\$1,842,059.91	N/A	\$1,689,611.89	N/A
Total for all systems	\$3,560,245.10	\$3,090,142.78	N/A	\$2,494,646.51	N/A

Components

Actual Information	
Description	File Name
Construction	<p>Component Description: Transmitter building project: Complete interior and exterior measurements of existing Facility. These docs will be used for Permits needed for renovations to construct New Transmitter Room.</p> <p>Amount: \$3,366.86</p> <p>Component Description: Transmitter building project.</p> <p>Amount: \$2,305.98</p>
Interim Antenna RF Switch	<p>Component Description: Motorized Switch Antenna for Interim Antenna</p> <p>Amount: \$43,150.00</p>

Ice Bridge	<table> <tr> <td data-bbox="703 174 1011 210">Component Description:</td><td data-bbox="1145 174 1350 246">Candler's Mtn Ice Bridge</td></tr> <tr> <td data-bbox="703 255 813 291">Amount:</td><td data-bbox="1145 255 1262 291">\$7,940.00</td></tr> </table>	Component Description:	Candler's Mtn Ice Bridge	Amount:	\$7,940.00																				
Component Description:	Candler's Mtn Ice Bridge																								
Amount:	\$7,940.00																								
Other -- Building Addition Size: 400.0	<table> <tr> <td data-bbox="703 425 1011 461">Component Description:</td><td data-bbox="1145 425 1374 542">WZBJ Construction quote / Task completed 07/15/19</td></tr> <tr> <td data-bbox="703 551 813 586">Amount:</td><td data-bbox="1145 551 1262 586">\$2,950.00</td></tr> <tr> <td data-bbox="703 685 1011 721">Component Description:</td><td data-bbox="1145 685 1374 837">WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter</td></tr> <tr> <td data-bbox="703 846 813 882">Amount:</td><td data-bbox="1145 846 1276 882">\$63,188.30</td></tr> <tr> <td data-bbox="703 981 1011 1016">Component Description:</td><td data-bbox="1145 981 1347 1016">Install Chain Link</td></tr> <tr> <td data-bbox="703 1025 813 1061">Amount:</td><td data-bbox="1145 1025 1262 1061">\$3,200.00</td></tr> <tr> <td data-bbox="703 1160 1011 1196">Component Description:</td><td data-bbox="1145 1160 1374 1312">WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter</td></tr> <tr> <td data-bbox="703 1321 813 1357">Amount:</td><td data-bbox="1145 1321 1276 1357">\$72,716.80</td></tr> <tr> <td data-bbox="703 1456 1011 1491">Component Description:</td><td data-bbox="1145 1456 1374 1608">WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter</td></tr> <tr> <td data-bbox="703 1617 813 1653">Amount:</td><td data-bbox="1145 1617 1276 1653">\$70,130.90</td></tr> <tr> <td data-bbox="703 1751 1011 1787">Component Description:</td><td data-bbox="1145 1751 1374 1904">WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter</td></tr> <tr> <td data-bbox="703 1912 813 1948">Amount:</td><td data-bbox="1145 1912 1276 1948">\$89,252.50</td></tr> </table>	Component Description:	WZBJ Construction quote / Task completed 07/15/19	Amount:	\$2,950.00	Component Description:	WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter	Amount:	\$63,188.30	Component Description:	Install Chain Link	Amount:	\$3,200.00	Component Description:	WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter	Amount:	\$72,716.80	Component Description:	WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter	Amount:	\$70,130.90	Component Description:	WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter	Amount:	\$89,252.50
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Component Description:	WDBJ-110-Transmitter Bldg Addition 1st New Primary Transmitter																								
Amount:	\$89,252.50																								

Other Electrical Service:
Switch Support Frame and
other electrical equipment
for primary transmitter

Component Description:	SW-24P GIG Netgear
Amount:	\$297.00
Component Description:	SHIP&HANDLE SWITCH SUPPORT FRAME MEGA
Amount:	\$249.78
Component Description:	Switch Support Frame. Mega Switch
Amount:	\$700.00

UHF - Liquid Cooled Solid
State Transmitter 52 - 61
kW

Component Description:	Credit Memo
Amount:	(\$1,980.80)
Component Description:	ESE ES 110 GPS Based 10 MHz Frequency
Amount:	\$1,980.80
Component Description:	SYSTEM, WDBJ U32 D30 INSTALLATION 29- 50KW (TWO CABINETS)
Amount:	\$761,016.30
Component Description:	This invoice has been moved to category Interim Antenna RF Switch
Amount:	N/A
Component Description:	System, WDBJ U32 D30, Installation
Amount:	\$138,366.60
Component Description:	Electrical Work- WDBJ7 Tower Project Lynchburg
Amount:	\$35,000.00
Component Description:	1st Primary Transmitter System
Amount:	\$484,283.10
Component Description:	Freight Expensed - Prepaid
Amount:	\$750.27

Cost Information

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna SBB8C170	\$96,130.00	\$52,158.40		\$6,400.00	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Please see DTVPros Invoice 356	\$6,400.00	N/A
UHF " Broadband Panel, Side Mount Auxiliary /Interim, 100 horizontally polarized	<i>\$0.00</i>	\$0.00	Do not use - category added in error by LMS	N/A	N/A
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	\$89,400.00	\$45,758.40	Please see attached DTVPros Quote JEHQ1663-01	N/A	N/A
Primary Antenna TFU-29JTH /VP-R 04	\$364,130.00	\$303,739.00		\$226,896.72	
Top Plate Adapter	<i>\$54,000.00</i>	\$54,000.00	DTVPros quote JEHQ1247-04	N/A	N/A

Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	\$13,900.00	\$15,264.00	DTVPros quote JEHQ1247-04	\$15,264.00	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$228,075.00	DTVPros quote JEHQ1247-04	\$205,232.72	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00	N/A
Sub-total	\$460,260.00	\$355,897.40	N/A	\$233,296.72	N/A
Total for all systems	\$3,560,245.10	\$3,090,142.78	N/A	\$2,494,646.51	N/A

Components

Actual Information	
Description	File Name
Sweep test of existing antenna	Component Description: Other Sweep Amount: \$6,400.00
UHF " Broadband Panel, Side Mount Auxiliary/Interim, 100 horizontally polarized	Information not provided.
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	Information not provided.

Top Plate Adapter	Information not provided.	
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	Component Description:	WDBJ-210-Elbow complex New
	Amount:	Primary Antenna \$3,052.80
	Component Description:	WDBJ-210-Elbow complex New
	Amount:	Primary Antenna \$3,816.00
	Component Description:	WDBJ-210-Elbow complex New
	Amount:	Primary Antenna \$4,579.20
	Component Description:	WDBJ-210-Elbow complex New
	Amount:	Primary Antenna \$3,816.00

UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Component Description:	UHF High Power Top Mount
	Amount:	\$43,787.12
	Component Description:	UHF-HIGH POWER TOP MOUNT (200-1000KW)
	Amount:	\$60,542.10
	Component Description:	UHF-High power top mount (200-1000KW) TV ANT TFU 29JTH-VP-R 04
	Amount:	\$50,451.75
	Component Description:	UHF-HIGH POWER TOP MOUNT (200-1000KW)
	Amount:	\$50,451.75

Sweep test of existing
antenna

Component Description:

WDBJ-210-
Sweep test New
Primary Antenna

Amount:

\$1,280.00

Component Description:

WDBJ-210-
Sweep test New
Primary Antenna

Amount:

\$1,600.00

Component Description:

WDBJ-210-
Sweep test New
Primary Antenna

Amount:

\$1,920.00

Component Description:

WDBJ-210-
Sweep test New
Primary Antenna

Amount:

\$1,600.00

Cost
Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$14,800.00	\$11,531.53		\$0.00	
Flexible Air Transmission Line - dielectric, 4"	\$14,800.00	\$11,531.53	Please see attached DTVPros Quote JEHQ1663-01	N/A	N/A
Primary Transmission Line	\$66,700.00	\$109,842.30		\$109,066.27	
Rigid Transmission Line - copper, 7 3/16"	\$66,700.00	\$109,842.30	see Estimated Cost Justification WDBJ-310-New Primary Transmission Line v0	\$109,066.27	N/A
Sub-total	\$81,500.00	\$121,373.83	N/A	\$109,066.27	N/A
Total for all systems	\$3,560,245.10	\$3,090,142.78	N/A	\$2,494,646.51	N/A

Components

Actual Information	
Description	File Name
Flexible Air Transmission Line - dielectric, 4"	Information not provided.

Rigid Transmission Line -
copper, 7 3/16"

Component Description: R62267 7" Hanger
Horizontal
Amount: \$3,709.12

Component Description: Elbow 350-Elbow
3-50 EIA 6x6 CU
Amount: \$1,090.03

Component Description: WDBJ-310-New
Primary
Transmission Line
Amount: \$19,893.09

Component Description: WDBJ-310-New
Primary
Transmission Line
Amount: \$39,990.30

Component Description: 45 Degree 6-50
Elbow
Amount: \$11,228.59

Component Description: WDBJ-310-New
Primary
Transmission Line
Amount: \$16,577.57

Component Description: WDBJ-310-New
Primary
Transmission Line
Amount: \$16,577.57

Cost Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$91,650.00	\$48,586.88		\$35,158.00	
Short Tower (less than 500')	\$84,200.00	\$41,136.88	Per Blake Construction Quote - Demo 3 Legged Tower	\$33,250.00	N/A
Tower Structural Analysis	<i>\$7,450.00</i>	\$7,450.00	Please see attached All State Tower Proposal ZA073816	\$1,908.00	N/A
Primary Tower TOWER	\$0.00	\$0.00		\$0.00	
Primary Tower TOWER	\$0.00	\$0.00		\$0.00	
Primary Tower	\$543,077.78	\$533,477.78		\$299,899.20	
Short Tower (less than 500')	\$84,200.00	\$84,200.00	N/A	\$23,883.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$3,000.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$3,000.00	N/A

New tower	\$446,277.78	\$446,277.78	Per Blake Construction Quote	\$273,016.20	N/A
Sub-total	\$634,727.78	\$582,064.66	N/A	\$335,057.20	N/A
Total for all systems	\$3,560,245.10	\$3,090,142.78	N/A	\$2,494,646.51	N/A

Components

Actual Information	
Description	File Name
Short Tower (less than 500')	<p>Component Description: General Conditions</p> <p>Amount: \$33,250.00</p>
Tower Structural Analysis	<p>Component Description: Job Completion - Roanoke, VA</p> <p>Amount: \$1,908.00</p>
Short Tower (less than 500')	<p>Component Description: WDBJ-480-Short Tower (less than 500')</p> <p>Amount: \$23,883.00</p>
Structural engineering tower load study for well documented tower	<p>Component Description: AST to perform analysis on (1) 60' SS Tower utilizing VA PE</p> <p>Amount: \$3,000.00</p>

New tower

Component Description: Transmitter and
Tower on Poor
MT
Amount: \$97,628.65

Component Description: Transmitter and
Tower
Amount: \$62,442.55

Component Description: WDBJ-480-New
Tower
Amount: \$112,575.00

Component Description: Transmitter and
Tower on Poor
MT
Amount: \$144,677.40

Component Description: WDBJ-480-
Construct New
Tower
Amount: \$370.00

Cost Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$184,620.00	\$162,360.00		\$119,097.45	
Attorney Fees - Other Matters	<i>\$610.00</i>	\$610.00	see Estimated Cost Justification WDBJ-550-Attorney - Other Matters v0	\$610.00	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$2,000.00	N/A	N/A	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$1,000.00	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	\$83.00	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$1,722.50	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$350.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$2,062.50	N/A
Project management of the transition	\$142,200.00	\$135,000.00	N/A	\$107,832.45	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	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	\$962.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$5,475.00	N/A

Sub-total	\$184,620.00	\$162,360.00	N/A	\$119,097.45	N/A
Total for all systems	\$3,560,245.10	\$3,090,142.78	N/A	\$2,494,646.51	N/A

Components

Actual Information Description	File Name
Attorney Fees - Other Matters	<p>Component Description: Total Professional Services</p> <p>Amount: \$444.00</p> <p>Component Description: Total Professional Services</p> <p>Amount: \$166.00</p>
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 FCC Form 2100 (main), License to Cover Application	<p>Component Description: Professional Services</p> <p>Amount: \$83.00</p>

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Professional Services \$740.00
	Component Description: Amount:	Complete and file first priority window construction permit filing for pop loss \$196.50
	Component Description: Amount:	Repack CP application \$786.00
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Component Description: Amount:	Buildout of repack CH-30 main antenna facility, develop final operating constants \$350.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Prepared engineering section for CP application \$2,062.50
Project management of the transition	Component Description: Amount:	Project Management \$2,152.35
	Component Description: Amount:	Project Management \$1,616.50

Component Description:	Project Management
Amount:	\$28.20

Component Description:	Project Management
Amount:	\$5,742.10

Component Description:	Project Management
Amount:	\$3,020.65

Component Description:	Project Management
Amount:	\$2,076.05

Component Description:	Project Management
Amount:	\$4,813.15

Component Description:	Project mgt
Amount:	\$4,982.95

Component Description:	Project Management
Amount:	\$3,455.75

Component Description:	Project Management
Amount:	\$4,305.90

Component Description:	Project Management
Amount:	\$4,207.15

Component Description:	Project Management
Amount:	\$4,079.50

Component Description:	Project Management
Amount:	\$3,081.30

Component Description:	Project Management
Amount:	\$5,064.45

Component Description:	Project Management
Amount:	\$5,360.15

Component Description:	Project Management
Amount:	\$2,619.80

Component Description:	Project Management
Amount:	\$2,654.70

Component Description:	Project Management
Amount:	\$1,895.60

Component Description:	Project Management
Amount:	\$1,863.20

Component Description:	Project Management
Amount:	\$2,157.60

Component Description:	Project Management
Amount:	\$1,630.60

Component Description:	Project Management
Amount:	\$1,931.30

Component Description:	Project Management
Amount:	\$1,668.75

Component Description:	Project management
Amount:	\$2,116.05

Component Description:	Project Management
Amount:	\$2,071.20

Component Description:	Project Management
Amount:	\$802.25

Component Description:	Project Management
Amount:	\$733.30

Component Description:	Project Management
Amount:	\$3,324.40

Component Description:	Project Management
Amount:	\$6,018.70

Component Description:	Project Management
Amount:	\$2,322.15

Component Description:	Project management
Amount:	\$2,397.65

Component Description:	Project Management
Amount:	\$2,314.90

Component Description:	WDBJ-510-Project Management
Amount:	\$1,350.00

Component Description:	Transition Related Project Management Costs
Amount:	\$3,300.00

Component Description:	Project Management
Amount:	\$913.95

Component Description:	Project Management
Amount:	\$2,536.05

Component Description:	Project Management
Amount:	\$2,373.10

Component Description:	Project management
Amount:	\$2,831.90

	Component Description: Amount:	Project Management \$2,019.15
Prepare and or review reimbursement form	Information not provided.	
Address transition timing and coordination issues w/ other stations and wireless	Component Description: Amount:	Review linked set for WDBJ; work on coordination with linked group for transition logistics. \$962.00
Perform engineering study for new channel assignment and antenna development	Component Description: Amount:	Regarding repack Ch-30, review planned antenna specifications, provide comments and inquiry regarding tower height under construction. \$175.00
	Component Description: Amount:	Consulting Engineer \$175.00
	Component Description: Amount:	Consulting Engineer - J. Davis. Develop technical parameters for interim antenna on repack Ch-30 for use during transition \$1,400.00

Component Description:

Perform
engineering study
for new channel
assignment

Amount:

\$475.00

Component Description:

Conduct channel
study of post-
auction CH 30 for
expansion created
by increased ERP.
Prep of engineering
portions of FCC CP-
MOD application.

Amount:

\$1,375.00

Component Description:

Conduct review of
repacked channel
assignment and
implementation
with prospective
antenna, discuss
results.

Amount:

\$1,875.00

Cost Information

Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$33,624.48	\$26,386.98		\$8,516.98	
Antenna Structure Registration Announcement	<i>\$334.48</i>	\$334.48	Antenna structure registration announcement in local paper.	\$334.48	N/A
MVPD Notification of Channel Change	<i>\$2,000.00</i>	\$2,000.00	see Estimated Cost Justification WDBJ-610-MVPD Notifications v0	\$2,000.00	N/A
Develop and air announcement of upcoming channel change	<i>\$5,000.00</i>	\$5,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$6,800.00</i>	\$6,800.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$1,300.00</i>	\$1,300.00	Please see attached WDBJ Disposal Costs Budget Revision Justification Letter	\$1,300.00	N/A
Non-zoning permits	<i>\$5,000.00</i>	\$5,000.00	N/A	N/A	N/A

FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$200.00	per Estimated Cost Justification WDBJ-610-STA FCC Filing Fees v0	\$200.00	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$335.00	see Estimated Cost Justification WDBJ-610-License to Cover FCC filing Fees v0	\$335.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$4,347.50	Justifying Quote WDBJ Widelity Medical Notification	\$4,347.50	N/A
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
Sub-total	\$33,624.48	\$26,386.98	N/A	\$8,516.98	N/A
Total for all systems	\$3,560,245.10	\$3,090,142.78	N/A	\$2,494,646.51	N/A

Components

Actual Information	
Description	File Name
Antenna Structure Registration Announcement	<p>Component Description: Antenna structure registration. Gives notice that on 09/13 /2017, it filed an application with the FCC</p> <p>Amount: \$334.48</p>

MVPD Notification of Channel Change	Component Description: Professional Services Amount: \$2,000.00
Develop and air announcement of upcoming channel change	Information not provided.
Equipment Delivery and Handling Charges	Information not provided.
Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description: TRANSPORTATION AND DISPOSAL OF DRUMS OF GLYCOL Amount: \$1,300.00
Non-zoning permits	Information not provided.
FCC Filing Fees - Special Temporary Authorization request	Component Description: WDBJ-610-STA FCC Filing Fees Amount: \$200.00
FCC Filing Fees - Form 2100 license to cover application	Component Description: For Professional Services Rendered Amount: \$335.00
DTV Medical Facility Notification	Component Description: Medical Notification Amount: \$4,347.50
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.

Cost Information	Grand Total		
		Predetermined Cost Estimate	Estimated Cost
			Actual Cost
	Total for all systems	\$3,560,245.10	\$3,090,142.78
			\$2,494,646.51

Reimbursement Status	Question	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	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 	

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

<p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Robert Folliard <i>Assistant Secretary</i></p> <p>07/02/2020</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 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) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Robert Folliard <i>Assistant Secretary</i></p> <p>07/02/2020</p>

Attachments