

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility	6900 S	Service: DTV	Call	WUPA	Channel: 36 (UHF)
ID:			Sign:		
File	000002	7041			
Number:					
FRN: 00	03474871	Date	07/10		
		Submitted:	/2017		

Applicant Name, Type, and Contact Information

Information

ATLANTA TELEVISION STATION WUPA INCEdwin L.+1 (202)elnass@cbs.CorporationDoing Business As: ATLANTANass457-comTELEVISION STATION WUPADESALES57 NW17254505INCST NWSUITE 501Vashington,17200361000000000000000000000000000000000000	on	Applicant	Address	Phone	Email	Applicant Type
		STATION WUPA INC Doing Business As: ATLANTA TELEVISION STATION WUPA	Nass 1725 DESALES ST NW SUITE 501 Washington, DC 20036 United	457-		Corporation

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
	Edwin L Nass , Nass <i>CBS</i>	Edwin L Nass 1725 DeSales Street NW Suite 501 Washington, DC 20036 United States	+1 (202) 457- 4602	elnass@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	ATS will install new broadband ant at interim site. Facility will move to interim site. Current main site ant and tx line will be removed. ATS will install new broadband ant at main site. Facility will move from interim site to main site.

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

Add Transmitter Information

Transmitter	Section	Question	Response
	Existing Transmitter Description	Type of change	Retune Existing
		Use	Auxiliary (Backup)
		Ownership	Owned
		Owner	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	Rhode and Schwarz

Model	NV8303
Year	2001
Туре	Solid State
Solid State Cooling	Air Cooled
Solid State Power capacity	1.5 kW

Retuning Transmitter Costs Auxiliary Transmitter Section Question Response **New IOT Tubes** Number of Tubes (including accessories) N/A needed **New Mask Filter** Power 1.5 kW Other Power N/A Is a new exciter needed? **New Exciter** No

Other Transmitter Costs

Auxiliary Transmitte

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	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

Other Transmitter Cost Not Listed

AuxiliaryOther Transmitter CoTransmitterInformation not provided.

Primary	Existing Transmitter Information					
Transmitter	Section	Question	Response			
	Existing Transmitter Description	Type of change	Purchase New			
		Use	Primary (Main)			
		Description of Use	N/A			
		Ownership	Owned			
		Owner	N/A			
		Site	N/A			
		Is this transmitter currently shared with another station?	No			
		Is this transmitter currently in operating condition?	Yes			
	Existing Transmitter	Manufacturer				
	Manufacturer and Type	Model	Sigma			
		Year	2001			
		Туре	Inductive Output Tube			
		IOT Power Type	Three			
		Power Capacity	63 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	ULXTE-100			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	62.9 kW			
		Justification for New Transmitter	Cannot re- tune current IOT transmitter. Replacement IOT transmitter will exceed cost of replacement solid state.			

Other Transmitter Costs

Primary	Other Transmitter Costs			
Transmitter	Section	Question	Response	
	Electrical Service	Service Entrance (3 phases 800A 208V)	No	
		Switchgear (industrial 800 amp)	No	
		Transformer (480V)	Yes	
		Power	500 kVA	
		Rigid Conduit and Wiring	Yes	
		Size	4 inches	

	Length	300.0 feet
	Other Electrical Service	Yes
	Description	Electrical work. Includes labor and materials not already listed.
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 Information not provided.

Interim	New Transmitter Costs		
Transmitter	Section	Question	Response
	New Transmitter	Use	Interim
		Description of Use	N/A
		Change Type	Purchase
		Manufacturer	
		Model	ULXTE-60
		Transmitter Type	Solid State
		Solid State Cooling	Liquid Cooled
		Solid State Power capacity	31.8 kW
		Justification for New Transmitter	No adequate aux transmitter. Facility must move to interim site for an expended period of time. Must operate at current main site pending move to interim site

Interim	Other Transmitter Costs			
Transmitter	Section	Question	Response	
	Electrical Service	Service Entrance (3 phases 800A 208V)	No	
		Switchgear (industrial 800 amp)	Yes	
		Transformer (480V)	No	
		Power	N/A	

Other Transmitter Costs

	Rigid Conduit and Wiring	Yes
	Size	4 inches
	Length	400.0 feet
	Other Electrical Service	Yes
	Description	Electrical work including labor and materials not listed elsewhere. See Exhibit 7
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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	No

Interim Other Transmitter Cost Not Listed

Transmitter Information not provided.

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	Lease New	
	Description	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	Class	Full Power	
	Manufacturer and Type	Mounting	Top Mount	
		Antenna position in stack	Тор	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels	N/A	
		Design power capacity in use	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	
		Manufacturer		

Model	TFU- 32GTH-R
Year	2002

Primary	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Primary (Main)	
		Description of Use	N/A	
		Change Type	Lease New	
		Is this a request for upgraded equipment?	Yes	
		Ownership	Leased	
		Owner	American Tower	
		Is antenna shared?	Yes	
		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	Top Mount	
		Antenna position in stack	Тор	
		Polarization	Elliptical	
		Туре	Broadband Panel	
		Number of Stations Supported	4	
		Number of Panels/Bays	99	
		Lower Limit	470.00 MHz	
		Upper Limit	608.00 MHz	
		Design power capacity in use	50.0 %	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	
		Manufacturer		

Model		14 bay, 4 around,, 56 ele total
Year		2018
Justifica	tion for New Antenna	Channel Change

Primary Antenna Section Question Response Do you need a Combiner for a Shared Yes **Combiner for Shared** Antenna Antenna? Type New Number of channels supported 4 Frequencies of channels supported Upper and lower frequency Frequency 470.0 MHz - 608.0 MHz No Do you need a combiner output splitter /switcher for dual feed lines? Yes **Elbow Complex** Do you require the separate purchase of the Elbow Complex? Broadband or Single Channel? Broadband Feed Line Size 8 3/16 inches inches Side Mount Brackets Do you require the separate purchase of No side mount brackets for a high power antenna? **Pattern Scatter Analysis** Do you require separate purchase of No pattern scatter analysis for a side mount high or medium power antenna? Do you require the sweep testing of Yes Sweep Test transmission line and antenna?

Other Antenna Costs

Primary	Other Antenna Cost Not Listed		
Antenna	Name	Description	
	Dielectric Combiner Installation	installation of combiner	

Antenna Section Question Responsibility New Antenna Description Use Interim Description of Use N/A Change Type Lease Ownership Lease Ownership Lease Stantenna shared? Yes Is antenna shared? No Will antenna be located on or in close proximity to an antenna farm? No Manufacturer and Type Class Full P New Antenna Manufacturer and Type Nounting Top IN Polarization Elliptin Top IN Number of Stations Supported 5 Top IN Number of Panels/Bays 12 Number of Panels/Bays 12	n New d can
New Antenna Class Full Manufacturer and Type Lease Nouting No Vill antenna belocated on or in close No Vill antenna belocated on or in close Full P Manufacturer and Type Class Full P Antenna position in stack Top N Polarization Stations Supported Stations Supported Number of Stations Supported 5 Number of Panels/Bays 12	New d can
Change Type Lease Ownership Lease Ownership Remains the start of the	d can
Ownership Lease Owner ? Owner ? Is antenna shared? Yes Is antenna directional? No Will antenna be located on or in close proximity to an antenna farm? No Manufacturer and Type Class Full P Mounting Top M Antenna position in stack Top M Polarization Elliptic Type ? Number of Stations Supported 5 Number of Panels/Bays 12	d can
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Image: Second state of the second s	
Is antenna directional? No Will antenna be located on or in close proximity to an antenna farm? No New Antenna Manufacturer and Type Class Full P Mounting Top M Antenna position in stack Top M Polarization Elliption Type Broad Number of Stations Supported 5 Number of Panels/Bays 12	
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Type Broad Panel Number of Stations Supported 5 Number of Panels/Bays 12	
Number of Stations Supported 5 Number of Panels/Bays 12	al
Number of Panels/Bays 12	
Lower Limit 470.0	
) MHz
Upper Limit 608.0) MHz
Design power capacity in use 50.0 %	, 0
Other Antenna Type N/A	
ERP: (Effective Radiated Power) 100.0	kW
Manufacturer	
Model PEPL C170-	
Year 2018	

Interim Antenna	Other Antenna Costs			
	Section	Question	Response	
	Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes	
		Туре	New	
		Number of channels supported	5	
		Frequencies of channels supported	Upper and lower frequency	
		Frequency	470.0 MHz - 608.0 MHz	
		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	8 3/16 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	

Interim Antenna Name

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

	Section	Question	Response
	Existing Transmission Line Description	Type of change	Lease 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	8 3/16 inches
		Other Diameter	N/A
		Segment Length	Broadband
		Other Segment Length	N/A
		Number of parallel runs	2
		Length	1275 feet per run

Primary Existing Transmission Line

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

Facility ID	Call Sign	
23960	WSB-TV	
48813	WUVG-DT	
64033	WPCH-TV	

72120 WGCL-TV

Primary Transmissio	New Transmission Line			
	n Line Section	Question	Response	
	New Transmission Line Costs	Use	Primary (Main)	
		Description of Use	N/A	
		Change Type	Lease New	
		Is this a request for upgraded equipment?	No	
		Туре	Rigid	
		Diameter	8 3/16 inches	
		Other Diameter	N/A	
		Segment Length	20 inches	
		Other Segment Length	N/A	
		Number of parallel runs	2	
		Length	1275 feet per run	
		Justification for New Transmission Line	Line to be re- furbished and connectors replaced.	

Other Transmission Line Expenses Not Listed Primary Transmi

nissior	n <u>Line</u>	Description	
	Gas Blocks	gas blocks	
	Interconnect tx line main	50' of 7-3/16" for connect to combiner.	
	TX line reducers	(2) 7-3/16" to 6-1/8" reducers	
	Interconnect tx line aux	150' of 6-1/8" line for connect to combiner.	

Interim	New Transmission Line			
Transmissio	n Line Section	Question	Response	
	New Transmission Line Costs	Use	Interim	
		Description of Use	N/A	
		Change Type	Lease New	
		Туре	Rigid	
		Diameter	8 3/16 inches	
		Segment Length	Broadband	
		Other Segment Length		
		Number of parallel runs	1	
		Length	1225 feet per run	
		Justification for New Transmission Line	For interim site antenna	

Other Transmission Line Expenses Not Listed Transmission

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

Auxiliary Tower	Add Tower			
	Section	Question	Response	
	Existing Tower	Type of change	Modify Existing	
	Description	Tower Use	Auxiliary (Backup)	
		Description of Use	Interim Tower	
		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?	Unknown	
		Is tower compliant with Rev G?	Yes	
	Existing Tower	Do you have a tower registration number?	Yes	
	Structure Registration	ASR Number	1206253	
	Coordinates (NAD83 (Latitude (NAD83)	33° 44' 40.9" N-	
	North American Datum of 1983))	Longitude (NAD83)	084° 21' 35.7" W-	
		Overall Structure Height	1080.04 feet	
		Support Structure Height	956.03 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	969.15 feet	

Struc	cture Type	GTOWER - Guyed Structure Used for Communication Purposes
Towe	er Owner	American Towers, LLC
Date	Constructed	05/14/2002

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
168094	WYGA-CD	DTV
23959	WRAS	FM
48813	WUVG-DT	DTV
68058	WHSG-TV	DTV
55108	WIRE-CD	DTV
64033	WPCH-TV	DTV

Auxiliary 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:

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

Auxiliary Other Tower Expenses Not Listed

AuxiliaryOther Tower ExpensTowerInformation not provided.

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?	Unknown		
		Is tower compliant with Rev G?	Unknown		
	Existing Tower Structure Registration	Do you have a tower registration number?	Yes		
		ASR Number	1223132		
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	33° 48' 26.4" N-		
		Longitude (NAD83)	084° 20' 21.5" W-		
		Overall Structure Height	1182.07 feet		
		Support Structure Height	1056.09 feet		
		Ground Elevation Above Mean Sea Level (AMSL)	867.12 feet		
		Structure Type	GTOWER - Guyed Structure Used for Communication Purposes		
		Tower Owner	American Tower, LLC		
		Date Constructed	03/27/2002		

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
22819	WATL	DTV
23960	WSB-TV	DTV
11675	WCLK	FM
11275	WWPW	FM
13805	WZGC	FM
29735	WUBL	FM
39735	WSTT	AM
73161	WKHX-FM	FM
68058	WHSG-TV	DTV
48813	WUVG-DT	DTV
72120	WGCL-TV	DTV
73345	WWWQ	FM
64033	WPCH-TV	DTV
54585	WRFG	FM

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:	Major Reinforcements needed

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

Other Tower Expenses Not Listed

PrimaryOther Tower ExpensTowerInformation not provided.

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	250
		Explanation	Station does not have adequate staff to handle this internally.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	No
		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	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	No
	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 Other Professional Services Expenses Not Listed Professional Services roopstsided.

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	No
		Non-zoning permits	Yes
		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?	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 Not Listed

Other Expenses	Other Expenses Not Listed			
	Name	Description		
	Interim site tx internal tx line	Install / modify feed line to combiner and test.		
	ATC Proj Mgmt	Tower construction project management by ATC. Site coordinations.		
	Main tx internal tx line	Install / modify feed line to combiner and test.		

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
Interim Transmitter ULXTE-60	\$1,526,100.00	\$1,522,200.00		\$0.00	
Other Electrical Service: Electrical work including labor and materials not listed elsewhere. See Exhibit 7	\$47,500.00	\$47,500.00	See Exhibit 7	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 31.8 kW	\$1,400,000.00	\$1,400,000.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
4" Rigid Conduit and Wiring (Cost per foot)	\$40,400.00	\$38,400.00	N/A	N/A	N/A
Primary Transmitter ULXTE-100	\$2,022,160.00	\$2,018,260.00		\$0.00	
Transformer 3 phase/480v - 500 KVA	\$48,400.00	\$46,000.00	N/A	N/A	N/A
4" Rigid Conduit and Wiring (Cost per foot)	\$30,300.00	\$28,800.00	N/A	N/A	N/A

UHF - Liquid Cooled Solid State Transmitter 62.9 kW	\$1,895,960.00	\$1,895,960.00	Present transmitter cannot be re- tuned per manufacturer. Solid state transmitter cost is less than replacement IOT transmitter.	N/A	N/A
Other Electrical Service: Electrical work. Includes labor and materials not already listed.	\$47,500.00	\$47,500.00	Electrical service required for new transmitter and transmitter cooling equipment	N/A	N/A
Auxiliary Transmitter NV8303	\$108,230.00	\$2,800.00		\$0.00	
UHF and VHF - minor banding issues	\$105,200.00	\$0.00	N/A	N/A	N/A
1.5 kW mask filter	\$3,030.00	\$2,800.00	N/A	N/A	N/A
Sub-total	\$3,656,490.00	\$3,543,260.00	N/A	\$0.00	N/A
Total for all	\$8,127,235.00	\$4,657,503.00	N/A	\$0.00	N/A

Components

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	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna PEPL48D- C170-2-6	\$196,675.00	\$115,395.00		\$0.00	
UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized	\$81,795.00	\$81,795.00	To accommodate move. See EXHIBIT	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$2,500.00	N/A	N/A	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$22,500.00	N/A	N/A	N/A
Elbow complex, broadband, at antenna input, per 8 3 /16. feedline (if needed)	\$18,950.00	\$3,600.00	N/A	N/A	N/A
Combiner Installation	\$5,000.00	\$5,000.00	See EXHIBIT	N/A	N/A

Primary Antenna 14 bay, 4 around,, 56 ele total	\$1,216,980.00	\$308,213.00		\$0.00	
Elbow complex, broadband, at antenna input, per 8 3 /16. feedline (if needed)	\$18,950.00	\$18,000.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$5,000.00	N/A	N/A	N/A
UHF - High Power Top Mount (200- 1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized	\$1,090,000.00	\$202,113.00	N/A	N/A	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$66,000.00	N/A	N/A	N/A
Dielectric Combiner Installation	\$17,100.00	\$17,100.00	Cost includes removal of existing combiner.	N/A	N/A
Sub-total	\$1,413,655.00	\$423,608.00	N/A	\$0.00	N/A
Total for all systems	\$8,127,235.00	\$4,657,503.00	N/A	\$0.00	N/A

Transmission Line

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$488,775.00	\$46,121.00		\$0.00	
Rigid Transmission Line - copper, 8 3/16" broadband	\$488,775.00	\$46,121.00	N/A	N/A	N/A
Primary Transmission Line	\$943,950.00	\$130,934.00		\$0.00	
Gas Blocks	\$12,000.00	\$12,000.00	Required for aux interconnect to combiner	N/A	N/A
TX line reducers	\$4,500.00	\$4,500.00	Required for line adapter from 7-3 /16" to 6-1 /8" combiner aux interconnect.	N/A	N/A
Rigid Transmission Line - copper, 8 3/16"	\$884,850.00	\$71,834.00	N/A	N/A	N/A
Interconnect tx line main	\$13,800.00	\$13,800.00	50ft of 7-3 /16" line for main tx connect to combiner. Published price.	N/A	N/A

Interconnect tx line aux	\$28,800.00	\$28,800.00	Aux transmitter interconnect to combiner. 150ft of 6-1 /8" rigid copper line.	N/A	N/A
Sub-total	\$1,432,725.00	\$177,055.00	N/A	\$0.00	N/A
Total for all systems	\$8,127,235.00	\$4,657,503.00	N/A	\$0.00	N/A

Tower Equipment and Rigging Costs

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	\$862,000.00	\$308,300.00		\$0.00	
Structural engineering tower load study for a documented tower with candelabra	\$20,000.00	\$14,800.00	N/A	N/A	N/A
Major tower reinforcement /modifications	\$421,000.00	\$157,500.00	N/A	N/A	N/A
Complex Tower (includes, for example, those with candelabras and /or stacked antennas)	\$421,000.00	\$136,000.00	N/A	N/A	N/A
Auxiliary Tower GTOWER	\$599,000.00	\$64,500.00		\$0.00	
Structural engineering tower load study for a documented tower with candelabra	\$20,000.00	\$4,500.00	N/A	N/A	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$15,000.00	N/A	N/A	N/A

Complex Tower (includes, for example, those with candelabras and /or stacked antennas)	\$421,000.00	\$45,000.00	N/A	N/A	N/A
Sub-total	\$1,461,000.00	\$372,800.00	N/A	\$0.00	N/A
Total for all systems	\$8,127,235.00	\$4,657,503.00	N/A	\$0.00	N/A

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	\$65,285.00	\$50,000.00		\$0.00	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Project management of the transition	\$39,500.00	\$37,500.00	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
RF Exposure Measurements	\$21,050.00	\$8,000.00	N/A	N/A	N/A
Sub-total	\$65,285.00	\$50,000.00	N/A	\$0.00	N/A
Total for all systems	\$8,127,235.00	\$4,657,503.00	N/A	\$0.00	N/A

Components

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	\$98,080.00	\$90,780.00		\$0.00	
MVPD Notification of Channel Change	\$1,500.00	\$1,500.00	N/A	N/A	N/A
Interim site tx internal tx line	\$4,000.00	\$4,000.00	Install line from transmitter to combiner and test.	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$4,250.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$20,000.00	\$20,000.00	Remove and dispose of transmitter and associated non-reused equipment.	N/A	N/A
Non-zoning permits	\$19,550.00	\$19,550.00	Prepare drawings for permits and permit filing costs for Main and Interim tower work.	N/A	N/A
Equipment Delivery and Handling Charges	\$15,000.00	\$15,000.00	N/A	N/A	N/A

Develop and air announcement of upcoming channel change	\$0.00	\$0.00	N/A	N/A	N/A
ATC Proj Mgmt	\$19,480.00	\$19,480.00	American Tower project management and oversight.	N/A	N/A
Main tx internal tx line	\$7,000.00	\$7,000.00	Install line from transmitter to combiner and test.	N/A	N/A
Sub-total	\$98,080.00	\$90,780.00	N/A	\$0.00	N/A
Total for all systems	\$8,127,235.00	\$4,657,503.00	N/A	\$0.00	N/A

Cost Information	Grand Total					
		Predetermined Cost Estimate	Estimated Cost	Actual Cost		
	Total for all systems	\$8,127,235.00	\$4,657,503.00	\$0.00		

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 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).
- 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
	07/10/2017

Attachments