

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

			-		
Facility	41458	Service: DTV	Call	WHIO-TV	Channel: 33 (UHF)
ID:			Sign:		
File	000002	7862			
Number:					
FRN: 000	01842509	Date	01/27		
		Submitted:	/2020		

Applicant Name, Type, and Contact Information

Information

Applicant	Address	Phone	Email	Applicant Type
MIAMI VALLEY BROADCASTING CORPORATION Doing Business As: MIAMI VALLEY BROADCASTING CORPORATION	Sr. Director of Technology & Plant Operations 1611 SOUTH MAIN STREET DAYTON, OH 45409 United States	+1 (937) 743- 6703	dave. thomas@coxinc. com	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
	Dave Thomas Senior Director Technology and Plant Operation Miami Valley Broadcasting Corporation	Dave Thomas 1611 South Main St Dayton, OH 45409 United States	+1 (937) 743- 6703	dave. thomas@coxinc. com

Broadcaster	Question	Response
Information and Transition Plan	Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
	Briefly describe transition plan	There is space in the transmitter building for the new Main and Aux transmitters after building modification is complete. WHIO TV will run the current main transmitter to the Aux Antenna during the installation of the New Main Transmitter.

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

Auxiliary	Existing Transmitter Information					
Transmitter	Section	Question	Response			
	Existing Transmitter Description	Type of change	Purchase New			
		Use	Auxiliary (Backup)			
		Description of Use	Back-Up Tranmsitter			
		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	Diamond			
		Year	2008			
		Туре	Solid State			
		Solid State Cooling	Air Cooled			
		Solid State Power Capacity	14 kW			

Auxiliary	New Transmitter Costs					
Transmitter	Section	Question	Response			
	New Transmitter	Use	Auxiliary (Backup)			
		Change Type	Purchase New			
		Is this a request for upgraded equipment?	Yes			
		Manufacturer				
		Model	ULXTE-24			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	16.1 kW			
		Justification for New Transmitter	Current Diamond CD transmitter cannot be retuned to new channel 33.			

Auxiliary	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			
		Rigid Conduit and Wiring	No			
		Size	N/A			
		Length	N/A			
			1			

	Other Electrical Service	Yes
	Description	Install (1) 400A distribution panel and (1) 150 KVA Transformer
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 CD			
		Year	2001			
		Туре	Inductive Output Tube			
		IOT Power Type	Two			
		Power Capacity	40.2 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-90		
		Transmitter Type	Solid State		
		Solid State Cooling	Liquid Cooled		
		Solid State Power capacity	56.4 kW		
		Justification for New Transmitter	Current Sigma CD transmitter cannot be retuned to new channel 33.		

Primary	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
		Rigid Conduit and Wiring	No
		Size	N/A
		Length	N/A
		Other Electrical Service	Yes

	Description	Install (1) 1200A Distribution panel and (1) 300KVA transformer
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	15 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	Yes
	Size	2270.0 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 Other Transmitter Cost Not Listed

Transmitter Information not provided.

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

Auxiliary	Existing Antenna Information			
Antenna	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Auxiliary (Backup)	
		Description of Use	Back-up Antenna	
		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 Manufacturer and Type	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels	N/A	
		Design power capacity in use	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	

Manufacturer	
Model	TFU- 28DSC-R CT3
Year	2004

Auxiliary	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Auxiliary (Backup)	
		Description of Use	Back-up 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?	Yes	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		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)	854.0 kW	
		Manufacturer		

Model	ATW26HS3 HSO-33H
Year	2017
Justification for New Antenna	Current antenna cannot be retuned to new channel 33.

Auxiliary 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?	Yes	
	Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes	
	Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes	

Other Antenna Cost Not Listed

Auxiliary Antenna

Name	Description
Rigging Aux Antenna	Rigging Aux Antenna - remove old and install new antenna
Aux Antenna Sweep 1	Aux Antenna Sweep 1- will reuse line check to make sure can handle full power transmitter.
Aux Antenna Sweep 2	Aux Antenna Sweep 2- will reuse line made repairs from sweep 1 - verify line at full power

Primary	Existing Antenna Information			
Antenna	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing antenna shared with another station or stations?	No	
		Is the existing antenna directional?	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	
		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- 30GTH-R 4C130
Year	2008

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?	No	
		Is antenna directional? Will antenna be located on or in close proximity to an antenna farm? Class	No	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Top Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		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)	854.0 kW	
		Manufacturer		

Model	ATW24HS3 HTO-33H
Year	2017
Justification for New Antenna	Current antenna cannot be retuned to new channel 33.

Primary	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?	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	

Other Antenna Cost Not Listed

Primary Antenna	Other Antenna Cost Not Listed		
	Name	Description	
	Additional Main Ant sweep	Additional Main Ant sweep - will reuse line during repack. This is the initial sweep for line prior to removing current antenna.	

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

Existing Transmission Line Primary Existing Transmission

sior	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
		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	Yes
	Existing Transmission	Manufacturer	Dielectric
	Line Manufacturer and Type	Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	19 1/2 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	1200 feet per run

Other Transmission Line Expenses Not Listed Transmission

Auxillary	Existing Transmission Line			
	Section	Question	Response	
	Existing Transmission Line Description	Type of change	Utilize Existing	
		Use	Auxiliary (Backup)	
		Description of Use	Feeds Aux Antenna	
		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	Manufacturer	Dielectric	
	Line Manufacturer and Type	Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	960 feet per run	

Existing Transmission Line

Auxillary	Other Transmission Line Expenses No	t Listed
Transmission _N	n Line	Description

New gaskets, seals, watchbands, for full power operationNew gaskets, seals, watchbands - needed to make Aux line usable during new main ortenne install	n Name	Description
could not take full power at time of sweep	•	to make Aux line usable during new main antenna install - sweep showed that 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

Primary	Add Tower			
Tower	Section	Question	Response	
	Existing Tower Description	Type of change	Modify Existing	
		Tower Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Leased	
		Is this tower consider Complex?	No	
		Is this tower currently shared with any other stations?	Yes	
		One or more FM, AM or TV radio broadcaster(s)	Yes	
		Others Types of Users	No	
		Is tower documented for structural analysis?	Yes	
		Is tower compliant with Rev G?	No	
	Existing Tower Structure	Do you have a tower registration number?	Yes	
	Registration	ASR Number	1016460	
	Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	39° 44' 02.0" N-	
	1983))	Longitude (NAD83)	084° 44' 53.0" W-	
		Overall Structure Height	1098.80 feet	
		Support Structure Height	1018.69 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	950.12 feet	

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	IWG Towers Assets II, LLC
Date Constructed	01/01/1953

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
14245	WHKO	FM

Primary Tower Modification Costs

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

Primary Tower Rigging Costs

Tower

Tower

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

Primary	Other Tower Expenses Not Listed		
Tower	Name	Description	
	STRUCTURAL ANALYSIS DESIGN	STRUCTURAL ANALYSIS DESIGN	

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	No
		Number of Hours	N/A
		Explanation	N/A
	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 Services	Prepare and file Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	Yes
		For Main Facility	Yes
		Prepare and file 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
	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	Yes
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Other Professional Services Expenses Not Listed

Professional	Services Costs	Description
	RF Consultant Pattern, Transmitter, Antenna	RF Consultant Pattern, Transmitter, Antenna

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	Yes
		Non-zoning permits	Yes
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	No
		FCC License to Cover Application	Yes
		FCC Special Temporary Authority Application	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

Expenses Information not provided.

Transmitters

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTE-90	\$1,965,863.00	\$1,766,203.44		\$1,766,105.44	
Other Building Addition Size: 2270.0	\$49,427.00	\$49,427.00	Building Renovation for new transmitter area - Quote attached	\$49,329.00	N/A
Other Electrical Service: Install (1) 1200A Distribution panel and (1) 300KVA transformer	\$34,436.00	\$34,436.00	Quote attached	\$34,436.00	N/A

Other Electrical Service: Install (1) 400A distribution panel and (1) 150 KVA Transformer	\$20,833.00	\$20,833.00	Quote attached	\$20,833.00	N/A
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	\$684,000.00	\$577,135.39	Original quote Q- 75124 plus revised quotes: Q- 82449 and Q-79460	\$577,135.39	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$23,197.00	Quote attached	\$23,197.00	N/A
Sub-total	\$2,708,896.00	\$2,387,368.83	N/A	\$2,387,270.83	N/A
Total for all systems	\$5,377,781.71	\$5,247,531.09	N/A	\$3,604,734.71	N/A

Components

Actual Information Description	File Name	
Other Building Addition Size: 2270.0	Component Description:	New attachment
		includes cover letter requested - Transmitter building
	Amount:	renovations \$49,329.00

ent r ed 50% t
s Q- s Q- 456
t tter rder
ew 90
prior

Switchgear - industrial 800 amp		
amp	Component Description:	2nd 50% payment
	Amount:	\$14,923.00
	Component Description:	New attachment
		includes cover
		letter requested
		with electrical costs and billing
		detail.
	Amount:	\$14,922.00
15 Ton system		
	Component Description:	Final invoice 2 of 2
	Amount:	\$25,410.00
	Component Description:	50% down
		payment 15 ton
		HVAC unit for
		new transmitter
	Amount:	room \$25,410.00
	Amount.	φ23,410.00
Other Electrical Service: nstall (1) 400A distribution	Component Description:	2nd 50% payment
panel and (1) 150 KVA	Amount:	\$10,416.50
Fransformer		÷,
	Component Description:	New attachment
		includes cover
		letter - 50% down
		payment

UHF - Liquid Cooled Solid		
State Transmitter 14.2 - 20 kW	Component Description:	1/3 payment prior
		to shipment
	Amount:	\$180,183.72
	Component Description:	Final invoice aux transmitter attached quotes Q-75124, Q- 82449, Q-79460
	Amount:	\$68,647.51
	Component Description:	Original Quote Q-
		75124 plus revised quotes Q- 82499 and Q-
		79460
	Amount:	\$148,120.44
	Component Description:	1/3 down
		payment for new ULXTE 24
	Amount:	transmitter \$180,183.72
Switchgear - industrial 800		
amp	Component Description:	2nd 50% payment
	Amount:	\$11,598.50
	Component Description:	New attachment
		includes cover
		letter requested -50% down
		payment
	Amount:	\$11,598.50

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
Primary Antenna ATW24HS3- HTO-33H	\$260,130.00	\$277,213.67		\$264,413.67	
Additional Main Ant sweep	\$6,400.00	\$6,400.00	Widelity cost - sweep line after new antenna installed.	N/A	N/A
UHF - High Power Top Mount (200- 1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$264,413.67	Price from ERI for antenna model# ATW24HS3- HTO-33H - see attached quote includes mount.	\$264,413.67	The original quote 253,525 add tax including 1 bury mount and 1 tune and test sweep. There was also 1 day weather delay, and some additional parts were needed after the tower crew arrived. Also the sales tax rate increased from an estimated 7.25 to 7.5

Sweep test of existing antenna	\$6,730.00	\$6,400.00	Sweep line prior to repack	N/A	N/A
Auxiliary Antenna ATW26HS3- HSO-33H	\$477,513.67	\$471,523.55		\$304,718.14	
Aux Antenna Sweep 2	\$6,400.00	\$6,400.00	Widelity cost - made repairs from aux sweep 1 tested full power for repack.	N/A	N/A
Aux Antenna Sweep 1	\$7,525.00	\$7,525.00	1 work day +2.5 days travel @ \$2,150.00 / day	\$0.00	N/A
Rigging Aux Antenna	\$194,264.33	\$194,264.33	Quote attached FYI -No place to add in rigging cost section	\$194,264.33	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna	\$5,260.00	\$5,000.00	N/A	N/A	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$17,749.88	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Sweep Aux check for full power use during repack	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 854 kW input, directional,, horizontally polarized	\$234,184.34	\$234,184.34	see attached quote plus tax and additional parts	\$110,453.81	N/A
Sub-total	\$737,643.67	\$748,737.22	N/A	\$569,131.81	N/A
Total for all systems	\$5,377,781.71	\$5,247,531.09	N/A	\$3,604,734.71	N/A

Actual Information Description	File Name
Additional Main Ant sweep	Information not provided.

UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	Component Description:	Additional Parts needed for antenna install - quote attached
	Amount:	\$1,187.88
	Component Description:	(1) day weather delay for tower crew installing main antenna No quote - see invoice for hourly detail -
	Amount:	\$3,750.00
	Component Description:	2nd payment - Antenna with installation and mount
	Amount:	\$140,463.29
	Component Description:	New frequency Main Antenna 50% down
	Amount:	payment \$119,012.50
Sweep test of existing antenna	Information not provided.	
Aux Antenna Sweep 2	Information not provided.	
Aux Antenna Sweep 1		
	Component Description:	Sweep Aux transmission line for full power operation after replacement seals, springs, rubbing shoe, etc
	Amount:	\$7,525.00

Rigging Aux Antenna		
	Component Description:	10 percent payment upon
		completion plus
		sales tax for insta
	Amount:	\$31,624.43
	Component Description:	50% down
		payment of
		\$180,711.00
	Amount:	\$90,355.50
	Component Description:	40% down on aux
		antenna upon
		delivery
	Amount:	\$72,284.40
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Sweep test of existing antenna	Information not provided.	
UHF - High Power, Side		
Mount, basic slot antenna,	Component Description:	New Frequency
854 kW input, directional,,		Aux antenna 50%
horizontally polarized		down payment,
	Amount:	\$104,180.00
	Component Description:	Additional parts
		needed to install
		aux antenna quot
		attached
	Amount:	\$6,273.81

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	\$0.00	\$0.00		\$0.00	
Auxiliary Transmission Line	\$31,422.58	\$31,422.58		\$0.00	
New gaskets, seals, watchbands, for full power operation	\$31,422.58	\$31,422.58	Repairs from Aux RF sweep 1 - actual costs came in under estimate - parts = \$2,422.58 +installation \$29,000	\$0.00	N/A
Sub-total	\$31,422.58	\$31,422.58	N/A	\$0.00	N/A
Total for all systems	\$5,377,781.71	\$5,247,531.09	N/A	\$3,604,734.71	N/A

Actual Information	
Description	File Name

New gaskets, seals, watchbands, for full power operation	Component Description:	Misc parts for Aux line to run at full
		power during TV
		Repack
	Amount:	\$2,321.33
	Component Description:	Shoulder screws
		for Aux
		transmission line
	Amount:	\$101.25

Tower Equipment and Rigging Costs

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification		Actual Cost Justification
Primary Tower TOWER	\$1,647,497.26	\$1,833,805.26		\$610,521.17	
Tower Helicopter Lift	\$325,432.60	\$325,432.60	See quotes	\$261,592.60	N/A
Serious tower reinforcement /modifications	\$1,052,000.00	\$1,300,216.00	This is from a quote received from ERI on 5/23/17 totaling \$1,450,108 - quote is uploaded	\$348,928.57	N/A
STRUCTURAL ANALYSIS DESIGN	\$33,264.66	\$33,264.66	Structural analysis quote 1- \$23,612 (attached) Structural analysis quote 2 - \$9,652 (attached)	N/A	N/A
Tall Tower (greater than 500')	\$210,500.00	\$149,892.00	Tower modification estimate attached	N/A	N/A

Tower	\$26,300.00	\$25,000.00	N/A	N/A	N/A
mapping for an					
undocumented					
/poorly					
documented					
tower and					
preparation of					
documentation					
necessary for					
tower load					
study					
Sub-total	\$1,647,497.26	\$1,833,805.26	N/A	\$610,521.17	N/A
Total for all	\$5,377,781.71	\$5,247,531.09	N/A	\$3,604,734.71	N/A
systems					

Actual Information		
Description	File Name	

Tower Helicopter Lift		
	Component Description:	Structural
		Installation for
		helicopter service
		(down payment)
	Amount:	\$178,035.00
	Component Description:	10 percent
		payment plus
	A	sales tax
	Amount:	\$13,602.40
	Component Description:	40% down of the
		installation of
		primary antenna -
		see attached for
		details.
	Amount:	\$31,091.20
	Component Description:	50% down
		payment for
		rigging &
		Installation of
		\$77,728.00
	Amount:	\$38,864.00
Serious tower reinforcement /modifications		
mounications	Component Description:	30% down
		payment of quote
	•	in attached file
	Amount:	\$47,978.00
	Component Description:	Change order for
		foundations see
		attached quote for
		details.
	Amount:	\$60,241.79

	Component Description:	Structural
		Reanalysis and
		report for tower
		5,000
	Amount:	\$5,000.00
	Component Description:	Revised invoice
		and original quote
		submitted for Geo
		technical survey
		foundation
		reinforcement
		design
	Amount:	\$9,000.00
	Component Description:	Tower modification
		construction layout
		field survey
	Amount:	\$1,600.00
		•)
	Component Description:	70% Final
		Payment for tower
		foundations.
	Amount:	\$111,948.67
	Component Description:	Tower Foundation
		testing and
		inspections
	Amount:	\$3,116.91
	Component Description:	20% down
		payment on 1098'
		tower
	Amount:	modifications. \$110,043.20
		ψιιυ,υ τ υ.∠υ
STRUCTURAL ANALYSIS	Information not provided.	
DESIGN		
Tall Tower (greater than	Information not provided.	
500')		

Information not provided

Tower mapping for an	Information not provided.
undocumented/poorly	
documented tower and	
preparation of	
documentation necessary	
for tower load study	

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	\$154,937.20	\$149,372.20		\$35,960.90	
RF Consultant Pattern, Transmitter, Antenna	\$43,122.20	\$43,122.20	Merrill Weiss RF Consultant Costs - estimated \$30,000 - uploaded quote dated 7/28 /17. Cooley LLP - Prepare form 399 - \$13,122.20	\$34,197.20	Did not include legal fees (Cooley LLP) for reviewing the development of WHIO-TV form 399.
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	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	N/A	N/A
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	N/A	\$55.80	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$1,707.90	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
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	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
Sub-total	\$154,937.20	\$149,372.20	N/A	\$35,960.90	N/A
Total for all systems	\$5,377,781.71	\$5,247,531.09	N/A	\$3,604,734.71	N/A

Actual Information Description	File Name	
RF Consultant Pattern, Transmitter, Antenna	Component Description:	295.75 hour for TV repack transmitter & antenna analysis for new channel assignment.
	Amount:	\$21,075.00
	Component Description:	See detail - Legal review/ submissions/
		revsions to form 399 development.
	Amount:	\$2,445.80
	Component Description:	Legal Form 399 Preparation
	Amount:	\$1,411.10
	Component Description:	See detail - only
		charges for form 399 are
	Amount:	professional services. \$485.60
		φ 1 05.00

	Component Description: Amount:	TV Repack Quarterly Progress report process. \$74.80
	Component Description: Amount:	See detail only charges for preparing form 399 are for professional services \$8,200.30
	Component Description:	Legal Repack reimbursement issues \$448.80
	Component Description: Amount:	Research TV Repack Allocation \$55.80
Comprehensive coverage verification via field study, if needed	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Component Description: Amount:	Research repack aux antenna license. \$55.80

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Develop Construction Permit \$1,446.70
	Component Description:	Discuss construction permit application issues
	Amount:	\$149.60
	Component Description: Amount:	See detail - only charges for Construction Permit \$111.60
		• • •
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.	
Perform engineering study for new channel assignment and antenna development	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.	

Other Expenses

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$97,385.00	\$96,825.00		\$1,850.00	
MVPD Notification of Channel Change	\$500.00	\$500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$15,000.00	\$15,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Non-zoning permits	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Local Zoning	\$55,000.00	\$55,000.00	N/A	\$1,850.00	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A

Sub-total	\$97,385.00	\$96,825.00	N/A	\$1,850.00	N/A
Total for all systems	\$5,377,781.71	\$5,247,531.09	N/A	\$3,604,734.71	N/A

Actual Information Description	File Name	
MVPD Notification of Channel Change	Information not provided.	
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)	Information not provided.	
Non-zoning permits	Information not provided.	
Local Zoning	Component Description: Amount:	Permit document fee \$1,850.00
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
DTV Medical Facility Notification	Information not provided.	

Cost Information	Grand Total					
		Predetermined Cost Estimate	Estimated Cost	Actual Cost		
	Total for all systems	\$5,377,781.71	\$5,247,531.09	\$3,604,734.71		

Reimbursem	entestiatus	Response
	The facility has ceased operating on its pre- auction channel.	Yes
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	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.	Dave Thomas Senior Director Operations 01/27/2020

Certification	Section	Question	Response
Certification	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).
- 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.

8.	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.	
9.	The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) fied above.	Dave Thomas Senior Director Operations 01/27/2020

Attachments

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