

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File Number:	18753 000002	Service: DTV 27479	Call Sign:	WVIZ	Channel: 35 (UHF)
FRN: 00(05277538	Date Submitted:	07/01 /2019		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
IDEASTREAM Doing Business As: IDEASTREAM	KEVIN E. MARTIN IDEA CENTER 1375 EUCLID AVENUE CLEVELAND, OH 44115 United States	+1 (216) 916-6455	kevin. martin@ideastream. org	Not-for- Profit

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Ontact Name and Information

Contact Information	Applicant	Address	Phone	Email
	Jerrold Francis Wareham Repack Coordinator ideastream	JERRY WAREHAM IDEA CENTER 1375 EUCLID AVENUE CLEVELAND, OH 44115 United States	+1 (216) 916- 6120	jerry. wareham@ideastream. org

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	WVIZ must replace its main antenna and transmitter in order to move it its new channel. It will need to install interim facilities in order to be able to replace the main facility. See attached narrative.

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

Primary	Existing Transmitter Information					
Fransmitter	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	Innovator			
		Year	2009			
		Туре	Solid State			
		Solid State Cooling	Air Cooled			
		Solid State Power Capacity	15 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	ULXTE40			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	23 kW			
		Justification for New Transmitter	The new transmitter is required because higher TPO for higher ERP to replicate the current signal on the new channel. The replication transmitter is the ULXTE30 (invoice attached). The ULXTE40 is an upgrade to achieve maximization (invoice attached)			

Primary	Other Transmitter Costs					
Transmitter	Section	Question	Response			
	Electrical Service	Service Entrance (3 phases 800A 208V)	No			
		Switchgear (industrial 800 amp)	No			
		Transformer (480V)	No			
		Power	N/A			
		Rigid Conduit and Wiring	No			
		Size	N/A			
		Length	N/A			
		Other Electrical Service	Yes			
		Description	Necessary conduit, wiring and fuse disconnects as quoted by electrical contractor.			
	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 Transmitter	Other Transmitter Cost Not Listed			
	Name	Description		
	Dummy Load	New dummy load required for new transmitter see attached quote from Bird		
	Bypass Switch	To provide electrical engineering services for new electrical circuits that need to be added to allow simultaneous operation of the transmitters to maintain service on the original channel during the test period. Osborn Engineering Quote Attached		
	Switch	Switch, cable and controller for new transmitter and dummy load Dielectric Switch Quote Attached		
	Transmitter Site Suvey	Survey of transmitter site to determine exact facility needs		

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

Primary	Existing Antenna Information					
Antenna	Section	Question	Response			
	Existing Antenna Description	Type of change	Purchase New			
		Antenna Use	Primary (Main)			
		Description of Use	N/A			
		Ownership	Owned			
		Owner	N/A			
		Site	N/A			
		Is the existing antenna shared with another station or stations?	No			
		Is the existing antenna directional?	Yes			
		Is antenna in operating condition?	Yes			
		Is antenna located on or in close proximity to an antenna farm?	No			
	Existing Antenna	Class	Full Power			
	Manufacturer and Type	Mounting	Top Mount			
		Antenna position in stack	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)	150.0 kW			

Manufacturer	
Model	TFU- 10GTH-R C170
Year	2009

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?	Yes	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Top Mount	
		Antenna position in stack	Тор	
		Polarization	Elliptical	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels/Bays	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Design power capacity in use	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	181.0 kW	
		Manufacturer		
			1	

Model	TFU- 10GTH-R C170 SP
Year	2019
Justification for New Antenna	Existing main antenna is a coaxial slot antenna that is channel specific and cannot be reused on the new channel.

Primary Antenna Question Response Section **Combiner for Shared** Do you need a Combiner for a Shared No Antenna Antenna? Туре N/A Number of channels supported Frequencies of channels supported N/A Frequency N/A Do you need a combiner output splitter N/A /switcher for dual feed lines? **Elbow Complex** Do you require the separate purchase of No the Elbow Complex? Broadband or Single Channel? N/A Feed Line Size N/A Side Mount Brackets Do you require the separate purchase of No side mount brackets for a high power antenna?

Other Antenna Costs

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
AntennaOther Antenna Cost Not ListedInformation not provided.

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	
		Туре	Broadband Slot	
		Number of Stations Supported	1	
		Number of Panels/Bays	8	
		Lower Limit	470.00 MHz	
		Upper Limit	698.00 MHz	
		Design power capacity in use	40.0 %	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	150.0 kW	
		Manufacturer		
		Model	TFU-8WB-R	
		Year	2019	

Justification for New Antenna	WVIZ needs an interim antenna for operation . while it replaces the primary antenna Dielectric Quote Attached

Other Antenna Costs

Interim Antenna

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

InterimOther Antenna Cost Not ListedAntennaInformation not provided.

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

Primary	Existing Transmission Line			
Transmissio	n Line Section	Question	Response	
	Existing Transmission Line Description	Type of change	Purchase New	
		Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing transmission line shared with another station or stations?	No	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission	Manufacturer		
	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	1207 feet per run	

Primary	New Transmission Line			
Transmission	n Line Section	Question	Response	
	New Transmission Line Costs	Use	Primary (Main)	
		Description of Use	N/A	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	20 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	1207 feet per run	
		Justification for New Transmission Line	Current transmission line has 19.5" segment lengths which will not work for the WVIZ assigned repack Ch. 35. See attached quote.	

Primary Other Transmission Line Expenses Not Listed

Transmission home tion not provided.

Interim	New Transmission Line		
Transmissio	n Line Section	Question	Response
	New Transmission Line	Use	Interim
	Costs	Description of Use	N/A
		Change Type	Purchase New
		Туре	Flexible Air
		Diameter	4 inches
		Segment Length	N/A
		Other Segment Length	
		Number of parallel runs	1
		Length	1000 feet per run
		Justification for New Transmission Line	WVIZ will need an interim transmission line for operation while it replaces its primary transmission line. Dielectric quote attached.

Interim Other Transmission Line Expenses Not Listed

Transmission hometion not provided.

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

marv	Existing	Tower
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Primary	Existing Tower			
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?		
		Is this tower currently shared with any other stations?	Yes	
		One or more FM, AM or TV radio broadcaster(s)	Yes	
		Others Types of Users	No	
		Is tower documented for structural analysis?	Yes	
		Is tower compliant with Rev G?	Yes	
	Existing Tower Structure	Do you have a tower registration number?	Yes	
	Registration	ASR Number	1265403	
	Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	41° 23' 09.9" N-	
	1983))	Longitude (NAD83)	081° 41' 20.7" W-	
		Overall Structure Height	912.06 feet	
		Support Structure Height	912.06 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	1040.01 feet	

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	6600 Broadview LLC
Date Constructed	06/05/2009

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
73195	WKYC	DTV

Primary Tower Modification Costs

Tower

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

Primary Tower Rigging Costs

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

Other Tower Expenses Not Listed Primary Tower

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	160
		Explanation	Project manager needed to manage all work required coordinate vendor and contractor specification development, selection of list for bid solicitation, bid evaluation, vendor /contractor selection /contractor selection /contracting and contract enforcement. See Osborn estimate.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
	-	Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare request for Special Temporary Authority	Yes

	Quantity	1
	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
Services	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	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	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 Other Professional Services Expenses Not Listed

Professional Services Costsided.

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?	Yes
		Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
		Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses Not Listed

Other Expenses	Other Expenses Not Listed		
	Name	Description	
	Employee Time	Time needed by ideastream employees to work on the transition to a new channel.	

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 ULXTE40	\$1,034,637.04	\$874,460.20		\$665,612.23	
Transmitter Site Suvey	\$8,000.00	\$8,000.00	Survey of transmitter site to determine needs	N/A	N/A
Switch	\$19,712.00	\$19,712.00	New switch needed for new transmitter and dummy load. Dielectric Quote Attached.	\$19,712.00	N/A
Bypass Switch	\$11,565.00	\$11,565.00	WVIZ is not able to connect the new transmitter to the existing Bypass Switch during the interim period between transmitter changes with the existing. Osborn Engineering Quote Attached	\$9,470.85	N/A

Dummy Load	\$18,660.04	\$18,660.04	New dummy load required for new transmitter see quote from Bird attached.	\$18,660.04	N/A
Other Electrical Service: Necessary conduit, wiring and fuse disconnects as quoted by electrical contractor.	\$29,700.00	\$29,700.00	See attached electrical quote from Ullman Electric.	\$29,700.00	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$786,823.16	N/A	\$588,069.34	N/A
Sub-total	\$1,034,637.04	\$874,460.20	N/A	\$665,612.23	N/A
Total for all systems	\$2,762,523.28	\$2,555,567.40	N/A	\$1,416,225.73	N/A

Components

Actual Information Description	File Name	
Transmitter Site Suvey	Information not provided.	
Switch	Component Description: Amount:	New switch Invoice and quote attached \$19,712.00

Bypass Switch		
	Component Description:	Payment due for
		fixed fee service to
		design necessary switch per vendor
		quote previously
		submitted.
	Amount:	\$206.00
	Component Description:	As requested by
		repack
		administrator more
		detail add by the
		vendor to the
		invoice for this
		fixed fee service.
		Quote attached to
		invoice. Required design and
		installation of
		switch.
	Amount:	\$5,679.96
	Component Description:	Fixed Fee required
		design and installation of
		switch per vendor
		quote previously
		submitted
	Amount:	\$3,584.89
Jummy Load		
	Component Description:	New Dummy Load
		Invoice for
		\$18,660.04
		attached along
	A m a u m f u	with quote.
	Amount:	\$18,660.04

Other Electrical Service: Necessary conduit, wiring and fuse disconnects as quoted by electrical contractor.	Component Description:	This component covers the installation of the new electric service and grounding system for the new transmitter. \$29,700.00
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Component Description:	One third second payment for transmitter required for replication (total \$634,927.60). The additional cost for maximization (total \$151,895.56) second payment of one third invoice also attached is not reimbursable. Quote also attached. \$211,642.53
	Component Description:	One third, third payment for transmitter required for replication (total \$643,920.34). The additional cost for maximization (total \$151,895.56) third payment of one third invoice also attached is not reimbursable. Quote also attached \$164,784.28

Component Description:	One third down payment for transmitter required for replication (total \$634,927.60). The additional cost for maximization (total \$151,895.56) also attached as JW3004459VI is not reimbursable.
Amount:	\$211,642.53

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 TFU-8WB-R	\$96,130.00	\$51,325.00		\$44,469.82	
UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized	\$89,400.00	\$44,925.00	Dielectric Quote for Interim Antenna attached	\$44,469.82	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
Primary Antenna TFU- 10GTH-R C170 SP	\$296,230.00	\$199,536.00		\$194,371.69	

UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$193,136.00	Quoted cost of antenna from the manufacturer with the upgrade cost related to vertical polarization removed from the overall cost. See attached quote.	\$194,371.69	The original estimate is lower than actual costs.
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
Sub-total	\$392,360.00	\$250,861.00	N/A	\$238,841.51	N/A
Total for all systems	\$2,762,523.28	\$2,555,567.40	N/A	\$1,416,225.73	N/A

Components

Actual Information	
Description	File Name

Component Description: Amount:	Payment required before shipping. Invoice with quote attached. \$4,037.32
Component Description: Amount:	See attached Cover Letter. Reimbursement sought for down payment of the Interim Antenna portion of the invoice \$20,216.25
Component Description: Amount:	See attached cover letter. Reimbursement is sought for the second payment related to the Interim Antenna \$20,216.25
Information not provided.	
Component Description: Amount:	a single 3 foot section of 6 inch 50 to 75 ohm transition. \$2,363.74
Component Description: Amount:	Wedding cake mounting adapter and transmission line connectors. \$18,185.55
	Amount: Component Description: Amount: Component Description: Amount: Information not provided. Component Description: Amount: Component Description:

	Component Description:	See attached
		Cover Letter.
		Reimbursement
		requested for first
		payment for
		amount related to
		Main Antenna
		Antenna
		\$67,726.80
		Mounting \$
		8,798.40 Feed
		Through \$ 7,225.20
		Elbow Complex \$
		3,160.80 Total
		\$86,911.20
	Amount:	\$86,911.20
	Component Description:	See attached
		Cover Letter/
		invoice/quote.
		Reimbursement
		request 2nd
		payment for
		amount of this
		invoice related to
		Main Antenna:
		Antenna
		\$67,726.80
		Mounting \$
		8,798.40 Feed
		Through \$ 7,225.20
		Elbow Complex \$
		3,160.80 Total
		\$86,911.20
	Amount:	\$86,911.20
Sweep test of existing	Information not provided.	
antenna		

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 Justification
Interim Transmission Line	\$74,000.00	\$59,448.26		\$53,503.44	
Flexible Air Transmission Line - dielectric, 4"	\$74,000.00	\$59,448.26	Dielectric Quote attached. Line \$53,048.26 Sweep \$ 6,400.00 Total \$59,448.26	\$53,503.44	N/A
Primary Transmission Line	\$243,814.00	\$259,200.00		\$160,251.30	
Rigid Transmission Line - copper, 6 1/8"	\$243,814.00	\$259,200.00	N/A	\$160,251.30	N/A
Sub-total	\$317,814.00	\$318,648.26	N/A	\$213,754.74	N/A
Total for all systems	\$2,762,523.28	\$2,555,567.40	N/A	\$1,416,225.73	N/A

Components

Actual Information	
Description	File Name

Flexible Air Transmission Line - dielectric, 4"	Component Description:	See attached cover letter. Reimbursement is
		requested for second payment of amount related to interim transmission line.
		Line \$23,871.72 Sweep \$ 2,880.00 Total \$26,751.72
	Amount:	\$26,751.72
	Component Description:	See attached Cover Letter. Reimbursement requested for down payment of the amount related to the Interim Transmission Line. Line \$23,871.72 Sweep \$ 2,880.00 Total \$26,751.72 \$26,751.72
	Amount:	\$26,751.72

Rigid Transmission Line -		
copper, 6 1/8"	Component Description:	See attached
		Cover Letter/invoice
		/quote.
		Reimbursement is
		requested for down
		payment of amount
		related to the Main
		Transmission Line
		Line \$74,759.96
		TLSCR'S \$
		2,485.69 Sweep \$
		2,880.00 Total
		\$80,125.65
	Amount:	\$80,125.65
	Component Description:	See attached
	component Description.	Cover Letter.
		Reimbursement is
		requested for down
		payment of amount
		related to the Main
		Transmission Line
		Line \$74,759.96
		TLSCR'S \$
		2,485.69 Sweep \$
		2,880.00 Total
		\$80,125.65
	Amount:	\$80,125.65

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 TOWER	\$802,100.00	\$902,875.70		\$172,573.70	
Tower Helicopter Lift	\$0.00	\$0.00	Estimate for helicopter lift included complex tower estimate.	N/A	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$150,000.00	N/A	\$0.00	N/A

Complex rower (includes, for example, those with candelabras and/or stacked antennass)\$421,000.00\$568,302.00Alternative contractor was used due to contractor was unable to complete stacked antenna install with helicopter, quote is W/AN/AN/ATower (groater than s00)\$210,500.00\$172,573.70\$172,573.70N/AN/ATurctural engineering tower load tower load tower load tower fold\$12,600.00\$12,000.0						
(greater than 500')Notice: Estimate adjusted and locked because line has been superseded. ***N/AN/AStructural engineering tower load study for well documented tower\$12,600.00\$12,000.00N/AN/AN/AStructural engineering tower load study for well documented tower\$12,600.00\$12,000.00N/AN/AN/AStructural engineering tower load study for well documented tower\$12,600.00\$12,000.00N/AN/AN/AStructural engineering tower load study for well documented tower\$12,600.00\$12,000.00N/AN/AN/AStudy for well documented tower\$802,100.00\$902,875.70N/A\$172,573.70N/ATotal for all\$2,762,523.28\$2,555,567.40N/A\$1,416,225.73N/A	Tower (includes, for example, those with candelabras and/or stacked	\$421,000.00	\$568,302.00	contractor was needed due to original contractor was unable to complete by deadline. The new contractor will complete stacked antenna install with helicopter, quote includes cost for helicopter. Project quote is WVIZ	N/A	N/A
engineering tower load study for well documented tower \$	(greater than	\$210,500.00	\$172,573.70	Notice: Estimate adjusted and locked because line has been superseded.	\$172,573.70	N/A
Total for all \$2,762,523.28 \$2,555,567.40 N/A \$1,416,225.73 N/A	engineering tower load study for well documented	\$12,600.00	\$12,000.00	N/A	N/A	N/A
	Sub-total	\$802,100.00	\$902,875.70	N/A	\$172,573.70	N/A
		\$2,762,523.28	\$2,555,567.40	N/A	\$1,416,225.73	N/A

Components

Description	File Name	
Tower Helicopter Lift	Information not provided.	
Minor tower reinforcement /modifications	Information not provided.	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Information not provided.	
Tall Tower (greater than 500')	Component Description:	This component consists a few of
		items structural study/report, towe rigging, structural tower
		modifications, and the install of interim antenna
		transmission line. The quote is also attached.
	Amount:	\$172,573.70
Structural engineering tower load study for well documented tower	Information not provided.	

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 Co Justificati
Outside Professional Services	\$55,990.00	\$56,750.00		\$30,813.19	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$975.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A

Prepare and or review reimbursement form	\$2,630.00	\$7,500.00	Required to revise and resubmit Form 399 at the request of the FCC and respond to multiple requests for additional information and documentation regarding reimbursement requests	\$6,248.25	Required to revise and resubmit 399 at the request o the FCC
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$900.00	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$1,366.00	N/A
Project management of the transition	\$25,280.00	\$23,000.00	Osborn Engineering Estimate attached. \$21,000 Time \$ 2,000 Reimbursable \$23,000 Total	\$21,323.94	N/A
Sub-total	\$55,990.00	\$56,750.00	N/A	\$30,813.19	N/A
Total for all systems	\$2,762,523.28	\$2,555,567.40	N/A	\$1,416,225.73	N/A

Components

Actual Information Description	File Name
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.

Perform engineering study		
for new channel assignment and antenna development	Component Description:	Total Power Output Calculations for final configuration
	Amount:	\$75.00
	Component Description:	WVIZ Assignment -
		Review of
		Population Loss,
		Preliminary
		Antenna
		Comparison (TUA- C4-08) and
		Potential Interfering
		Stations 1.5
		\$225.00
	Amount:	\$225.00
	Component Description:	WVIZ Repack Call
		and Data Review
		1.5 \$225.00
	Amount:	\$225.00
	Component Description:	WVIZ - Review of
		Proposed Dielectric
		Antenna Pattern
		and Subsequently
		Revised Pattern.
		Conference Call to
		Discuss Status and Options 3.0 \$450.00
	Amount:	\$450.00 \$450.00
Address transition timing	Information not provided.	
and coordination issues w/ other stations and wireless		
Prepare and or review reimbursement form		
	Component Description:	Legal Services on
		5-2-2017 Review of
		Widelity catalog with client
	Amount:	\$156.00

Component Description:	Review of FCC Requested 399 Changes, Conference Call and Preparation 4.0 \$600 Services provided by engineer Benjamin Pidek \$600.00
Component Description:	Legal Services on 8-4-2017 \$117 Rev of 399 revision request 8-7-2017 \$117 Rev add documentation 8- 11-2017 \$41.25 File amended 399 8-11-2017 \$312 Review amended 399 8-17-2017 \$117 Resp client regard CORES \$704.25
Component Description: Amount:	See attached cover letter. \$558 is the amount of this invoice related to Prepare and or Review Reimbursement form \$558.00
Component Description: Amount:	Review of and Reponse to WVIZ 399 Questions .5 \$75.00 \$75.00

Component Description: Amount:	- Preliminary Widelity Cost Spreadsheet for WVIZ 1.0 \$150.00 \$150.00
Component Description:	See attached Cover Letter and invoice marked as requested. Prepare and or Review Reimbursement \$186.00
Component Description:	6-14-2017 \$195 Resp to client re reimbursement 6- 19-2017 \$117 Resp to client re 399 6- 20-2017 \$195 Review Draft Reimburse App 6- 28-2017 \$624 Review 399 narr conf call & follow up \$1,131.00
Component Description:	Legal Services on 7-5-2017 \$117 Resp to client re empl. time reimb 7- 6-2017 \$156 Review empl. time exhibit 7-10-2017 \$49.50 File forms 7- 10-2017 \$468 Rev final 399 and confirm to file \$790.50

Component Description:	See attached cover letter and invoice marked as requested. \$273.00 is the portion of this invoice relating to Prepare and or Review Reimbursement Form \$273.00
Component Description:	-Help Prepare 399 1.0 \$150.00 - Review of 399 1.0 \$150.00 - 399 Narrative Review and Conference Call 2.0 \$300.00 - 399 Questions1.0 \$150.00 \$750.00
Component Description:	Review and categorize past invoices to provide information required for reimbursement Invoice reissued to include Tax ID and who did the work \$75.00
Component Description: Amount:	See attached Cover Letter with invoice marked as requested. Prepare and or Review Reimbusement \$604.50

	Component Description:	See attached cover letter. \$195.00 is the amount of this invoice related to Prepare and or Review Reimbursement Form \$195.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Prepare CP Application for WVIZ 6.0 \$900.00
Prepare request for Special Temporary Authorization	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description:	Legal Services on 6-7-2017 \$117 Review of public notice & email to client 6-20-2017 \$117 Review draft construction permit modification appliecation and associated emails
	Amount:	\$234.00

Component Description:	See attached cover letter. \$328.50 is the portion of this invoice related to Outside Professional Services Attorney Fees Prepare and File FCC Form 2100 (main) Construction Permit. \$328.50
Component Description:	Includes revised cover letter correcting typo in amount of cost as requested. Legal Services 9-27-2017 \$78 Memo to client reports due for CP holders and second filing window notice \$78.00
Component Description:	See attached cover letter. \$296.50 is the amount of this invoice related to Outside Professional Services Attorney Fees Prepare and File FCC Form 2100 (main) Construction Permit. \$296.50

	Component Description: Amount:	Legal Services on 2-10-2017 \$78 email exchange with client regarding channel change \$78.00
	Component Description:	See attached cover letter and invoice marked as requested. \$39 is the portion of this invoice related to Outside Professional Services Attorney Fees Prepare and File FCC Form 2100 (main) Construction Permit. \$39.00
	Component Description:	Legal Services on 7-24-2017 \$195 Review of CP authorizations
	Amount:	\$195.00
	Component Description:	Legal Services on 5-3-2017 \$117 email exchanges with consulting engineer regarding FCC release of TV study update
	Amount:	\$117.00
Project management of the transition		

Component Description: Amount:	Initial invoice for Project Management Services per Osborn Engineering with estimate attached. \$8,400.00
Component Description: Amount:	Second invoice for Project Management per Osborn Engineering estimate attached. \$915.00
Component Description: Amount:	Interim payment for project management based on vendor estimate previously submitted. \$750.00
Component Description: Amount:	Project manager to coordinate antenna shipping and installation. Review project timeline with all stakeholders, onsite meeting. \$1,639.18
Component Description: Amount:	Third payment for Project Management per Osborn Engineering estimate previously submitted. \$2,610.00

Component Description: Amount:	Interim invoice for Project Management per vendor quote previously submitted \$225.00
Component Description: Amount:	Project Management Services per estimate previously submitted \$675.00
Component Description: Amount:	Interim payment for project management based on vendor estimate previously submitted \$825.00
Component Description: Amount:	Interim invoice for Project Management per vendor quote previously submitted \$2,584.76
Component Description: Amount:	Repack Project Management Services \$2,325.00

Component Description:	Project
	management,
	progress calls,
	schedule aux
	antenna sweep
	calls.
Amount:	\$375.00

Other Expenses

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$159,622.24	\$151,972.24		\$94,630.36	
Employee Time	\$102,019.43	\$102,019.43	Employee Time Estimate Updated 1- 15-18.pdf	\$70,582.40	N/A
MVPD Notification of Channel Change	\$1,935.00	\$1,935.00	This was the only vendor that could preform notification at this price on the needed timeline.	\$1,935.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$3,900.00	N/A	\$3,900.00	N/A
Non-zoning permits	\$1,000.00	\$1,000.00	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

Equipment Delivery and Handling Charges	\$28,117.81	\$28,117.81	Shipping and offloading for transmitter and main, switch and interim antennas and transmission lines. See attached quotes.	\$18,212.96	N/A
Equipment Storage	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Sub-total	\$159,622.24	\$151,972.24	N/A	\$94,630.36	N/A
Total for all systems	\$2,762,523.28	\$2,555,567.40	N/A	\$1,416,225.73	N/A

Components

Actual Information	
Description	File Name

Employee Time		
	Component Description:	See attached cover letter and invoice updated per request. This invoice is for the period 10-1-2017 through 9-30-2018. Attached is detailed labor rate calculation for the period along with individual hours and pay stubs. Also revised estimate.
	Amount:	\$41,871.90
	Component Description:	Invoice as requested, summary of hours to be reimbursed by position, labor rate calculation, individual time records, paystubs for the first date and last date for which reimbursement is requested. \$28,710.50
MVPD Notification of Channel Change	Component Description:	Vendor provided MVPD Notification Service \$1,935.00
DTV Medical Facility Notification	Amount: Component Description: Amount:	Provide Medical Notification Service \$3,900.00
Non-zoning permits	Information not provided.	

Disposal Costs (for equipment and other waste, net of any salvage value)Information not provided.Equipment Delivery and Handling ChargesComponent Description:See attached cover letter. Reimbursement is requested for the down payment of the amount related to Equipment Delivery and Handling Main Antenna and Transmission Line \$4,185.00Amount:Component Description:ForkLift to unload transmission Line \$4,185.00Component Description:ForkLift to unload transmission Line \$4,185.00Amount:Component Description:ForkLift to unload transmission Line \$4,185.00Amount:Scissor Lift for the installition of the transmister components, transmission line, and switch. \$986.47	equipment and other waste, net of any salvage value) Equipment Delivery and Handling Charges Component Description: See attached cover letter. Reimbursement is requested for the down payment of the amount related to Equipment Delivery and Handling Main Antenna and Transmission Line \$4,185.00 Component Description: ForkLift to unload transmitter and associated components into the building. \$538.68 Component Description: Scissor Lift for the installition of the transmitter components, transmission line, and switch.			
Handling ChargesComponent Description:See attached cover letter. Reimbursement is requested for the down payment of the amount related to Equipment Delivery and Handling Main Antenna and Transmission Line \$4,185.00Amount:Component Description:ForkLift to unload transmitter and associated components into the building. \$538.68Component Description:Scissor Lift for the installition of the transmitter components, transmission line, and switch.	Handling ChargesComponent Description:See attached cover letter. Reimbursement is requested for the down payment of the amount related to Equipment Delivery and Handling Main Antenna and Transmission Line \$4,185.00Amount:Component Description:ForkLift to unload transmitter and associated components into the building. \$538.68Component Description:Scissor Lift for the installition of the transmitter components, transmission line, and switch.	equipment and other waste, net of any salvage	Information not provided.	
Component Description:ForkLift to unload transmitter and associated components into the building.Amount:\$538.68Component Description:Scissor Lift for the installition of the transmitter components, transmission line, and switch.	Component Description: ForkLift to unload transmitter and associated components into the building. Amount: \$538.68 Component Description: Scissor Lift for the installition of the transmitter components, transmission line, and switch.			letter. Reimbursement is requested for the down payment of the amount related to Equipment Delivery and Handling Main Antenna and Transmission Line
transmitter and associated components into the building. \$538.68Amount:\$538.68Component Description:Scissor Lift for the installition of the transmitter components, transmission line, and switch.	transmitter and associated components into the building. \$538.68Amount:\$538.68Component Description:Scissor Lift for the installition of the transmitter components, transmission line, and switch.		Amount:	\$4,185.00
Amount: \$538.68 Component Description: Scissor Lift for the installition of the transmitter components, transmission line, and switch.	Amount: \$538.68 Component Description: Scissor Lift for the installition of the transmitter components, transmission line, and switch.		Component Description:	transmitter and associated components into
installition of the transmitter components, transmission line, and switch.	installition of the transmitter components, transmission line, and switch.		Amount:	-
			Component Description:	installition of the transmitter components, transmission line,
			Amount:	

	Component Description:	See attached cover letter/invoice/quote. Reimbursement is requested for the second payment of the amount related to Equipment Delivery and Handling Main Antenna and Transmission Line
	Amount:	\$4,185.00
	Component Description: Amount:	See attached cover letter, quote and invoice for shipping for interim antenna and transmission line. \$7,586.50
	Component Description: Amount:	See attached cover letter and invoice for shipping for necessary switch \$731.31
Equipment Storage	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	

Cost	Grand Total			
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$2,762,523.28	\$2,555,567.40	\$1,416,225.73

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. The above-named entity. 	
		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.	Christian Siebeneck Chief Technologist
	07/01/2019

Attachments