



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **61216** | Service: **DTV** | Call **WHIZ-TV** | Channel: **30 (UHF)** |
ID:
File **0000027921** | Sign:
Number:
FRN: **0032272452** | Date **05/20**
Submitted: **/2020**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
SOUTHEASTERN OHIO TELEVISION SYSTEM	Henry C Littick 629 Downard Road Zanesville, OH 43701 United States	+1 (740) 452-5431	hlittick@whizmediagroup.com	General Partnership

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Kevin J Buente <i>Chief Engineer</i> <i>Southeastern Ohio Television System</i>	Kevin Buente 629 Downard Road Zanesville, OH 43701 United States	+1 (740) 452-5431	kbuente@whizmediagroup.com

**Broadcaster
Information
and
Transition
Plan**

Question	Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	Install new Tx, and interim antenna. Switch over to interim antenna with existing Tx. Install new top mount antenna, plumb RF to new antenna. Test.

Transmitters

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

**Primary
Transmitter**

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	Sigma CD
	Year	2001
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	50 kW

**Primary
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	ULXTE-40
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	25.3 kW
	Justification for New Transmitter	Gates Air unable to retune old IOT transmitter.

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes

	Description	Labor and parts to supply power to WHIZ transmitter.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	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
Mask Filter	40kW UHF, 6-Sections, 3db Ybrid, Channel 30
Estimated Shipping	Shipping
Estimated Tax	Tax
RF Test Load	40kW broadband UHF Testing Load
Installation and Proof	Install and Proof of Performance of new transmitter system.

Antennas

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

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels	40
	Design power capacity in use	100.0 %
	Lower Limit	479.00 MHz
	Upper Limit	632.00 MHz
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	620.0 kW

Manufacturer	
Model	TFU-O4-10 /40H-1-T
Year	2006

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	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	506.0 kW
	Manufacturer	

Model	ATW16H2-ETOX-30H
Year	2019
Justification for New Antenna	Existing antenna can not meet pattern requirements of assigned channel.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	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?	
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

**Primary
Antenna**

Other Antenna Cost Not Listed
Information 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	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels/Bays	16
	Lower Limit	470.00 MHz
	Upper Limit	700.00 MHz
	Design power capacity in use	95.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	500.0 kW
	Manufacturer	
	Model	230ECN-16- 30/40
	Year	2019

	Justification for New Antenna	Move ch.40 over to interim antenna to replace current top mount antenna with new ch. 30 top mount antenna.
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Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	No

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

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

Primary Transmission Line**Existing Transmission Line**

Section	Question	Response
Existing Transmission Line Description	Type of change	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 Line Manufacturer and Type	Manufacturer	Dielectric
	Type	Rigid
	Diameter	7 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	585 feet per run

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Line Sweep and Tune	Tune Elbow Complexes to correct Channel
Rigid Transmission Line - Copper	Rigid transmission line piece to connect existing line to antenna

Interim Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Flexible Air
	Diameter	5 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	491 feet per run
	Justification for New Transmission Line	Provide RF to interim aux antenna that is being rented.

Interim Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
EIA Flanges	6-1/8 in EIA Female Flange with gas barrier for 5-inch air HELIAX (HJ9-series).

Ground Kit	Grounding kit, qty. 1, 24-inch cable with 1-hole factory attached lug for 5-inch coax
Hoisting Grip	Hoisting Grip for 5-inch coaxial cables
threaded rod kit	3/8-inch threaded rod kit. Includes qty 5 24-inch rod, ceiling mounting plate, nuts /washers for use with EWG or HELIAX.
threaded rod kit	3/8-inch threaded rod kit. Includes qty 5 12-inch rod, ceiling mounting plate, nuts /washers for use with EWG or HELIAX.
Half inch hardware	1/2-inch hardware, kit of 10, with 1-1/4-inch fillister-head bolts, lock washers and nuts.
Hoisting Grip Kit	Hoisting grip hanger kit to attach HELIAX hoisting grips to tower. Includes 18-inches of chain, 12-inch x 12-inch turnbuckle, and two shackles. One required for each hoisting grip and one hoisting grip required for each 200-feet of vertical run
Round member adapter	Round member adapter for 4 to 5-inch round members. Kit of 10. Stainless steel clamps to mount 1/2 to 4-inch cable hangers to round support members. Two each are required for 3 and 4-inch cable hangers.
Standard Hangers	Standard hangers, kit of 10, for 5-inch coaxial cable and EW20 HELIAX waveguide
Wall Feed Through	Wall/Roof Feed Thru, Single Entrance, for 5-inch cable

**Tower
Equipment
And
Rigging
Costs**

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

**Primary
Tower**

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	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 Registration	Do you have a tower registration number?	Yes
	ASR Number	1232923
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	39° 55' 42.0" N-
	Longitude (NAD83)	081° 59' 07.0" W-
	Overall Structure Height	502.95 feet
	Support Structure Height	459.97 feet
	Ground Elevation Above Mean Sea Level (AMSL)	908.13 feet

	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	Southeastern Ohio Television System
	Date Constructed	06/19/2002

**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
183304	WZVL	FM

Primary Tower

Tower Modification Costs

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

Primary Tower

Tower Rigging Costs

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

**Primary
Tower**

Other Tower Expenses Not Listed

Information not provided.

**Outside
Professional Services Costs**

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	595
	Explanation	WHIZ-TV requires the aid of outside project management services in order to fulfill the requirements of the repack. WHIZ-TV does not have sufficient resource capacity and expertise in house to handle all of the reimbursement repack tasks.
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
	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)	Yes
	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
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Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
DowTherm Removal	Coolant for existing transmitter has to be properly disposed of.

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	Yes
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	No
	Does this relocation require Equipment Storage?	No
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses	Other Expenses Not Listed Information not provided.
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Cost Information

Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTE-40	\$1,237,161.86	\$1,049,734.56		\$1,049,469.32	
Estimated Tax	<i>\$0.00</i>	\$0.00	N/A	\$0.00	N/A
Estimated Shipping	<i>\$0.00</i>	\$0.00	N/A	\$0.00	N/A
Other Electrical Service: Labor and parts to supply power to WHIZ transmitter.	<i>\$28,948.72</i>	\$28,948.72	Please see WHIZ-TV Primary Transmitter - Electrical Revision Justification Cover Letter	\$28,948.72	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$9,949.83	per Estimated Cost Justification WHIZ-110-1st Primary Transmitter - Transformer 3-phase /480v - 150 KVA v0	\$9,949.81	N/A

UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$775,172.87	per Estimated Cost Justification WHIZ-110- 1st Primary Transmitter - UHF Liquid Cooled Solid State 21-31 kW v1	\$774,907.67	N/A
Installation and Proof	\$69,219.31	\$69,219.31	Estimated Cost Justification WHIZ-110- 1st Primary Transmitter - Installation and Proof v0	\$69,219.29	N/A
RF Test Load	\$20,637.08	\$20,637.08	Estimated Cost Justification WHIZ-110- 1st Primary Transmitter - RF Test Load v0	\$20,637.08	N/A
Mask Filter	\$145,806.75	\$145,806.75	Estimated Cost Justification WHIZ-110- 1st Primary Transmitter - Mask Filter v0	\$145,806.75	N/A
Sub-total	\$1,237,161.86	\$1,049,734.56	N/A	\$1,049,469.32	N/A
Total for all systems	\$3,296,178.01	\$2,196,162.04	N/A	\$1,856,568.38	N/A

Components

Actual Information
Description

File Name

Estimated Tax	Information not provided.	
Estimated Shipping	Information not provided.	
Other Electrical Service: Labor and parts to supply power to WHIZ transmitter.	Component Description: Amount:	Bill to date: Build and install \$19,493.16 Component Description: Amount:
Transformer 3 phase/480v - 150 KVA	Component Description: Amount:	WHIZ-110-1st Primary Transmitter - Transformer 3- phase/480v - 150 KVA \$3,826.85 Component Description: Amount:
	Component Description: Amount:	WHIZ-110-1st Primary Transmitter - Transformer 3- phase/480v - 150 KVA \$3,061.48 Component Description: Amount:
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW		

Component Description:	ULXTE-40 Transmitter
Amount:	\$240,912.75

Component Description:	ULXTE-40 Transmitter
Amount:	\$221,554.56

Component Description:	"A. Transmitter B. Mask Filter System C. RF Test Load D. Electrical E. Installation & Proof"
Amount:	\$224,472.80

Component Description:	Mount new panel tub to wall near main switchgear.
Amount:	\$4,162.18

Component Description:	1 of: Shurflo 2088- 594-144 Industrial Automatic
Amount:	\$124.66

Component Description:	2 of: SHURFLO 2442356 Hose Adapter
Amount:	\$32.52

Component Description:	ULXTE-40 Transmitter
Amount:	\$70,640.45

	Component Description:	1 of: BestEquip 3T Prylever Bar
	Amount:	\$107.99
	Component Description:	SITE SURVEY, ADVANCED TIER 2
	Amount:	\$13,164.93
Installation and Proof	Component Description:	WHIZ-110-1st Primary Transmitter - Installation and Proof
	Amount:	\$21,298.24
	Component Description:	WHIZ-110-1st Primary Transmitter - Installation and Proof
	Amount:	\$21,298.24
	Component Description:	WHIZ-110-1st Primary Transmitter - Installation and Proof
	Amount:	\$26,622.81

RF Test Load	<table> <tr> <td data-bbox="719 174 1023 208">Component Description:</td><td data-bbox="1161 174 1353 322">WHIZ-110-1st Primary Transmitter - RF Test Load</td></tr> <tr> <td data-bbox="719 338 826 371">Amount:</td><td data-bbox="1161 338 1278 371">\$7,937.34</td></tr> <tr> <td data-bbox="719 477 1023 510">Component Description:</td><td data-bbox="1161 477 1353 624">WHIZ-110-1st Primary Transmitter - RF Test Load</td></tr> <tr> <td data-bbox="719 640 826 674">Amount:</td><td data-bbox="1161 640 1278 674">\$6,349.87</td></tr> <tr> <td data-bbox="719 779 1023 813">Component Description:</td><td data-bbox="1161 779 1353 927">WHIZ-110-1st Primary Transmitter - RF Test Load</td></tr> <tr> <td data-bbox="719 943 826 976">Amount:</td><td data-bbox="1161 943 1278 976">\$6,349.87</td></tr> </table>	Component Description:	WHIZ-110-1st Primary Transmitter - RF Test Load	Amount:	\$7,937.34	Component Description:	WHIZ-110-1st Primary Transmitter - RF Test Load	Amount:	\$6,349.87	Component Description:	WHIZ-110-1st Primary Transmitter - RF Test Load	Amount:	\$6,349.87
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Amount:	\$6,349.87												
Mask Filter	<table> <tr> <td data-bbox="719 1102 1023 1135">Component Description:</td><td data-bbox="1161 1102 1326 1249">WHIZ-110-1st Primary Transmitter - Mask Filter</td></tr> <tr> <td data-bbox="719 1265 826 1299">Amount:</td><td data-bbox="1161 1265 1294 1299">\$56,079.53</td></tr> <tr> <td data-bbox="719 1404 1023 1438">Component Description:</td><td data-bbox="1161 1404 1326 1552">WHIZ-110-1st Primary Transmitter - Mask Filter</td></tr> <tr> <td data-bbox="719 1568 826 1601">Amount:</td><td data-bbox="1161 1568 1294 1601">\$44,863.61</td></tr> <tr> <td data-bbox="719 1706 1023 1740">Component Description:</td><td data-bbox="1161 1706 1326 1854">WHIZ-110-1st Primary Transmitter - Mask Filter</td></tr> <tr> <td data-bbox="719 1870 826 1904">Amount:</td><td data-bbox="1161 1870 1294 1904">\$44,863.61</td></tr> </table>	Component Description:	WHIZ-110-1st Primary Transmitter - Mask Filter	Amount:	\$56,079.53	Component Description:	WHIZ-110-1st Primary Transmitter - Mask Filter	Amount:	\$44,863.61	Component Description:	WHIZ-110-1st Primary Transmitter - Mask Filter	Amount:	\$44,863.61
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Amount:	\$44,863.61												

**Cost
Information**

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna 230ECN-16- 30/40	\$187,852.04	\$173,320.80		\$173,320.80	
UHF - High Power, Side Mount, broadband panel, 16 bay,, 500 kW input, directional,, elliptically or circularly polarized	<i>\$164,702.04</i>	\$164,702.04	Please see WHIZ-280- Interim Antenna - UHF High Power Side Mount Direction, E- POL Cost Increase Justification Cover Letter V.0	\$164,702.04	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$8,618.76	Please see WHIZ-280- Interim Antenna - Side Mount Brackets Cost Increase Justification Cover Letter V.0	\$8,618.76	N/A
Primary Antenna ATW16H2- ETOX-30H	\$296,230.00	\$287,750.00		\$157,268.69	
Sweep test of existing antenna	\$6,730.00	\$6,250.00	N/A	\$0.00	N/A

UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$281,500.00	N/A	\$157,268.69	N/A
Sub-total	\$484,082.04	\$461,070.80	N/A	\$330,589.49	N/A
Total for all systems	\$3,296,178.01	\$2,196,162.04	N/A	\$1,856,568.38	N/A

Components

Actual Information	
Description	File Name
UHF - High Power, Side Mount, broadband panel, 16 bay,, 500 kW input, directional,, elliptically or circularly polarized	<p>Component Description: Interim Antenna i230ECN-16-30/40</p> <p>Amount: \$76,010.50</p> <p>Component Description: 50% Payment for interim antenna only listed in attachment "Antenna Quote Side.pdf"</p> <p>Amount: \$76,010.50</p> <p>Component Description: Interim Antenna</p> <p>Amount: \$88,691.54</p>

Side mount brackets for high power antennas (if not included in antenna base cost)	<div> <div> Component Description: Amount: </div> <div> WHIZ-280-Interim Antenna - Side Mount Brackets \$3,980.00 </div> </div> <div> <div> Component Description: Amount: </div> <div> 50% deposit for side mounts for interim antenna. \$3,980.00 </div> </div> <div> <div> Component Description: Amount: </div> <div> WHIZ-280-Interim Antenna - Side Mount Brackets \$4,638.76 </div> </div>
Sweep test of existing antenna	Information not provided.
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	<div> <div> Component Description: Amount: </div> <div> ATW16H2-ETOX \$14,273.00 </div> </div> <div> <div> Component Description: Amount: </div> <div> Trasar Antenna \$42,819.00 </div> </div> <div> <div> Component Description: Amount: </div> <div> ATW16H2-ETOX \$57,357.69 </div> </div> <div> <div> Component Description: Amount: </div> <div> 30% deposit of top mount antenna. \$51,441.00 </div> </div> <div> <div> Component Description: Amount: </div> <div> Trasar Antenna \$42,819.00 </div> </div>

Cost
Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$51,555.00	\$40,232.57		\$40,232.56	
Wall Feed Through	\$0.00	\$0.00	N/A	\$0.00	N/A
Standard Hangers	\$0.00	\$0.00	N/A	\$0.00	N/A
Round member adapter	\$0.00	\$0.00	N/A	\$0.00	N/A
Hoisting Grip Kit	\$0.00	\$0.00	N/A	\$0.00	N/A
Half inch hardware	\$0.00	\$0.00	N/A	\$0.00	N/A
threaded rod kit	\$0.00	\$0.00	N/A	\$0.00	N/A
Ground Kit	\$0.00	\$0.00	N/A	\$0.00	N/A
EIA Flanges	\$0.00	\$0.00	N/A	\$0.00	N/A
Flexible Air Transmission Line - dielectric, 5"	\$51,555.00	\$40,232.57	see Estimated Cost Justification WHIZ-380-Interim Transmission Line - 3_Flexible Air v1	\$40,232.56	N/A
Hoisting Grip	\$0.00	\$0.00	N/A	\$0.00	N/A
Primary Transmission Line	\$9,709.11	\$9,709.11		\$7,819.11	

Rigid Transmission Line - Copper	\$3,005.99	\$3,005.99	See attached WHIZ-TV Justification for Primary Transmission Line - Other Expenses - Dielectric invoice 696014	\$1,115.99	N/A
Line Sweep and Tune	\$6,703.12	\$6,703.12	per Estimated Cost Justification WHIZ-310- Primary Transmission Line - Line Sweep and Tune v0	\$6,703.12	N/A
Sub-total	\$61,264.11	\$49,941.68	N/A	\$48,051.67	N/A
Total for all systems	\$3,296,178.01	\$2,196,162.04	N/A	\$1,856,568.38	N/A

Components

Actual Information Description	File Name
Wall Feed Through	Component Description: 50% Deposit Amount: \$137.50
Standard Hangers	Component Description: 50% Deposit Amount: \$481.75
Round member adapter	Component Description: 50% Deposit Amount: \$134.30

Hoisting Grip Kit	Component Description: 50% Deposit Amount: \$225.00
Half inch hardware	Component Description: 50% Deposit Amount: \$345.76
threaded rod kit	Information not provided.
Ground Kit	Information not provided.
EIA Flanges	Information not provided.
Flexible Air Transmission Line - dielectric, 5"	Component Description: Kit, Dehydrator Amount: \$145.01 Component Description: WHIZ-380-Interim Transmission Line - 3" Flexible Air Amount: \$18,479.23 Component Description: WHIZ-380-Interim Transmission Line - 3" Flexible Air Amount: \$21,608.32
Hoisting Grip	Information not provided.
Rigid Transmission Line - Copper	Component Description: Other Freight and Shipping Amount: \$1,115.99
Line Sweep and Tune	Component Description: WHIZ-310-Primary Transmission Line - Line Sweep and Tune Amount: \$6,703.12

Cost Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$1,353,800.00	\$480,700.00		\$398,700.00	
Tower Helicopter Lift	<i>\$65,000.00</i>	\$65,000.00	Please see WHIZ Worldwide Communications Consultants Proposal 191029201	\$65,000.00	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$12,000.00	see Estimated Cost Justification WHIZ-410- Existing Primary Tower - Tower Mapping, Undocumented Tower v0	\$12,000.00	N/A
Serious tower reinforcement /modifications	\$1,052,000.00	\$321,700.00	Please see WHIZ-TV Proposal 190426-201 Worldwide Comm and WHIZ Proposal 190530-201	\$321,700.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$82,000.00	N/A	\$0.00	N/A
Sub-total	\$1,353,800.00	\$480,700.00	N/A	\$398,700.00	N/A
Total for all systems	\$3,296,178.01	\$2,196,162.04	N/A	\$1,856,568.38	N/A

Components

Actual Information		
Description	File Name	
Tower Helicopter Lift	Component Description:	Helicopter Cost
	Amount:	\$65,000.00
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Component Description:	Tower Mapping
	Amount:	\$12,000.00

Serious tower reinforcement /modifications	Component Description: Amount:	10% deposit - Tower modification \$14,740.00
	Component Description: Amount:	65% deposit due \$110,825.00
	Component Description: Amount:	Tower Service 65% deposit of 147,400.00 \$95,810.00
	Component Description: Amount:	Balance Due- Tower Service \$36,850.00
	Component Description: Amount:	Design and Drawings \$3,800.00
	Component Description: Amount:	Balance Due \$42,625.00
	Component Description: Amount:	10% deposit \$17,050.00
Tall Tower (greater than 500')	Information not provided.	

Cost
Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$127,625.00	\$129,225.00		\$29,757.90	
DowTherm Removal	<i>\$800.00</i>	\$800.00	N/A	\$0.00	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	\$0.00	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	\$0.00	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$0.00	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	\$875.00	N/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$375.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$0.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$0.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	\$0.00	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$0.00	N/A
Project management of the transition	\$94,010.00	\$99,675.00	Please see Widelity Strategic Support proposal	\$28,507.90	N/A

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$0.00	N/A	\$0.00	N/A
Sub-total	\$127,625.00	\$129,225.00	N/A	\$29,757.90	N/A
Total for all systems	\$3,296,178.01	\$2,196,162.04	N/A	\$1,856,568.38	N/A

Components

Actual Information	
Description	File Name
DowTherm Removal	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	Information not provided.
Prepare request for Special Temporary Authorization	<p>Component Description: Technical portion of request for special temporary authority</p> <p>Amount: \$875.00</p>

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	<p>Component Description:</p> <p>Technical portion of application for license to cover construction</p> <p>Amount:</p> <p>\$375.00</p>
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.
Perform engineering study for new channel assignment and antenna development	Information not provided.
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Prepare and or review reimbursement form	Information not provided.

Project management of the transition

Component Description: Project Management
Amount: \$1,911.05

Component Description: Project Management
Amount: \$4,500.20

Component Description: Project Management
Amount: \$230.00

Component Description: Project Management
Amount: \$2,812.65

Component Description: Project Management
Amount: \$4,095.40

Component Description: Project Management
Amount: \$5,619.35

Component Description: Project Management
Amount: \$1,081.25

Component Description: Project Management
Amount: \$1,869.20

Component Description: Project Management
Amount: \$6,388.80

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.
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Cost Information

Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$32,245.00	\$25,490.00		\$0.00	
MVPD Notification of Channel Change	<i>\$5,000.00</i>	\$5,000.00	N/A	\$0.00	N/A
Develop and air announcement of upcoming channel change	<i>\$13,500.00</i>	\$13,500.00	N/A	\$0.00	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$2,000.00</i>	\$2,000.00	N/A	\$0.00	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	\$0.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$4,800.00	N/A	\$0.00	N/A
Sub-total	\$32,245.00	\$25,490.00	N/A	\$0.00	N/A
Total for all systems	\$3,296,178.01	\$2,196,162.04	N/A	\$1,856,568.38	N/A

Components

Information not provided.

Cost Information	Grand Total		
		Predetermined Cost Estimate	Estimated Cost
			Actual Cost
	Total for all systems	\$3,296,178.01	\$2,196,162.04
			\$1,856,568.38

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

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

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

<p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Kevin J Buente <i>Chief Engineer</i></p> <p>05/20/2020</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 	

4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Kevin J Buente <i>Chief Engineer</i></p> <p>05/20/2020</p>

Certification	Section	Question	Response
	Submission of Final Allocation or Accounting Information Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents 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. 2. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 	

3. The above-named entity certifies that all costs identified as "actual costs" herein accurately represent the costs actually paid by the above-named entity, including any discounts, refunds, or rebates.
4. 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.
5. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
6. 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.

Kevin J Buente
Chief Engineer

05/20/2020

Attachments