Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: **68581** | Service: **DTV** | Call Sign: **KTVD** | Channel: **31 (UHF)**

File Number: **0000027983**

FRN: **0001887363** | Date Submitted: **06/11/2019**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
MULTIMEDIA HOLDINGS CORPORATION	Law Department TEGNA Inc. 7950 Jones Branch Drive McLean, VA 22107 United States	+1 (703) 873-6600	lawdept@tegna.com	Corporation

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
Jeffrey Johnson , Johnson . *Vice President Projects* *TEGNA*	Jeffrey Johnson 7950 Jones Branch Drive McLean, VA 22102 United States	+1 (703) 873-6736	jsjohnson@tegna.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.	Yes
Briefly describe transition plan	KTVD will be moving to channel 31 from channel 19. It plans to repurpose the current broadband antenna and transmission line. It requires a new combiner port and a new transmitter. It would cost more to re-tune the existing TX than to purchase a new.

Transmitters

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

Auxiliary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Low Power Backup transmitter
	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	Ranger
	Year	2003
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	1 kW

Auxiliary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	UAXTE 2R37
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	1.2 kW
	Justification for New Transmitter	The old transmitter cannot be re-tuned.

Auxiliary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	100.0 feet
	Other Electrical Service	Yes

	Description	Additional electrical services required for transmitter installation.
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 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

Auxiliary Transmitter

Other Transmitter Cost Not Listed

Information not provided.

Primary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	PWR 60 P2
	Year	2007
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	60 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?	Yes
	Manufacturer	
	Model	ULXT 60
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	51 kW
	Justification for New Transmitter	It will cost more to re-tune the old transmitter with interim transmitter lease pricing than purchasing a new one.

Primary Transmitter

Other Transmitter Costs

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

	Length	100.0 feet
	Other Electrical Service	Yes
	Description	Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.
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 leashold improvement?	Yes
	Size	100.0 square feet
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Transmitter installation	Transmitter installation

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	Retune Existing
	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?	Yes
	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	Top Mount
	Antenna position in stack	Top
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	2
	Number of Panels	48
	Design power capacity in use	50.0 %
	Lower Limit	470.00 MHz

Upper Limit	860.00 MHz
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	1000.0 kW
Manufacturer	Dielectric
Model	TUC-C4SP-12/48U-4-T
Year	2008

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

Facility ID	Call Sign
47903	KCNC-TV

Primary Antenna

Adjustment to Existing Antenna

Section	Question	Response
Sweep Test of Existing Antenna	Do you need a sweep test of existing antenna?	Yes

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	Additional Module
	Number of channels supported	3
	Frequencies of channels supported	RF channel
	Frequency	N/A

Enter a list of RF channel numbers.

RF Channel Number
19
31
35

Primary Antenna

Other Antenna Cost Not Listed

Name	Description
Mask Filter	New mask filter required for new channel.

Auxiliary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Retune Existing
	Antenna Use	Auxiliary (Backup)
	Description of Use	AUX Antenna
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	Yes
	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
Type	Broadband Panel
Number of Stations Supported	2
Number of Panels	36
Design power capacity in use	50.0 %
Lower Limit	470.00 MHz
Upper Limit	860.00 MHz
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	987.0 kW
Manufacturer	Dielectric
Model	TUA-C3-12 /36-1-S
Year	2008

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

Facility ID	Call Sign
47903	KCNC-TV

Auxiliary Antenna

Adjustment to Existing Antenna

Section	Question	Response
Sweep Test of Existing Antenna	Do you need a sweep test of existing antenna?	Yes

Auxiliary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes

Type	Additional Module
Number of channels supported	3
Frequencies of channels supported	RF channel
Frequency	N/A

Enter a list of RF channel numbers.

RF Channel Number
19
31
35

Auxiliary Antenna

Other Antenna Cost Not Listed

Name	Description
Mask Filter	New mask filter required for new channel.

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?	Yes
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	Dielectric
	Type	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	2
	Length	1000 feet per run

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

Facility ID	Call Sign
47903	KCNC-TV

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
TX Line Sweep	Sweep required to verify post-transition channel measures well on existing line.

Auxiliary Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Auxiliary (Backup)
	Description of Use	AUX Line
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	Yes
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	Dielectric
	Type	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	2

	Length	1000 feet per run

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

Facility ID	Call Sign
47903	KCNC-TV

Auxiliary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
TX Line Sweep	Sweep required to verify post-transition channel measures well on existing line.

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?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1058328
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	39° 43' 50.6" N-
	Longitude (NAD83)	105° 13' 55.6" W-
	Overall Structure Height	734.24 feet
	Support Structure Height	620.40 feet
	Ground Elevation Above Mean Sea Level (AMSL)	7115.40 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	LAKE CEDAR GROUP, L. L.C.
Date Constructed	06/01/2009

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
47903	KCNC-TV	DTV

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:	Minor Reinforcements needed

Primary Tower

Tower Rigging Costs

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

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	200
	Explanation	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to $150x200hrs ($30000), a new OES component has been created & funded with part of the $ removed from PM, & "Prepare & or review reimbursement form" has been increased
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	Yes

	Quantity	2
	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	Yes
	Quantity	2
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	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	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	Yes

	Number of Days	10
	Justification	$2,500 per site visit including expenses x 10 days. It is necessary to survey the site, plan the equipment, develop specifications for purchasing, & oversee multiple vendor RF projects. Station does not have available personnel trained in such services.

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Other Legal Services	Other Legal Services related to the DTV Repack
Pre filing site review	outside engineering to review all facilitues
Other Engineering Services	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to $150x200hrs($30000), a new OES component has been created & funded with part of the $ removed from PM, & "Prepare & or review reimbursement form" has been increased

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	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	Yes
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	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

Other Expenses Not Listed

Information not provided.

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 ULXT 60	**$1,203,323.74**	**$1,203,023.74**		**$1,173,425.16**	
Transmitter installation	***$18,345.45***	$18,345.45	Transmitter installation	$18,345.45	N/A
Other -- Building Addition Size: 100.0	***$25,000.00***	$25,000.00	New pad required for heat exchangers, transformers, pumps, etc. Equipment must also be shielded.	$301.42	N/A
Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	***$92,949.50***	$92,949.50	See Encore Electric Quote. The total is 50 cents higher than originally thought due to the "cents" being lopped off on the vendor's quote.	$92,949.50	N/A
3" Rigid Conduit and Wiring (Cost per foot)	$5,200.00	$4,900.00	N/A	N/A	N/A

UHF - Liquid Cooled Solid State Transmitter 51 kW	***$1,061,828.79***	$1,061,828.79	See attached GatesAir quotes and invoices.	$1,061,828.79	The Actual Cost exceeds the Estimated Cost due in part to the inclusion of the Combiner & RF System in this category, as well as sales tax.
Auxiliary Transmitter UAXTE 2R37	**$153,600.00**	**$115,837.89**		**$44,168.95**	
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	$126,000.00	$88,337.89	N/A	$44,168.95	N/A
2" Rigid Conduit and Wiring (Cost per foot)	$2,600.00	$2,500.00	N/A	N/A	N/A
Other Electrical Service: Additional electrical services required for transmitter installation.	***$25,000.00***	$25,000.00	Additional electrical services required for transmitter installation.	N/A	N/A
Sub-total	$1,356,923.74	$1,318,861.63	N/A	$1,217,594.11	N/A
Total for all systems	$3,022,519.40	$2,401,236.29	N/A	$1,439,601.44	N/A

Components

Actual Information Description	File Name	
Transmitter installation	**Component Description:** **Amount:**	Gates inv #US0321815 Stage 1 Filter line install UL20190416jgv1 $18,345.45
Other -- Building Addition Size: 100.0	**Component Description:** **Amount:**	Inv 148630459 KTVD Equipment rental UL20180601jgv1 $301.42
Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	**Component Description:** **Amount:**	KTVD Encore Elec inv #43123 Electrical work UL20180806jg v2 $92,949.50
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 51 kW	**Component Description:** **Amount:**	Inv MAN00269 KTVD Combiner and RF System 45 percent down payment UL20180424jg v1 $92,291.63
	Component Description: **Amount:**	Inv GO10004699-1 KTVD ULXT-60 transmitter 50 percent down payment UL20180424jg v1 $390,798.01

Component Description:	Inv MAN00386 KTVD Combiner and RF System 45 percent payment 2 UL20180424jg v1
Amount:	$92,291.63
Component Description:	Inv US0307804 KTVD ULXT-60 TX balance due UL20180515jgv2
Amount:	$456,327.97
Component Description:	Gates inv #US0320664 Various transmitter parts UL20190416jgv1
Amount:	$3,017.61
Component Description:	Majestic 630000097 v190530pmv1
Amount:	$1,760.00
Component Description:	Transmitter /Components-GatesAir
Amount:	$422,226.60
Component Description:	Gates inv #US0320805 Various transmitter parts UL20190416jgv1
Amount:	$2,042.67

	Component Description: **Amount:**	Inv US0307626 KTVD ULXT-60 TX change order UL20180515jgv1 $23,246.71
	Component Description: **Amount:**	Amazon 31900 v190530pmv1 $52.56
	Component Description: **Amount:**	Deposit on Transmitter $144,324.64
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	**Component Description:** **Amount:**	Gates inv #GO10004858-1 Aux TX 50 pct pmt 1 UL20181030jgv1 $44,168.95
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Electrical Service: Additional electrical services required for transmitter installation.	Information not provided.	

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
Primary Antenna TUC-C4SP-12/48U-4-T	**$730,130.00**	**$170,371.25**		**$78,959.25**	
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	$18,950.00	$18,000.00	N/A	$6,238.00	N/A
Mask Filter	***$73,250.00***	$73,250.00	New mask filter required for new post-transition channel. See attached Dielectric quote.	N/A	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	N/A	N/A
UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, horizontally polarized	$547,000.00	$0.00	Antenna to be repurposed	N/A	N/A

Adding a module to existing combiner (without antenna)	$84,200.00	$72,721.25	3-channel manifold combiner required in order to repurpose existing broadband antenna and broadband transmission line. See attached Dielelctric quote.	$72,721.25	N/A
Auxiliary Antenna TUA-C3-12 /36-1-S	**$134,880.00**	**$129,427.75**		**$80,027.75**	
Mask Filter	***$25,000.00***	$25,000.00	N/A	N/A	N/A
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	$18,950.00	$18,000.00	N/A	N/A	N/A
Adding a module to existing combiner (without antenna)	$84,200.00	$80,027.75	3-channel manifold combiner required in order to repurpose existing broadband antenna and broadband transmission line. See attached Dielelctric quote.	$80,027.75	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	N/A	N/A

UHF â€“ Broadband Panel, Side Mount Auxiliary /Interim, 987 horizontally polarized	***$0.00***	$0.00	N/A	N/A	N/A
Sub-total	$865,010.00	$299,799.00	N/A	$158,987.00	N/A
Total for all systems	$3,022,519.40	$2,401,236.29	N/A	$1,439,601.44	N/A

Components

Actual Information Description	File Name
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	**Component Description:** Die 499005 v190610pmv1 **Amount:** $4,085.00 **Component Description:** Die inv #US0320792 Swivel Hanger and tax UL20190405jgv1 **Amount:** $2,153.00
Mask Filter	Information not provided.
Sweep test of existing antenna	Information not provided.
UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, horizontally polarized	Information not provided.

Adding a module to existing combiner (without antenna)	**Component Description:** **Amount:** **Component Description:** **Amount:**	Die 235024 v190604pmv1 $65,921.25 Die 445002 v190503jgv2 $6,800.00
Mask Filter	Information not provided.	
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	Information not provided.	
Adding a module to existing combiner (without antenna)	**Component Description:** **Amount:** **Component Description:** **Amount:** **Component Description:** **Amount:**	Electron D 201812007 v190507jgv2 $14,106.50 Electron D inv #201812007 Manifold Aux Combiner Install UL20190402jgv1 $14,106.50 Die 235024 v190604pmv1 $65,921.25
Sweep test of existing antenna	Information not provided.	
UHF â€“ Broadband Panel, Side Mount Auxiliary /Interim, 987 horizontally polarized	Information not provided.	

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
Primary Transmission Line	**$6,400.00**	**$6,400.00**		**$0.00**	
TX Line Sweep	***$6,400.00***	$6,400.00	N/A	N/A	N/A
Auxiliary Transmission Line	**$6,400.00**	**$6,400.00**		**$0.00**	
TX Line Sweep	***$6,400.00***	$6,400.00	N/A	N/A	N/A
Sub-total	$12,800.00	$12,800.00	N/A	$0.00	N/A
Total for all systems	$3,022,519.40	$2,401,236.29	N/A	$1,439,601.44	N/A

Components

Information not provided.

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	**$394,800.00**	**$375,000.00**		**$0.00**	
Minor tower reinforcement /modifications	$158,000.00	$150,000.00	N/A	N/A	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	$26,300.00	$25,000.00	N/A	N/A	N/A
Tall Tower (greater than 500')	$210,500.00	$200,000.00	N/A	N/A	N/A
Sub-total	$394,800.00	$375,000.00	N/A	$0.00	N/A
Total for all systems	$3,022,519.40	$2,401,236.29	N/A	$1,439,601.44	N/A

Components

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 Co Justificat
Outside Professional Services	**$268,155.66**	**$270,510.66**		**$47,967.83**	
Other Engineering Services	***$15,000.00***	$15,000.00	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to $150x200hrs ($30000), a new OES component has been created & funded with part of the $ removed from PM, & "Prepare & or review reimbursement form" has been increased	$2,475.00	N/A
Pre filing site review	***$23,500.00***	$23,500.00	N/A	N/A	N/A
Other Legal Services	***$19,260.66***	$19,260.66	Other Legal Services related to the DTV Repack	$12,747.84	N/A

Additional Field Engineering Service, 10 Days	***$25,000.00***	$25,000.00	$2,500 per site visit including expenses x 10 days. It is necessary to survey the site, plan the equipment, develop specifications for purchasing, & oversee multiple vendor RF projects. Station does not have available personnel trained in such services.	N/A	N/A
Comprehensive coverage verification via field study, if needed	$84,200.00	$80,000.00	N/A	N/A	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	$2,105.00	$2,000.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	$2,105.00	$2,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	$7,360.00	$7,000.00	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	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	$5,260.00	$5,000.00	N/A	N/A	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
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	$3,155.00	$3,000.00	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
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	$15,000.00	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to $150x200hrs ($30000), a new OES component has been created & funded with part of the $ removed from PM, & "Prepare & or review reimbursement form" has been increased	$3,637.50	N/A
Project management of the transition	$31,600.00	$30,000.00	It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399s. Station does not have available personnel or personnel trained in project management for such complex projects.	$29,107.49	N/A

Prepare request for Special Temporary Authorization	$4,100.00	$3,000.00	N/A	N/A	N/A
RF Exposure Measurements	$21,050.00	$20,000.00	N/A	N/A	N/A
Sub-total	$268,155.66	$270,510.66	N/A	$47,967.83	N/A
Total for all systems	$3,022,519.40	$2,401,236.29	N/A	$1,439,601.44	N/A

Components

Actual Information Description	File Name	
Other Engineering Services	**Component Description:** **Amount:**	Osborn inv #29838 Other Eng Srvcs UL20190322jgv1 $2,475.00
Pre filing site review	Information not provided.	
Other Legal Services	**Component Description:** **Amount:**	Covington inv #60796723 Various Legal UL20181024jgv1 $4,141.93
	Component Description: **Amount:**	Covington 60801032 v190508pmv1 $1,521.69
	Component Description: **Amount:**	Covington 60801029 v190513pmv1 $164.44

	Component Description: Covington 60805585 v190513pmv1 **Amount:** $4,655.68 **Component Description:** Covington 60805585 v190508pmv1 **Amount:** $4,655.68 **Component Description:** Covington 60801032 v190530jgv2 **Amount:** $1,958.17 **Component Description:** Covington inv #60808553 Various legal thru 180630 UL20190410jgv1 **Amount:** $235.69 **Component Description:** Covington 60801029 v190508pmv1 **Amount:** $164.44 **Component Description:** Covington inv #60805588 Various legal thru 180531 UL20190410jgv1 **Amount:** $1,756.37
Additional Field Engineering Service, 10 Days	Information not provided.
Comprehensive coverage verification via field study, if needed	Information not provided.

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.
ASR modification (prepare FCC Form 854)	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 - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
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.

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	**Component Description:** Osborn inv #29838 Actual Cost Invoices UL20190322jgv1 **Amount:** $437.50 **Component Description:** Osborn inv #28999 Amend 399 Form UL20190301jgv2 **Amount:** $3,200.00

Project management of the transition	**Component Description:** **Amount:**	Inv 29216 KTVD Proj Mgt 180428-180525 UL20180706jg v1 $4,350.00
	Component Description: **Amount:**	Osborn inv #26018 Proj Mgt 170530-170728 UL20181107jg v1 $20,669.99
	Component Description: **Amount:**	Osborn inv #29838 Proj mgt 180526-180629 UL20190322jgv1 $2,362.50
	Component Description: **Amount:**	Osborn inv #28999 Proj mgt 180331-180427 UL20190321jgv1 $1,725.00
Prepare request for Special Temporary Authorization	Information not provided.	
RF Exposure Measurements	Information not provided.	

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	**$124,830.00**	**$124,265.00**		**$15,052.50**	
Disposal Costs (for equipment and other waste, net of any salvage value)	***$25,000.00***	$25,000.00	N/A	N/A	N/A
Non-zoning permits	***$25,000.00***	$25,000.00	N/A	N/A	N/A
Local Zoning	***$750.00***	$750.00	3 cents per $100 of construction cost.	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$11,000.00	N/A	$3,750.00	N/A
FCC Filing Fees - Form 2100 license to cover application	$335.00	$325.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	$195.00	$190.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	***$25,000.00***	$25,000.00	N/A	$8,032.50	N/A

MVPD Notification of Channel Change	***$6,000.00***	$6,000.00	40 hours at $150 per hour to shoot, edit . write and produce promotional information.	N/A	N/A
Develop and air announcement of upcoming channel change	***$6,000.00***	$6,000.00	40 hours at $150 per hour to shoot, edit . write and produce promotional information.	$3,270.00	N/A
Equipment Storage	***$25,000.00***	$25,000.00	N/A	N/A	N/A
Sub-total	$124,830.00	$124,265.00	N/A	$15,052.50	N/A
Total for all systems	$3,022,519.40	$2,401,236.29	N/A	$1,439,601.44	N/A

Components

Actual Information Description	**File Name**	
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
Non-zoning permits	Information not provided.	
Local Zoning	Information not provided.	
DTV Medical Facility Notification	**Component Description:** **Amount:**	RF Notifications inv #1052 Medical Notifications UL20181029jg v1 $3,750.00

FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	
Equipment Delivery and Handling Charges	**Component Description:** **Amount:**	Die 235024 v190604pmv1 $8,032.50
MVPD Notification of Channel Change	Information not provided.	
Develop and air announcement of upcoming channel change	**Component Description:** **Amount:**	2C Media inv #203806 Creation of channel change announcement UL20181016jgv1 $3,270.00
Equipment Storage	Information not provided.	

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$3,022,519.40	$2,401,236.29	$1,439,601.44

Reimbursement Status

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

Certification

Section	Question	Response
Submission of Estimated Expenses Statements	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.	
	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.

	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.	**Jeffrey C Gehman** *Engineering Associate* 06/11/2019

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 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).	
	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.

	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.	
	I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	**Jeffrey C Gehman** *Engineering Associate* 06/11/2019

Attachments