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: **74176** | Service: **DTV** | Call Sign: **WVVA** | Channel: **17 (UHF)**

File Number: **0000027484**

FRN: **0018223693** | Date Submitted: **03/27/2018**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
WVVA LICENSE, LLC Doing Business As: WVVA LICENSE, LLC	P.O. BOX 909 QUINCY, IL 62306 United States	+1 (217) 223-5100	bdreasler@quincyinc.com	Limited Liability Company

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
Tony zumMallen *QCommunications, LLC*	Tony zumMallen 705B SE Melody LN #314 Lees Summit, MO 64063 United States	+1 (816) 729-1177	tony@qcom1.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	Transition from ch 46 to ch 17 and will need an antenna, transmitter and associated gear and systems. The station will need an interim transmitter and antenna system to provide continuous service during the transition.

Transmitters

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

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	Power CD
	Year	2006
	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	ULXTE-72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47 kW
	Justification for New Transmitter	IOT transmitter is not tunable per the manufacturer.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	400.0 feet
	Other Electrical Service	No
	Description	N/A

HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	25 tons
	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
Securirty - Site	This site requires security once the new transmission line and equipment arrive on site to be installed. Estimated length of 4-6 weeks.
Site Survey - TX	Site survey and report are required to be performed before the new transmitter and components installation plan can be finalized.
Disconnect existing Transmitter	Disconnect transmitter and components from existing configuration and move within building to make way for new facilities.
Transmitter - Training	Transmitter training - offsite - 1 week in duration at mfg site.
Sales Tax Equipment-Main TX	Sales tax for equipment- Main transmitter- per quote

Interim Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	UAXTE-12R44
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	10 kW
	Justification for New Transmitter	Interim facility is required to avoid prolonged period of station silence during transition, and station currently has no aux facility to use for interim operation. Extended silent period during transition to new channel is unreasonable.

Interim Transmitter

Other Transmitter Costs

Section	Question	Response

Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	400.0 feet
	Other Electrical Service	No
	Description	N/A
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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	Yes

Interim Transmitter

Other Transmitter Cost Not Listed

Name	Description
Sales Tax-EQ	Est sales tax for equipment per quote

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	Other
	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	Omni-Directional
	ERP: (Effective Radiated Power)	1000.0 kW

Manufacturer	
Model	TFU-24JTH-R-04
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?	No
	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	Broadband Slot
	Number of Stations Supported	1
	Number of Panels/Bays	18
	Lower Limit	470.00 MHz
	Upper Limit	698.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	545.0 kW
	Manufacturer	

	Model	TFU18-JTT /VP-R04
	Year	2017
	Justification for New Antenna	Existing antenna is not tunable to new channel assignment. Adding Vertical component to Primary antenna and do not know of any upgraded pricing as of time of filing.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	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?	Yes
	Broadband or Single Channel?	Broadband
	Feed Line Size	6 1/8 inches inches

Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
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	Horizontal
	Type	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	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	300.0 kW
	Manufacturer	
	Model	TFU-8WB-R
	Year	2017

	Justification for New Antenna	Interim facility is required to avoid prolonged period of station silence during transition, and station currently has no aux facility to use for interim operation. Extended silent period during transition to new channel is unreasonable.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	Feed Line Size	4 1/16 inches
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?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Antenna

Other Antenna Cost Not Listed

Name	Description
FREIGHT-MFG EQ	FREIGHT FROM MFG TO STAGING

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	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 Line Manufacturer and Type	Manufacturer	
	Type	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	176 feet per run

Primary Transmission Line

New Transmission 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
	Type	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	176 feet per run
	Justification for New Transmission Line	Existing line will not operate on new channel assignment per Dielectric sweep test.

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Disconnect existing Interior RF components	Disconnect interior RF transmission line and filters from existing configuration and move within the building to make way for new facilities.

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	4 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	200 feet per run
	Justification for New Transmission Line	Interim facility is required to avoid prolonged period of station silence during transition, and station currently has no aux facility to use for interim operation. Extended silent period during transition to new channel is unreasonable.

Interim Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

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?	Terrain Constrained
	Is this tower currently shared with any other stations?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1254053
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	37° 15' 21.1" N-
	Longitude (NAD83)	081° 10' 53.3" W-
	Overall Structure Height	166.66 feet
	Support Structure Height	124.34 feet

Ground Elevation Above Mean Sea Level (AMSL)	3669.25 feet
Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	WVVA Television, Inc.
Date Constructed	09/18/2006

Primary Tower

Tower Modification Costs

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

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	Terrain constrained
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	934
	Explanation	Scope & significance of project (QMI has multiple stations repacked) require outside management services to augment existing internal personnel to assist turnkey management of and ensure timely and safe execution of channel relocation.
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	4
	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	4
	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	Yes

RF exposure measurements	No
Additional Field Engineering Service	No
Number of Days	N/A
Justification	N/A

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
General Repack Legal Services	See atached Memo - QMI INIvoice Memo for Shared Legal Expenses (Matter 104411 00054) for Form 399
Quarterly reporting	Preparation and submittal of the FCC required quarterly report 387 by PM and attorney.
Vendor Travel expenses	Vendor Travel expenses for working in the field on behalf of the station for the Repack project

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	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
Interim Transmitter UAXTE-12R44	**$568,424.70**	**$542,124.70**		**$210,964.35**	
UHF inside RF system including switching	$147,500.00	$140,000.00	N/A	N/A	N/A
UHF - Air Cooled Solid State Transmitter 10 - 12 kW	$336,500.00	$320,000.00	N/A	$197,357.14	N/A
Switchgear - industrial 800 amp	$38,200.00	$36,300.00	N/A	$1,665.83	N/A
2" Rigid Conduit and Wiring (Cost per foot)	$10,400.00	$10,000.00	N/A	$0.00	N/A
Sales Tax-EQ	***$35,824.70***	$35,824.70	Sales tax-INTERIM TX per Gates Q-73720	$11,941.38	N/A
Primary Transmitter ULXTE-72	**$1,809,088.75**	**$1,726,788.75**		**$465,155.97**	
Sales Tax Equipment-Main TX	***$78,988.75***	$78,988.75	est sales tax for main tx equipment per quote Q-73721	$26,329.58	N/A

Transmitter - Training	***$3,300.00***	$3,300.00	Transmitter training - offsite - 1 week in duration at mfg site.	N/A	N/A
Disconnect existing Transmitter	***$20,000.00***	$20,000.00	Disconnect transmitter and components from existing configuration and move within building to make way for new facilities.	N/A	N/A
Site Survey - TX	***$25,000.00***	$25,000.00	Site survey and report are required to be performed before the new transmitter and components installation plan can be finalized.	N/A	N/A
Securirty - Site	***$17,500.00***	$17,500.00	This site requires security once the new transmission line and equipment arrive on site to be installed. Estimated length of 4-6 weeks.	N/A	N/A

2" Rigid Conduit and Wiring (Cost per foot)	$10,400.00	$10,000.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	$1,473,000.00	$1,400,000.00	N/A	$420,064.70	N/A
Service entrance 3 phase/800 amp/208 volt	$14,400.00	$13,700.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	$38,200.00	$36,300.00	N/A	$14,880.19	N/A
Transformer 3 phase /480v - 300 KVA	$36,800.00	$35,000.00	N/A	$3,881.50	N/A
25 Ton system	$91,500.00	$87,000.00	N/A	N/A	N/A
Sub-total	$2,377,513.45	$2,268,913.45	N/A	$676,120.32	N/A
Total for all systems	$4,043,689.95	$3,688,455.45	N/A	$797,885.19	N/A

Components

Actual Information Description	File Name
UHF inside RF system including switching	Information not provided.

UHF - Air Cooled Solid State Transmitter 10 - 12 kW	**Component Description:** **Amount:**	WVVA-GATES-INTERIM TX INV-GO10004797-1 LINES A,B AND D. $197,357.14
Switchgear - industrial 800 amp	**Component Description:** **Amount:**	WVVA-GATES-INTERIM ELEC-INV GO10004797-1 LINE C. $1,665.83
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Sales Tax-EQ	**Component Description:** **Amount:**	WVVA- GATES-INTERIM-SALES TAX-INV GO10004797-1 $11,941.38
Sales Tax Equipment-Main TX	**Component Description:** **Amount:**	WVVA-Gates-Main-tx-sales-tax-GO10004796-1 $26,329.58
Transmitter - Training	Information not provided.	
Disconnect existing Transmitter	Information not provided.	
Site Survey - TX	Information not provided.	
Securirty - Site	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	**Component Description:** **Amount:**	WVVA-Gates-MAIN-TX - INV GO10004796-1 LINE- A, B and E $420,064.70
Service entrance 3 phase /800 amp/208 volt	Information not provided.	
Switchgear - industrial 800 amp	**Component Description:** **Amount:**	WVVA-Gates-Main-RF-INV GO10004796-1, LINE C $14,880.19
Transformer 3 phase/480v - 300 KVA	**Component Description:** **Amount:**	WVVA-Gates-Main-Elec- INV GO10004796-1, LINE D $3,881.50
25 Ton system	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
Interim Antenna TFU-8WB-R	**$427,317.50**	**$230,520.00**		**$6,720.00**	
FREIGHT-MFG EQ	***$2,227.50***	$2,227.50	FREIGHT EQ MFG TO STAGING PER INVOICE-93049	$2,227.50	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	$189,500.00	$180,000.00	system zeroed out the previous actions	N/A	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	$189,500.00	$4,492.50	***System Notice: Estimate adjusted and locked because line has been superseded. ***TOOL ERASED EST PRICE AND ALL PREVIOUS TRANSACTION FOR THE INTERIM ANTENNA	$4,492.50	N/A

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	$5,260.00	$5,000.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	$23,150.00	$22,000.00	N/A	N/A	N/A
Elbow complex, broadband, at antenna input, per 4 1/16. feedline (if needed)	$10,950.00	$10,400.00	N/A	N/A	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$0.00	N/A
Primary Antenna TFU18-JTT /VP-R04	**$205,690.00**	**$204,400.00**		**$74,392.88**	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	$5,260.00	$5,000.00	N/A	N/A	N/A

Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	$13,700.00	$13,000.00	N/A	$5,386.50	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$2,880.00	N/A
UHF - High Power Top Mount One Station antenna elliptically or circularly polarized	***$180,000.00***	$180,000.00	per Catalog of costs for replacement antenna. 399 tool did not populate a standard predetermined cost. Not sure why this is a standardized antenna replacement. Lowered to the Catalog min $180,000	$66,126.38	N/A
Sub-total	$633,007.50	$434,920.00	N/A	$81,112.88	N/A
Total for all systems	$4,043,689.95	$3,688,455.45	N/A	$797,885.19	N/A

Components

Actual Information Description	File Name

FREIGHT-MFG EQ	**Component Description:** **Amount:**	WVVA-DIE-ANT-INTERIM-SALES TAX- PER INV-93049 LINE 19 - ADDED ORDER CONF 488001 $2,227.50
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	Information not provided.	
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	**Component Description:** **Amount:**	WVVA-DIE-ANT-INV 93049 LINE 1 $4,492.50
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Elbow complex, broadband, at antenna input, per 4 1/16. feedline (if needed)	Information not provided.	
Sweep test of existing antenna	Information not provided.	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	

Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	**Component Description:**	ELBOW - DEPOSIT 10 PERCENT WVVA
	Amount:	$1,197.00
	Component Description:	ELBOW MAIN DEPOSIT INV 35 PERCENT WVVA
	Amount:	$4,189.50
Sweep test of existing antenna	**Component Description:**	SWEEP MAIN ANTENNA DEPOSIT INV WVVA
	Amount:	$2,240.00
	Component Description:	SWEEP MAIN ANT DEPOSIT INV 10 PERCENT WVVA
	Amount:	$640.00
UHF - High Power Top Mount One Station antenna elliptically or circularly polarized	**Component Description:**	MAIN ANT DEPOSIT 35 PERCENT INV WVVA
	Amount:	$51,431.63
	Component Description:	MAIN ANTENNA DEPOSIT INV 10 PERCENT WVVA
	Amount:	$14,694.75

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	**$14,800.00**	**$14,000.00**		**$11,171.50**	
Flexible Air Transmission Line - dielectric, 4"	$14,800.00	$14,000.00	N/A	$11,171.50	N/A
Primary Transmission Line	**$48,052.00**	**$46,292.00**		**$5,307.75**	
Rigid Transmission Line - copper, 6 1/8"	$35,552.00	$33,792.00	N/A	$5,307.75	N/A
Disconnect existing Interior RF components	***$12,500.00***	$12,500.00	Disconnect interior RF transmission line and filters from existing configuration and move within the building to make way for new facilities.	N/A	N/A
Sub-total	$62,852.00	$60,292.00	N/A	$16,479.25	N/A
Total for all systems	$4,043,689.95	$3,688,455.45	N/A	$797,885.19	N/A

Components

Actual Information Description	File Name

Flexible Air Transmission Line - dielectric, 4"	**Component Description:**	INTERIM LINE INV 45 PERCENT-LINES 2 AND 18
	Amount:	$5,027.18
	Component Description:	WVVA DIE-LINE-EQ-INV 93049 LINES 2 AND 18-FINAL. TOOL ZEROED OUT INTERIM ANT
	Amount:	$1,117.14
	Component Description:	WVVA- INTERIM LINE - 2nd 45 percent inv- lines 2 and 18
	Amount:	$5,027.18
Rigid Transmission Line - copper, 6 1/8"	**Component Description:**	MAIN LINE DEPOSIT 35 PERCENT INV WVVA
	Amount:	$18,577.13
	Component Description:	MAIN LINE - DEPOSIT 10 PERCENT INV WVVA
	Amount:	$5,307.75
Disconnect existing Interior RF 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	**$591,600.00**	**$562,000.00**		**$0.00**	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$400,000.00	N/A	N/A	N/A
Structural engineering tower load study for well documented tower	$12,600.00	$12,000.00	N/A	N/A	N/A
Minor tower reinforcement /modifications	$158,000.00	$150,000.00	N/A	N/A	N/A
Sub-total	$591,600.00	$562,000.00	N/A	$0.00	N/A
Total for all systems	$4,043,689.95	$3,688,455.45	N/A	$797,885.19	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 Cost Justificatio
Outside Professional Services	**$318,637.00**	**$302,815.00**		**$24,172.74**	
Vendor Travel expenses	***$21,965.00***	$21,965.00	Reimbursable Vendor Travel expenses for working in the field on behalf of the station for the Repack project - see quote for estimated expenses. QC-17010	$1,449.41	N/A
Quarterly reporting	***$7,000.00***	$7,000.00	Preparation and submittal of the FCC required quarterly report 387 by PM and attorney.	N/A	N/A
General Repack Legal Services	***$10,000.00***	$10,000.00	See attached memo-QMI Repack Invoice Memo for Shared Legal Expenses (Matter 10441100054) for Form 399-	$791.83	N/A

Comprehensive coverage verification via field study, if needed	$84,200.00	$80,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	$14,720.00	$14,000.00	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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	$5,260.00	$5,000.00	N/A	$3,519.00	N/A
Project management of the transition	$147,572.00	$140,100.00	N/A	$18,412.50	N/A
Prepare and or review reimbursement form	$2,630.00	$2,500.00	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

Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$0.00	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
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	$1,580.00	$1,500.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	$8,200.00	$6,000.00	N/A	N/A	N/A
Sub-total	$318,637.00	$302,815.00	N/A	$24,172.74	N/A
Total for all systems	$4,043,689.95	$3,688,455.45	N/A	$797,885.19	N/A

Components

Actual Information Description	File Name	
Vendor Travel expenses	**Component Description:** **Amount:**	WVVA- PM-Travel exp -Items-1010,1014,1015 - INV QC17-148 $1,449.41
Quarterly reporting	Information not provided.	

General Repack Legal Services

Component Description:	Brooks-WVVA General SEPT17 inv - 1 of 7 so 6 are at 80.57 and WVVA is at 80.58 to be to the penny.
Amount:	$80.58
Component Description:	Brooks-WVVA-General-AUG17 inv
Amount:	$117.85
Component Description:	Brooks WVVA-General -NOV17 inv 3946865 - first 6 are at 221.57 WVVA is the last of 7 and is at 221.58 to be to the penny for the inv.
Amount:	$221.58
Component Description:	BROOKS-WVVA-JAN-18 INV 3949058
Amount:	$49.50
Component Description:	Brooks-WVVA-General JUNE17 inv
Amount:	$266.44
Component Description:	Brooks-WVVA-General JULY17-inv
Amount:	$275.00
Component Description:	Brooks-General-MAY17-inv
Amount:	$190.85

	Component Description: **Amount:**	Brooks-WVVA-General OCT17 inv- first 6 are at 322.28 last 1 of 7 WVVA is at 322.32 to be to the penny for inv 3945578 $322.32
Comprehensive coverage verification via field study, if needed	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:** **Amount:**	LEGAL JUNE17 WVVA $359.00
	Component Description: **Amount:**	LEGAL 4-17-INV $470.00
	Component Description: **Amount:**	LEGAL AUG17 $470.00
	Component Description: **Amount:**	LEGAL MAY17 WVVA $453.00
	Component Description: **Amount:**	LEGAL JULY17 WVVA $1,626.00
	Component Description: **Amount:**	LEGAL SEPT17 WVVA $141.00
Project management of the transition	**Component Description:** **Amount:**	WVVA- PM-INV-QC17-148 - PM from Mar thru Aug-17. Please delete previous INV QC17-135, submitted as it is a deposit invoice submitted prior to the FAQ 12/20/17. $18,412.50
	Component Description: **Amount:**	PM-WVVA DEPOSIT INV $70,007.50

Prepare and or review reimbursement form	Information not provided.	
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Perform engineering study for new channel assignment and antenna development	**Component Description:** **Amount:**	ENGR NEW CH ASSIGN WVVA INV $2,100.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	**Component Description:** **Amount:**	ENGR- CP - INV $1,970.00
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare request for Special Temporary Authorization	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 Cos Justificatio
Other Expenses	**$60,080.00**	**$59,515.00**		**$0.00**	
MVPD Notification of Channel Change	***$5,000.00***	$5,000.00	Required FCC notification.	N/A	N/A
Develop and air announcement of upcoming channel change	***$15,000.00***	$15,000.00	Required FCC announcements and good will public relations must we upheld. The production airing and disseminating of these announcements are fundamental to our operations.	N/A	N/A
Equipment Storage	***$10,000.00***	$10,000.00	Expecting multiple staggered equipment deliveries from different vendors and need to store and stage new equipment prior to installation date. Anticipate from 6-24 months of storage time.	N/A	N/A

Equipment Delivery and Handling Charges	***$8,000.00***	$8,000.00	Transport, forklift rental and handling fees from staging area to transmitter site.	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$10,000.00***	$10,000.00	Rent 40 yard dumpster with multiple pickups. Estimated 6-months on site. Potential hazardous waste management issues.	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	$335.00	$325.00	N/A	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$11,000.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	$195.00	$190.00	N/A	N/A	N/A
Sub-total	$60,080.00	$59,515.00	N/A	$0.00	N/A
Total for all systems	$4,043,689.95	$3,688,455.45	N/A	$797,885.19	N/A

Components

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$4,043,689.95	$3,688,455.45	$797,885.19

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.	**BRADY DREASLER** *CORPORATE DIRECTOR OF ENGINEERING* 03/27/2018

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.	**BRADY DREASLER** *CORPORATE DIRECTOR OF ENGINEERING* 03/27/2018

Attachments