

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File Number:	74176 000002		Call Sign:	WVVA	Channel: 17 (UHF)
FRN: 00 1	18223693	Date Submitted:	11/13 /2019		

Applicant Name, Type, and Contact Information

Information

WVVA LICENSE, LLCP.O. BOX+1 (217)bdreasler@quincyinc.LimitedDoing Business As:909223-5100comLiabilityWVVA LICENSE, LLCQUINCY,IL 62306CompanyUnitedStatesStatesStates	1	Applicant	Address	Phone	Email	Applicant Type
		Doing Business As:	909 QUINCY, IL 62306 United	. ,		Liability

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contact Name and Information					
Contact Information	Applicant	Address	Phone	Email		
	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	Question	Response
Information and Transition Plan	Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
	Briefly describe transition plan	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	Existing Transmitter Information					
Transmitter	Section	Question	Response			
	Existing Transmitter Description	Type of change	Purchase New			
		Use	Primary (Main)			
		Description of Use	N/A			
		Ownership	Owned			
		Owner	N/A			
		Site	N/A			
		Is this transmitter currently shared with another station?	No			
		Is this transmitter currently in operating condition?	Yes			
	Existing Transmitter	Manufacturer				
	Manufacturer and Type	Model	Power CD			
		Year	2006			
		Туре	Inductive Output Tube			
		IOT Power Type	Two			
		Power Capacity	60 kW			

Existing Transmitter Information

Primary	New Transmitter Costs					
Transmitter	Section	Question	Response			
	New Transmitter	Use	Primary (Main)			
		Change Type	Purchase New			
		Is this a request for upgraded equipment?	Yes			
		Manufacturer				
		Model	ULXTE-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 Other Transmitter Costs

Transmitter	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
	Туре	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 Mame

Name	Description
Transmitter - Training	Transmitter training - offsite - 1 week in duration at mfg site.
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.
Disconnect existing Transmitter	Disconnect transmitter and components from existing configuration and move within building to make way for new facilities.
Sales Tax Equipment-Main TX	Sales tax for equipment- Main transmitter- per quote
Site Survey - TX	Site survey and report are required to be performed before the new transmitter and components installation plan can be finalized.

Interim	New Transmitter Costs					
Transmitter	Section	Question	Response			
	New Transmitter	Use	Interim			
		Description of Use	N/A			
		Change Type	Purchase			
		Manufacturer				
		Model	ULXTE-30			
		Transmitter Type	Solid State			
		Solid State Cooling	Air Cooled			
		Solid State Power capacity	19.2 kW			
		Justification for New Transmitter	Interim facility is required to avoid station silence during transition, no aux facility to use for interim operation. Extended silent period during transition to new channel is unreasonable. 10-5-18 - AMENDED 399 TO REFLECT TX CHANGE DUE TO ENGR MOD.			

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
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A
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 Rela	ated Expenses	Do you have antenna related expenses?	Yes

Primary	Existing Antenna Information			
Antenna	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing antenna shared with another station or stations?	No	
		Is the existing antenna directional?	No	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	No	
	Existing Antenna	Class	Full Power	
	Manufacturer and Type	Mounting	Top Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	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	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Primary (Main)	
		Description of Use	N/A	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	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	
		Туре	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.

Other Antenna Costs Primary

•		
A	nten	na

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Туре	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	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 Other Antenna Cost Not Listed

Antenna Information not provided.

Interim	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
		Is antenna directional?	Yes	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Broadband Slot	
		Number of Stations Supported	1	
		Number of Panels/Bays	8	
		Lower Limit	470.00 MHz	
		Upper Limit	698.00 MHz	
		Design power capacity in use	100.0 %	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	300.0 kW	
		Manufacturer		
		Model	TFU-8WB-R	
		Year	2017	
			1	

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

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Antenna

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	В
	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	

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

Primary	Existing Transmission Line			
Transmissio	n Line Section	Question	Response	
	Existing Transmission Line Description	Type of change	Purchase New	
		Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing transmission line shared with another station or stations?	No	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission	Manufacturer		
	Line Manufacturer and Type	Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	176 feet per run	

Primary	New Transmission Line			
Transmissio	section	Question	Response	
	New Transmission Line Costs	Use	Primary (Main)	
		Description of Use	N/A	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	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	Other Transmission Line Expenses Not Listed		
Transmissio	n Line	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.	

ransmissio	n Line Section	Question	Response
	New Transmission Line	Use	Interim
	Costs	Description of Use	N/A
		Change Type	Purchase New
		Туре	Flexible Air
		Diameter	4 inches
		Segment Length	N/A
		Other Segment Length	
		Number of parallel runs	1
		Length	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

Other Transmission Line Expenses Not Listed

Transmission not provided.

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

marv	Existing	Tower	
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Primary	Existing Tower			
Tower	Section	Question	Response	
	Existing Tower Description	Type of change	Modify Existing	
		Tower Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Is this tower consider Complex?	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	Do you have a tower registration number?	Yes	
	Registration	ASR Number	1254053	
	Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	37° 15' 21.1" N-	
1983))	1983))	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 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 Rigging Costs

Tower	Section	Question	Response
	Tower Rigging Costs	Complex Tower	Terrain constrained
	Helicopter Services Required	Are helicopter services required?	No

Other Tower Expenses Not Listed

Primary Tower

Tower

Information not provided.

Outside	Section	Question	Response
Professional		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	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	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 Se	ervice No
Number of Days	N/A
Justification	N/A

Other Professional Services Expenses Not Listed Outside Professional Services Costs Description **General Repack Legal Services** See atached Memo - QMI INIvoice Memo for Shared Legal Expenses (Matter 104411 00054) for Form 399 Preparation and submittal of the FCC **Quarterly reporting** required quarterly report 387 by PM and attorney. Vendor Travel expenses for working in the **Vendor Travel expenses** field on behalf of the station for the Repack project

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	No
		Non-zoning permits	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 Not Listed

Expenses Information not provided.

Transmitters

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmitter ULXTE-30	\$1,209,017.76	\$1,060,074.90		\$409,987.32	
Sales Tax- EQ	\$35,824.70	\$35,824.70	Sales tax- INTERIM TX per Gates Q- 73720	\$11,941.38	N/A
UHF inside RF system including switching	\$147,500.00	\$140,000.00	N/A	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$10,400.00	\$10,000.00	N/A	\$0.00	N/A
UHF - Air Cooled Solid State Transmitter 19.2 kW	\$640,593.06	\$640,593.06	This is to amend the 399 Interim TX to more closely replicate the existing station contour during the interim operations that was paid on 3-28- 18.	\$197,357.14	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	\$3,331.66	N/A

UHF - Air Cooled Solid State Transmitter 10 - 12 kW	\$336,500.00	\$197,357.14	***System Notice: Estimate adjusted and locked because line has been superseded.	\$197,357.14	N/A
Primary Transmitter ULXTE-72	\$1,809,088.75	\$1,747,184.32		\$1,404,839.18	
Switchgear - industrial 800 amp	\$38,200.00	\$56,695.57	Per Quote #73721, Line C totals \$44,640.57, PLUS the added change orders: Q- 82352 PO 20727; Q- 82564 PO 20742; Q- 83542 PO 20818; Q- 84797 PO 20924 totaling \$12,055	\$56,695.57	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.	\$14,000.00	N/A

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
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
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
Transmitter - Training	\$3,300.00	\$3,300.00	Transmitter training - offsite - 1 week in duration at mfg site.	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$10,400.00	\$10,000.00	N/A	N/A	N/A
Transformer 3 phase /480v - 300 KVA	\$36,800.00	\$35,000.00	N/A	\$11,644.49	N/A

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,400,000.00	N/A	\$1,296,169.54	N/A
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$13,700.00	N/A	N/A	N/A
25 Ton system	\$91,500.00	\$87,000.00	N/A	N/A	N/A
Sub-total	\$3,018,106.51	\$2,807,259.22	N/A	\$1,814,826.50	N/A
Total for all systems	\$4,873,783.01	\$4,106,519.22	N/A	\$2,065,870.20	N/A

Components

File Name	
Component Description: Amount:	WVVA- GATES- INTERIM-SALES TAX-INV GO10004797-1 \$11,941.38
Information not provided.	
Information not provided.	
Component Description: Amount:	WVVA-GATES- INV 2ND INV GO10004797-2 LINES A B AND D- q-73720 \$197,357.14
	Component Description: Amount: Information not provided. Information not provided. Component Description:

Switchgear - industrial 800		
amp	Component Description:	WVVA-GATES-
		INTERIM ELEC-
		INV GO10004797-
		1 LINE C.
	Amount:	\$1,665.83
	Component Description:	WVVA-GATES
		INT 2ND INV
		GO10004797-2
		ULXTE-30 LINE C
	Amount:	\$1,665.83
UHF - Air Cooled Solid		
State Transmitter 10 - 12 kW	Component Description:	WVVA-GATES-
		INTERIM TX INV-
		GO10004797-1
		LINES A,B AND D.
	Amount:	\$197,357.14

Switchgear - industrial 800 amp		
	Component Description:	WVVA - Gates Air - RF Accessories -
		INV US0322512
		Line C - 3rd
		invoice - PO
		20027 - Q-73721
	Amount:	\$14,880.19
	Component Description:	WVVA change orders: Q-82352
		PO 20727; Q-
		82564 PO 20742;
		Q-83542 PO
		20818; Q-84797
		PO 20924
	Amount:	\$12,055.00
	Component Description:	WVVA GATES
		2ND INV
		GO10004796-2
		LINE C
	Amount:	\$14,880.19
	Component Description:	WVVA-Gates-
		Main-RF-INV
		GO10004796-1,
		LINE C
	Amount:	\$14,880.19
Site Survey - TX		
	Component Description:	WVVA-SURVEY-
		INV-QC18-031
	Amount:	\$14,000.00
Sales Tax Equipment-Main		
ТХ	Component Description:	WVVA-Gates-
		Main-tx-sales-tax-
		GO10004796-1
	Amount:	\$26,329.58

Disconnect existing Transmitter	Information not provided.	
Securirty - Site	Information not provided.	
Transmitter - Training	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Transformer 3 phase/480v - 300 KVA	Component Description:	WVVA - Gates Air - Electrical - INV US0322512 Line E - PO 20027 Q- 73721
	Amount:	\$3,881.49
	Component Description:	WVVA GATES MAIN 2ND INV GO10004796-2-
	Amount:	LINE D \$3,881.50
	Component Description:	WVVA-Gates- Main-Elec- INV
	Amount:	GO10004796-1, LINE D \$3,881.50

UHF - Liquid Cooled Solid		
State Transmitter 35 - 50 kW	Component Description:	WVVA-GATES MAIN- 2ND INV GO10004796-2 - LINE A B E AND CHANGE ORDER TO MASK Q-77979
	Amount:	\$436,245.43
	Component Description:	Gates Air INV #3 - US0322512 LIne items A and B; change order Q- 77979, PO 20339
	Amount:	\$333,782.24
	Component Description:	WVVA - Gates - Main TX - INV US0331604 - PO 20027 Q-73721 Lines A and E. Plus Freight \$13762.82
	Amount:	\$106,077.17
	Component Description:	WVVA-Gates- MAIN-TX - INV GO10004796-1 LINE- A, B and E
	Amount:	\$420,064.70
Service entrance 3 phase /800 amp/208 volt	Information not provided.	
25 Ton system	Information not provided.	

Antennas

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna TFU-8WB-R	\$616,817.50	\$90,952.50		\$47,152.50	
FREIGHT- MFG EQ	\$2,227.50	\$2,227.50	FREIGHT EQ MFG TO STAGING PER INVOICE-93049	\$2,227.50	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
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
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$20,216.25	***System Notice: Estimate adjusted and locked because line has been superseded.***	\$20,216.25	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$20,216.25	***System Notice: Estimate adjusted and locked because line has been superseded.***	\$20,216.25	N/A
Primary Antenna TFU18-JTT /VP-R04	\$205,690.00	\$204,400.00		\$74,392.88	

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
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,880.00	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
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
Sub-total	\$822,507.50	\$295,352.50	N/A	\$121,545.38	N/A
Total for all systems	\$4,873,783.01	\$4,106,519.22	N/A	\$2,065,870.20	N/A

Components

Actual Information Description	File Name	
FREIGHT-MFG EQ		
	Component Description:	WVVA-DIE-AN INTERIM-SAL TAX- PER INV 93049 LINE 19 ADDED ORDE CONF 488001
	Amount:	\$2,227.50
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.	
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	Component Description:	WVVA-DIE-AN INV 93049 LIN 1
	Amount:	\$4,492.50
UHF - Lower Power Side		
Mount, One station - 200-500 kW, horizontally polarized	Component Description:	INTERIM ANT LINE1 WVVA
	Amount:	\$20,216.25
UHF - Lower Power Side Mount, One station - 200-500	Component Description:	WVVA-INTER
kW, horizontally polarized		ANT line 1- 2n 45 percent inv
		•

UHF - High Power Top Mount One Station antenna elliptically or circularly polarized	Component Description:	MAIN ANTENNA DEPOSIT INV 10 PERCENT WVVA
	Amount:	\$14,694.75
	Component Description:	MAIN ANT DEPOSIT 35 PERCENT INV WVVA
	Amount:	\$51,431.63
Sweep test of existing antenna		
	Component Description:	SWEEP MAIN ANT DEPOSIT INV 10 PERCENT WVVA
	Amount:	\$640.00
	Component Description:	SWEEP MAIN ANTENNA DEPOSIT INV WVVA
	Amount:	\$2,240.00
Elbow complex, broadband, at antenna input, per 6 1/8.		
feedline (if needed)	Component Description:	ELBOW MAIN DEPOSIT INV 35 PERCENT WVVA
	Amount:	\$4,189.50
	Component Description:	ELBOW - DEPOSIT 10 PERCENT WVVA
	Amount:	\$1,197.00
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	

Transmission Line

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
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	\$65,577.50		\$5,307.75	
Rigid Transmission Line - copper, 6 1/8"	\$35,552.00	\$53,077.50	Actual costs per invoices.	\$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	\$79,577.50	N/A	\$16,479.25	N/A
Total for all systems	\$4,873,783.01	\$4,106,519.22	N/A	\$2,065,870.20	N/A

Components

Actual Information	
Description	

File Name

Flexible Air Transmission Line - dielectric, 4"	Component Description: Amount:	INTERIM LINE INV 45 PERCENT- LINES 2 AND 18 \$5,027.18
	Component Description: Amount:	WVVA DIE-LINE- EQ-INV 93049 LINES 2 AND 18- FINAL. TOOL ZEROED OUT INTERIM ANT \$1,117.14
	Component Description: Amount:	WVVA- INTERIM LINE - 2nd 45 percent inv- lines 2 and 18 \$5,027.18

Rigid Transmission Line -		
copper, 6 1/8"	Component Description:	MAN00091 Line #4: this request is for 35% of the main tx copper line. The first 10% already reimbursed under INV MAN00086.
	Amount:	\$18,577.13
	Component Description:	MAIN LINE DEPOSIT 35 PERCENT INV WVVA
	Amount:	\$18,577.13
	Component Description:	MAIN LINE - DEPOSIT 10 PERCENT INV
	Amount:	WVVA \$5,307.75
Disconnect existing Interior RF components	Information not provided.	

Tower Equipment and Rigging Costs

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$591,600.00	\$562,000.00		\$4,920.00	
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	\$4,920.00	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$400,000.00	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	\$4,920.00	N/A
Total for all systems	\$4,873,783.01	\$4,106,519.22	N/A	\$2,065,870.20	N/A

Components

Actual Information	
Description	File Name

Structural engineering tower load study for well documented tower	Component Description:	WVVA-PJFORD ANALYSIS- INV
	Amount:	206072 \$1,800.00
	Component Description:	WVVA- TOWER MAP - FORD IN\
	Amount:	206593 \$3,120.00
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Information not provided.	
Minor tower reinforcement /modifications	Information not provided.	

Outside Professional Services

Cost Information

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

Description Outside Professional	Predetermined Cost Estimate \$318,637.00	Estimated Cost \$302,815.00	Estimated Cost Justification	Actual Cost \$108,099.07	Actual Co Justificati
Services 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	\$7,689.41	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-	\$2,585.66	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
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
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
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
Project management of the transition	\$147,572.00	\$140,100.00	N/A	\$94,305.00	N/A
Sub-total	\$318,637.00	\$302,815.00	N/A	\$108,099.07	N/A
Total for all systems	\$4,873,783.01	\$4,106,519.22	N/A	\$2,065,870.20	N/A

Components

Actual Information	
Description	File Name

	Vendor Travel expenses		
		Component Description:	WVVA - QCOMM - PM TRVL- JAN- JUN 19 - INV QC19-
		Amount:	063 \$6,240.00
		Component Description:	WVVA- PM-Travel exp -ltems- 1010,1014,1015 -
		Amount:	INV QC17-148 \$1,449.41
-	Quarterly reporting	Information not provided.	
	General Repack Legal		
	Services	Component Description:	Brooks General Repack Legal Services period ending June 30, 2017. \$266.45 is WVVA portion of total invoice.
		Amount:	\$266.45
		Component Description:	Brooks General Repack legal services for period ending March 31, 2018. \$28.28 is WVVA portion of total invoice.
		Amount:	\$28.28
		Component Description:	Brooks- General Repack Legal Services for period ending July 31, 2017. \$275.00 is WVVA portion of total invoice amount.
		Amount:	\$275.00

Component Description:	Brooks General Repack Legal Services for period ending August 31, 2017. \$177.86 is 1 /7th of total invoice which is WVVA portion. \$117.86
Component Description:	Brooks General Repack legal services for period ending April 30, 2018. \$28.29 is WVVA portion of total invoice \$28.29
Component Description:	Brooks General Repack Legal Services for period ending November 30, 2017. \$221.58 is WVVA portion of total invoice. \$221.58
Component Description:	Brooks General Repack Legal services for period ending May 31, 2017. \$190.85 is WVVA portion of total invoice. \$190.85

Component Description:	Brooks General Repack legal services for period ending February 28, 2018. \$28.28 is WVVA portion of total invoice. \$28.28
Component Description: Amount:	Brooks General Repack Legal Services for period ending January 31, 2018. \$35.36 is WVVA of total invoice \$35.36
Component Description: Amount:	Brooks - General Repack Legal for period ending October 31, 2017. \$322.29 is WVVA portion of total invoice. \$322.29
Component Description: Amount:	Brooks General Repack legal services for period ending December 31, 2017. \$40.28 is WVVA portion of total invoice \$40.28
Component Description: Amount:	WVVA-BROOKS- INV-3951200- MAR18 \$49.50

Component Description: Amount:	BROOKS-WVVA- JAN-18 INV 3949058 \$49.50
Component Description: Amount:	WVVA BROOKS AUG18 - INV 3957123 \$198.00
Component Description:	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 - 10-16 ADDED MEMO \$322.32
Component Description: Amount:	WVVA - BROOKS JULY18 INV 3955736 \$99.00
Component Description: Amount:	WVVA-BROOKS- MAY18 - INV3953763 \$49.50
Component Description: Amount:	Brooks-General- MAY17-GEN INV 3940170 -ONE SEVENTH- SEE MEMO \$190.85

Component Description: Amount:	Brooks-WVVA- General-AUG17 inv \$117.85
Component Description: Amount:	WBNG-BROOKS APRIL18 INV 3952583 \$99.00
Component Description: Amount:	WVVA- BROOKS- DEC18-INV3961877 \$198.00
Component Description: Amount:	Brooks-WVVA- General JUNE17 inv 3941325 - ONE SEVENTH SEE MEMO \$266.44
Component Description:	Brooks-WVVA- General JULY17- inv 3942230 - ONE SEVENTH SEE
Amount:	MEMO \$275.00
Component Description: Amount:	Brooks-WVVA General SEPT17 inv 3944708 \$90.64
Component Description: Amount:	WVVA-BROOKS- OCT-19- INV3959632 \$198.00

	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 inv10-16- ADDED BROOKS MEMO \$221.58
Comprehensive coverage verification via field study, if needed	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
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.	

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	LEGAL MAY17 WVVA \$453.00
	Component Description: Amount:	LEGAL 4-17-INV \$470.00
	Component Description: Amount:	LEGAL SEPT17 WVVA \$141.00
	Component Description: Amount:	LEGAL AUG17 \$470.00
	Component Description: Amount:	LEGAL JUNE17 WVVA \$359.00
	Component Description: Amount:	LEGAL JULY17 WVVA \$1,626.00
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	

Project management of the transition	Component Description: Amount: Component Description:	WVVA-QCOMM- PM 1THRU3-18 - INV QC18-051 \$7,875.00 WVVA - QCOMM PM 4THRU7-180
	Amount:	INV QC18-065 \$3,015.00
	Component Description: Amount:	WVVA-QCOMM PM- JAN - JUN 19 - INV QC19-063 \$50,250.00
	Component Description:	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:	WVVA-PM-AUG- DEC18- INV QC19- 021
	Amount:	\$6,150.00
	Component Description: Amount:	PM-WVVA DEPOSIT INV \$70,007.50
	Component Description: Amount:	WVVA-PM- 8THRU12-INV QC18-023 \$8,602.50

Other Expenses

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Co Justificat
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 - Special Temporary Authorization request	\$195.00	\$190.00	N/A	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
Sub-total	\$60,080.00	\$59,515.00	N/A	\$0.00	N/A
Total for all systems	\$4,873,783.01	\$4,106,519.22	N/A	\$2,065,870.20	N/A

Components

Information not provided.

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$4,873,783.01	\$4,106,519.22	\$2,065,870.20	

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 	
		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.	
an au name	are, under penalty of perjury, that I am thorized representative of the above- ed applicant for the Authorization(s) fied above.	BRADY DREASLER CORPORATE DIRECTOR OF ENGINEERING
		11/13/2019

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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).	
		 The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 	
		2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.	
		3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	

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

8.	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.	
9.	The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ied above.	BRADY DREASLER CORPORATE DIRECTOR OF ENGINEERING 11/13/2019

Attachments