

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility	51102	Service: DTV	Call	KOZK	Channel: 16 (UHF)
ID:			Sign:		
File	000002	7902			
Number:					
FRN: 00	02487056	Date	07/11		
		Submitted:	/2017		

Applicant Name, Type, and Contact Information

Applicant Information

BOARD OF GOVERNORS OFTammy Wiley 901 S.+1TAMMYWILEY@MISSOURISTATE. EDUGovernment EntityOFNATIONAL836-MISSOURIAVE.5878STATESPRINGFIELD, United States	Applicant	Address	Phone	Email	Applicant Type
	GOVERNORS OF MISSOURI STATE UNIVERSITY Doing Business As: BOARD OF GOVERNORS OF MISSOURI STATE	901 S. NATIONAL AVE. SPRINGFIELD, MO 65897	(417) 836-		

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contact Name and Inf	ormation		
Contact Information	Applicant	Address	Phone	Email

Matthew Anderson Sanderford , Jr President Marsand, Inc. 211 Pack Saddle Trail Weatherford, TX 76088	Matthew Sanderford 211 Pack Saddle Trail Weatherford, TX 76088	+1 (817) 783-5566	engineering@marsand. com
	United States		

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	See attached narrative transition plan.

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 and Type	Manufacturer			
		Model	DHD20P1		
		Year	2003		
		Туре	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power Capacity	5.5 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?	No			
		Manufacturer				
		Model	THU9-4			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	6.5 kW			
		Justification for New Transmitter	Existing transmitter is not supported by manufacturer for retune.			

Primary Other Transmitter Costs

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

PrimaryOther Transmitter Cost Not ListedTransmitterInformation not provided.

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

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?	No	
		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	2	
		Number of Panels/Bays	16	
		Lower Limit	500.00 MHz	
		Upper Limit	626.00 MHz	
		Design power capacity in use	60.0 %	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	85.0 kW	

Manufacturer	
Model	RD-16RFS (OM) -500626-SL
Year	2017
Justification for New Antenna	Interim antenna used as contingence plan only in the event extensive tower modification and main transmission line replacement can not be completed by November 2018.

Interim Other Antenna Costs

Antenna

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

Interim Other Antenna Cost Not Listed

Antenna Information not provided.

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

ransmissio	n 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
Existing Transmission Line Manufacturer and Type		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	Yes
	_	Manufacturer	
		Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	Other
		Other Segment Length	18.4 feet
		Number of parallel runs	1
		Length	1942 feet per run

Primary Existing Transmission Line

Primary	New Transmission Line		
Transmissio	n Line Section	Question	Response
	New Transmission Line Costs	Use	Primary (Main)
		Description of Use	N/A
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	Broadband
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	2100 feet per run
		Justification for New Transmission Line	Existing transmission line stick length does not support CH16. Broadband length will accommodate both Ch 23 and Ch 16.

Primary Other Transmission Line Expenses Not Listed

Transmission to me tion not provided.

Interim	New Transmission Line		
Transmission	n Line Section	Question	Response
	New Transmission Line Costs	Use	Interim
		Description of Use	N/A
		Change Type	Purchase New
		Туре	Flexible Air
		Diameter	3 inches
		Segment Length	N/A
		Other Segment Length	
		Number of parallel runs	1
		Length	1100 feet per run
		Justification for New Transmission Line	Interim transmission line used as contingence plan only in the event extensive tower modification and main transmission line replacement can not be completed by November 2018.

Other Transmission Line Exper		ot Listed
Transmissio	n Line	Description
	Interim Line and Antenna Installation	Cost to install interim line and antenna

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?	No	
		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?	No	
	Existing Tower Structure Registration	Do you have a tower registration number?	Yes	
		ASR Number	1007736	
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	37° 10' 11.0" N-	
		Longitude (NAD83)	092° 56' 31.0" W-	
		Overall Structure Height	1959.62 feet	
		Support Structure Height	1893.35 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	1564.94 feet	

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Board of Governors of Missouri State University
Date Constructed	08/01/2003

Primary Tower Section Qu

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:	Serious Reinforcements needed

Primary Tower Section

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

Primary	Other Tower Expenses Not Listed			
Tower	Name	Description		
	Transmission Line Change Out	Cost to replace transmission line.		

Outside	Section	Question	Response
Professional	I Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	200
		Explanation	The station has multiple transmitter sites (2 TV) and operates with minimal staff. It does not have personnel available for any of these tasks, nor is the staff trained to provide any of these services.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare request for Special Temporary Authority	Yes
		Quantity	1

	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	No
RF Field Engineering Services	Comprehensive coverage verification via field study	No
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A

Outside	Other Professional Services Expenses Not Listed			
Professional	Services Costs	Description		
	Site Survey	Site visit to determine final equipment needs and installation planning		

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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	No
		FCC Special Temporary Authority Application	No
	Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
		Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	No
		Does this relocation require Equipment Storage?	No
		Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
		Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses Not Listed

Other Expenses Not Listed				
•	Description			
check	Site check to determine constraints and installation of transmitter requirements			
	check			

Transmitters

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter THU9-4	\$273,500.00	\$260,000.00		\$0.00	
UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW	\$273,500.00	\$260,000.00	Final quote not received. Maximum estimate used in its place.	N/A	N/A
Sub-total	\$273,500.00	\$260,000.00	N/A	\$0.00	N/A
Total for all systems	\$2,496,980.00	\$3,386,670.00	N/A	\$0.00	N/A

Components

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 RD-16RFS(OM) -500626-SL	\$56,730.00	\$56,400.00		\$0.00	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 16 bay,, 85 kW input, horizontally polarized	\$50,000.00	\$50,000.00	N/A	N/A	N/A
Sub-total	\$56,730.00	\$56,400.00	N/A	\$0.00	N/A
Total for all systems	\$2,496,980.00	\$3,386,670.00	N/A	\$0.00	N/A

Components

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	\$164,900.00	\$161,600.00		\$0.00	
Interim Line and Antenna Installation	\$100,000.00	\$100,000.00	N/A	N/A	N/A
Flexible Air Transmission Line - dielectric, 3"	\$64,900.00	\$61,600.00	N/A	N/A	N/A
Primary Transmission Line	\$487,200.00	\$464,100.00		\$0.00	
Rigid Transmission Line - copper, 6 1/8" broadband	\$487,200.00	\$464,100.00	N/A	N/A	N/A
Sub-total	\$652,100.00	\$625,700.00	N/A	\$0.00	N/A
Total for all systems	\$2,496,980.00	\$3,386,670.00	N/A	\$0.00	N/A

Components

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	\$1,387,420.00	\$2,321,320.00		\$0.00	
Structural engineering tower load study for well documented tower	\$12,600.00	\$9,000.00	N/A	\$0.00	N/A
Serious tower reinforcement /modifications	\$1,052,000.00	\$2,200,000.00	See station transition plan	N/A	N/A
Tall Tower (greater than 500')	\$210,500.00	\$0.00	Tower Rigging cost is include in tower modification cost.	N/A	N/A
Transmission Line Change Out	\$112,320.00	\$112,320.00	Cost assumes tower has been rigged as part of tower modifications.	N/A	N/A
Sub-total	\$1,387,420.00	\$2,321,320.00	N/A	\$0.00	N/A
Total for all systems	\$2,496,980.00	\$3,386,670.00	N/A	\$0.00	N/A

Components

Outside Professional Services

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$69,680.00	\$66,250.00		\$0.00	
Site Survey	\$10,000.00	\$10,000.00	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
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Project management of the transition	\$31,600.00	\$30,000.00	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
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	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
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	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
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Sub-total	\$69,680.00	\$66,250.00	N/A	\$0.00	N/A
Total for all systems	\$2,496,980.00	\$3,386,670.00	N/A	\$0.00	N/A

Components

Other Expenses

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$57,550.00	\$57,000.00		\$0.00	
MVPD Notification of Channel Change	\$11,000.00	\$11,000.00	Send notification to cable companies, MVPD locations, follow up on signal reception after repack switch.	N/A	N/A
site check	\$10,000.00	\$10,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$20,000.00	\$20,000.00	Remove existing Sigma Diamond CD transmitter to make room for new transmitter, including Glycol draining and disposal.	N/A	N/A
Develop and air announcement of upcoming channel change	\$5,000.00	\$5,000.00	Spot creation, talent, production.	N/A	N/A

Sub-total	\$57,550.00	\$57,000.00	N/A	\$0.00	N/A
Total for all systems	\$2,496,980.00	\$3,386,670.00	N/A	\$0.00	N/A

Components

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$2,496,980.00	\$3,386,670.00	\$0.00	

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. The above-named 	
		entity 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).
- 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- d applicant for the Authorization(s) ied above.	James Baker VP, Missouri State University 07/11/2017

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).
- 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.	N/A (Estimated Expenses filing) N/A (Estimated Expenses filing) N/A (Estimated Expenses filing)
	07/11/2017

Attachments