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: **51101** | Service: **DTV** | Call Sign: **KOZJ** | Channel: **35 (UHF)**

File Number: **0000027873**

FRN: **0002487056** | Date Submitted: **07/11/2017**

Applicant Information

Applicant Name, Type, and Contact Information

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

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

Matthew Anderson Sanderford , Jr. . *President* *Marsand, Inc. 211 Pack Saddle Trail Weatherford, TX 76088-8646*	Matthew Sanderford 211 Pack Saddle Trail Weatherford, TX 76088 United States	+1 (817) 783-5566	engineering@marsand.com

Broadcaster Information and Transition Plan

Question	Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	Yes
Briefly describe transition plan	See attached station transition plan.

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	DHD20P1
	Year	2003
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	5.5 kW

Primary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	THU9-8EVO
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	13 kW
	Justification for New Transmitter	Existing transmitter manufacturer will not support retuning to new channel and current transmitter does not have sufficient output power.

Primary Transmitter

Other Transmitter Costs

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

	Size	N/A
	Length	N/A
	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

Primary Transmitter

Other Transmitter Cost Not Listed

Information not provided.

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	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Slotted Coaxial
	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	N/A
	ERP: (Effective Radiated Power)	55.0 kW

Manufacturer	
Model	B16UOM
Year	1984

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?	No
	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	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	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	59.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	68.0 kW
	Manufacturer	

Model	RD-16RFS (OM) -500626-SL
Year	2017
Justification for New Antenna	Existing CH25 antenna will not support CH35. Broadband replacement allows reuse of existing aperture and main transmission line run with no structural modification.

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	3 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.

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	No

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

Add Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1012933
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	37° 04' 34.9" N-
	Longitude (NAD83)	094° 32' 16.4" W-
	Overall Structure Height	981.94 feet
	Support Structure Height	980.96 feet

Ground Elevation Above Mean Sea Level (AMSL)	1042.97 feet
Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	SpectraSite Communications, LLC. through American Towers, LLC.
Date Constructed	01/01/1965

FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared

Facility ID	Call Sign	Service
18283	KODE-TV	DTV

Primary Tower

Tower Modification Costs

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

Primary Tower

Tower Rigging Costs

Section	Question	Response

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

Primary Tower

Other Tower Expenses Not Listed

Name	Description
Antenna Change Out	Cost for removing old antenna and install new antenna
Ground and Building AE Permit Drawing Package	Tower owner required generation of a construction drawing package
Tower Permit Drawing Package	Tower owner required generation of a construction drawing package
Structural Engineering Tower Load Study	Tower owner required Rigorous Structural analysis

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	100
	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	No
	Quantity	N/A

	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	No
	Quantity	N/A
	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	Yes
	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

	Justification	N/A

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Site Survey	Site visit for specifying the final equipment needs and installation planning.
Tower Owner Project Managment	Tower owner required project management.

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	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

Other Expenses Not Listed

Information not provided.

Cost Information

Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter THU9-8EVO	**$494,500.00**	**$470,000.00**		**$0.00**	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	$494,500.00	$470,000.00	Final quote not received. Maximum estimate used in its place.	N/A	N/A
Sub-total	$494,500.00	$470,000.00	N/A	$0.00	N/A
Total for all systems	$2,041,645.00	$1,025,928.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna RD-16RFS(OM) -500626-SL	**$71,330.00**	**$67,400.00**		**$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,, 68 kW input, horizontally polarized	***$50,000.00***	$50,000.00	N/A	N/A	N/A
Elbow complex, broadband, at antenna input, per 3 1/8. feedline (if needed)	$9,340.00	$6,000.00	N/A	N/A	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	$71,330.00	$67,400.00	N/A	$0.00	N/A
Total for all systems	$2,041,645.00	$1,025,928.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Transmission Line

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 GTOWER	**$1,388,425.00**	**$382,798.00**		**$0.00**	
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	$26,300.00	$8,173.00	Cost estimate provided by tower owner.	N/A	N/A
Tall Tower (greater than 500')	$210,500.00	$0.00	Tower Rigging cost is include in the tower owner's estimate reinforcement / modifications.	N/A	N/A
Structural Engineering Tower Load Study	***$5,225.00***	$5,225.00	Cost estimate provided by tower owner.	N/A	N/A
Serious tower reinforcement /modifications	$1,052,000.00	$275,000.00	Cost estimate provided by tower owner.	N/A	N/A

Antenna Change Out	***$85,000.00***	$85,000.00	Quote attached from PCI	N/A	N/A
Ground and Building AE Permit Drawing Package	***$4,700.00***	$4,700.00	Cost estimate provided by tower owner.	N/A	N/A
Tower Permit Drawing Package	***$4,700.00***	$4,700.00	Cost estimate provided by tower owner.	N/A	N/A
Sub-total	$1,388,425.00	$382,798.00	N/A	$0.00	N/A
Total for all systems	$2,041,645.00	$1,025,928.00	N/A	$0.00	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 Justification
Outside Professional Services	**$61,840.00**	**$80,730.00**		**$0.00**	
Tower Owner Project Managment	***$9,480.00***	$9,480.00	Cost provided by tower owner	N/A	N/A
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
Project management of the transition	$15,800.00	$15,000.00	N/A	N/A	N/A
Prepare and or review reimbursement form	$2,630.00	$2,500.00	N/A	N/A	N/A
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
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 - Negotiation of lease and other matters for shared locations	$4,210.00	$25,000.00	After consultation with legal counsel, the station is estimating lease negotiation costs of $25,000 for amending the current site lease with ATC and for negotiating a Master Agreement with ATC relating to the overall tower changes necessary for the station's repack.	N/A	N/A
Sub-total	$61,840.00	$80,730.00	N/A	$0.00	N/A
Total for all systems	$2,041,645.00	$1,025,928.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	**$25,550.00**	**$25,000.00**		**$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
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)	***$2,000.00***	$2,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	***$1,000.00***	$1,000.00	Spot creation, talent, production.	N/A	N/A
Sub-total	$25,550.00	$25,000.00	N/A	$0.00	N/A
Total for all systems	$2,041,645.00	$1,025,928.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$2,041,645.00	$1,025,928.00	$0.00

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.	**James Baker** *VP, Missouri State University* 07/11/2017

Attachments