

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

169027 Service: DTV **KUKL-TV** Channel: 15 (UHF) Facility Call Sign:

ID:

File 0000026466

Number:

FRN: **0007148174** Date 07/07

> Submitted: /2017

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
BOARD OF REGENTS OF THE MONTANA UNIVERSITY SYSTEM Doing Business As: BOARD OF REGENTS OF THE MONTANA UNIVERSITY SYSTEM	ROOM 183, VCB BOZEMAN, MT 59717 United States	+1 (406) 994- 3437	eric_hyyppa@montanapbs. org	Government Entity

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email

The Preparer is same as the reimbursement contact.

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	The station will replace the existing transmitter and antenna with a new transmitter and a new antenna that can operate at the new assigned frequency in compliance with the Phase I timeline. This is anticipated to be a direct replacement project.

Transmitters

rs	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	Maxiva UAX2000AT
	Year	2011
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	2.0 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	UAXTE-2
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	1.2 kW
	Justification for New Transmitter	Existing transmitter is unable to operate at the new assigned frequency.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	40.0 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

Primary Transmitter **Other Transmitter Cost Not Listed**

Transmitter Information not provided.

Antennas

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

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?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Broadband Panel
	Number of Stations Supported	1
	Number of Panels	4
	Design power capacity in use	20.0 %
	Lower Limit	662.00 MHz
	Upper Limit	668.00 MHz
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	23.4 kW

Manufacturer	
Model	ETU-2U2- HSC1-46
Year	2011

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?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Class A
Manufacturer and Types	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Туре	Broadband Panel
	Number of Stations Supported	1
	Number of Panels/Bays	4
	Lower Limit	476.00 MHz
	Upper Limit	482.00 MHz
	Design power capacity in use	20.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	12.4 kW
	Manufacturer	
	Model	ESR-PC1

Year	2017
Justification for New Antenna	Existing antenna is unable to operate at the required power at the new assigned frequency. We have attached the price quote for an 'upgraded' elliptical polarized antenna. This quote is less than the catalog price for a standard H- pol antenna.

Other Antenna Costs

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?	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 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?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Other Antenna Cost Not Listed

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

Primary Transmission

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	Commscope
	Туре	Flexible Air
	Diameter	1 5/8 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	175 feet per

Other Transmission Line Expenses Not Listed

Primary
Transmission of 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

Type of change Move Equipment 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? One or more FM, AM or TV radio broadcaster(s) Others Types of Users No Is tower documented for structural analysis? Unknown Is tower compliant with Rev G? Unknown Existing Tower Structure Registration Coordinates (NAD83 (North American Datum of 1983)) ARR Number 1000780 Existing Tower Structure Height 239.83 feet Support Structure Height 199.80 feet Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free Standing or Guyed	Section	Question	Response
Tower Use	-	Type of change	Move Equipment
Ownership Is this tower consider Complex? Is this tower currently shared with any other stations? One or more FM, AM or TV radio broadcaster(s) Others Types of Users Is tower documented for structural analysis? Unknown Is tower compliant with Rev G? Unknown Existing Tower Structure Registration Coordinates (NAD83 (North American Datum of 1983)) Overall Structure Height Support Structure Height Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free		Tower Use	Primary (Main)
Is this tower consider Complex? Is this tower currently shared with any other stations? One or more FM, AM or TV radio broadcaster(s) Others Types of Users Is tower documented for structural analysis? Unknown Is tower compliant with Rev G? Unknown Existing Tower Structure Registration Do you have a tower registration number? ASR Number Do you have a tower registration number? ASR Number Latitude (NAD83) Coordinates (NAD83 (North American Datum of 1983)) Overall Structure Height Support Structure Height Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free		Description of Use	N/A
Is this tower currently shared with any other stations? One or more FM, AM or TV radio broadcaster(s) Others Types of Users Is tower documented for structural analysis? Unknown Is tower compliant with Rev G? Unknown Existing Tower Structure Registration Coordinates (NAD83 (North American Datum of 1983)) Overall Structure Height Support Structure Height Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free		Ownership	Leased
Stations? One or more FM, AM or TV radio Yes		Is this tower consider Complex?	No
Droadcaster(s)			Yes
Is tower documented for structural analysis? Unknown Is tower compliant with Rev G? Unknown Existing Tower Structure Registration Coordinates (NAD83 (North American Datum of 1983)) Do you have a tower registration number? Yes ASR Number 1000780 Latitude (NAD83) 48° 00' 48.0" N- Longitude (NAD83) 114° 21' 58.0" W- Overall Structure Height 239.83 feet Support Structure Height 199.80 feet Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free		· ·	Yes
Is tower compliant with Rev G? Unknown Existing Tower Structure Registration ASR Number Latitude (NAD83) Latitude (NAD83) Longitude (NAD83) Overall Structure Height Support Structure Height Ground Elevation Above Mean Sea Level (AMSL) Structure Type Unknown Yes 48° 00' 48.0" N- 114° 21' 58.0" W- 6679.05 feet TOWER - Free		Others Types of Users	No
Existing Tower Structure Registration Coordinates (NAD83 (North American Datum of 1983)) Do you have a tower registration number? ASR Number Latitude (NAD83) Latitude (NAD83) Longitude (NAD83) Doverall Structure Height Support Structure Height Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free	_	Is tower documented for structural analysis?	Unknown
Structure Registration ASR Number 1000780 Coordinates (NAD83 (North American Datum of 1983)) Latitude (NAD83) 48° 00' 48.0" N-48.0" N-4		Is tower compliant with Rev G?	Unknown
Registration ASR Number 1000780 Coordinates (NAD83) 48° 00' 48.0" N- NAD83 (North American Datum of 1983)) Longitude (NAD83) 114° 21' 58.0" W- Overall Structure Height 239.83 feet Support Structure Height 199.80 feet Ground Elevation Above Mean Sea Level (AMSL) 6679.05 feet Structure Type TOWER - Free		Do you have a tower registration number?	Yes
NAD83 (North American Datum of 1983)) Overall Structure Height Support Structure Height Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free		ASR Number	1000780
American Datum of 1983)) Overall Structure Height 239.83 feet Support Structure Height 199.80 feet Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free	•	Latitude (NAD83)	48° 00' 48.0" N-
Overall Structure Height 239.83 feet Support Structure Height 199.80 feet Ground Elevation Above Mean Sea Level (AMSL) 6679.05 feet Structure Type TOWER - Free	American Datum	Longitude (NAD83)	114° 21' 58.0" W-
Ground Elevation Above Mean Sea Level (AMSL) Structure Type TOWER - Free		Overall Structure Height	239.83 feet
(AMSL) Structure Type TOWER - Free		Support Structure Height	199.80 feet
			6679.05 feet
Structure		Structure Type	Standing or Guyed

Tower Owner	EAGLE COMMUNICATIONS
Date Constructed	06/01/1968

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
49340	KALS	FM
18079	KCFW-TV	DTV
35453	KAJJ-CD	DTV
89617	KLKM	FM

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

Outside Professional

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	No
	Number of Hours	N/A
	Explanation	N/A
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	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	No
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside
Other Professional Services Expenses Not Listed
Professional Services ©qstsided.

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?	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?	No

Other Expenses Not Listed

Expenses Information not provided.

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 UAXTE-2	\$127,040.00	\$121,000.00		\$0.00	
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	\$126,000.00	\$120,000.00	N/A	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$1,040.00	\$1,000.00	N/A	N/A	N/A
Sub-total	\$127,040.00	\$121,000.00	N/A	\$0.00	N/A
Total for all systems	\$292,340.00	\$202,945.00	N/A	\$0.00	N/A

Components

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 ESR-PC1	\$38,070.00	\$24,195.00		\$0.00	
UHF - Lower Power Side Mount, Class A broadband panel (cost per panel)	\$5,040.00	\$0.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - Lower Power Side Mount, Class A One Station antenna basic	\$26,300.00	\$17,795.00	N/A	N/A	N/A
Sub-total	\$38,070.00	\$24,195.00	N/A	\$0.00	N/A
Total for all systems	\$292,340.00	\$202,945.00	N/A	\$0.00	N/A

Components

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	\$0.00	\$0.00		\$0.00	
Sub-total	\$0.00	\$0.00	N/A	\$0.00	N/A
Total for all systems	\$292,340.00	\$202,945.00	N/A	\$0.00	N/A

Components

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	\$84,200.00	\$25,000.00		\$0.00	
Short Tower (less than 500')	\$84,200.00	\$25,000.00	N/A	N/A	N/A
Sub-total	\$84,200.00	\$25,000.00	N/A	\$0.00	N/A
Total for all systems	\$292,340.00	\$202,945.00	N/A	\$0.00	N/A

Components

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	\$24,980.00	\$23,750.00		\$0.00	
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	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 - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Sub-total	\$24,980.00	\$23,750.00	N/A	\$0.00	N/A
Total for all systems	\$292,340.00	\$202,945.00	N/A	\$0.00	N/A

Components

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	\$18,050.00	\$9,000.00		\$0.00	
DTV Medical Facility Notification	\$11,550.00	\$2,500.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$1,500.00	\$1,500.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$2,500.00	\$2,500.00	N/A	N/A	N/A
Equipment Storage	\$1,500.00	\$1,500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$1,000.00	\$1,000.00	N/A	N/A	N/A
Sub-total	\$18,050.00	\$9,000.00	N/A	\$0.00	N/A
Total for all systems	\$292,340.00	\$202,945.00	N/A	\$0.00	N/A

Components

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$292,340.00	\$202,945.00	\$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

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 abovenamed applicant for the Authorization(s) specified above. Dean
Lawver
Director of
Technology

07/07/2017

Attachments