

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 14040	Service: DTV	Call	KRMA-TV	Channel: 33 (UHF)
ID:		Sign:		
File 000002	7982			
Number:				
FRN: 0001615582	Date	01/30		
	Submitted:	/2019		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
ROCKY MOUNTAIN PUBLIC MEDIA, INC. Doing Business As: ROCKY MOUNTAIN PUBLIC MEDIA, INC.	DANNA LUO 1089 BANNOCK STREET DENVER, CO 80204	+1 (303) 892- 6666	dannaluo@rmpbs. org	Not-for- Profit
	United States			

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Name and Information Preparer Contact Applicant Address Phone Email Information **James Schoedler** 1069 S Downing +1 (303) 725jschoedler@usa. KRMA Repack Project Street 9043 net Manager Denver, CO 80209 JB Schoedler Associates United States LLC

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	To transition from CH 18 to CH 33 KRMA must replace its antenna, transmission line, and main transmitter. The backup transmitter will be retuned. Installation will take place in 2018 so that testing can begin on 12/1/18 or soon thereafter.

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

ransmitter	Section	Question	Response
	Existing Transmitter Description	Type of change	Purchase New
		Use	Auxiliary (Backup)
		Description of Use	Low Power Backup
		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	Innovator LX
		Year	2009
		Туре	Solid State
		Solid State Cooling	Air Cooled
		Solid State Power Capacity	3 kW

Add Transmitter Information

Auxiliary	New Transmitter Costs				
Transmitter	Section	Question	Response		
	New Transmitter	Use	Auxiliary (Backup)		
		Change Type	Purchase New		
		Is this a request for upgraded equipment?	No		
		Manufacturer			
		Model	UAXTE- 6R44		
		Transmitter Type	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power capacity	3.6 kW		
		Justification for New Transmitter	KRMA originally requested funds to retune the existing Axcera transmitter, but after submitting sample rf modules to UBS /Axcera for re-tuning, the company has advised that due to the age and design of the modules the re- tuning will not be possible.		

ransmitter	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

Auxiliary Other Transmitter Costs

Other Transmitter Cost Not Listed

Auxiliary Other Transmitter Co Transmitter Information not provided.

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	2009		
		Туре	Inductive Output Tube		
		IOT Power Type	Single		
		Power Capacity	30 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	ULXTE-50		
		Transmitter Type	Solid State		
		Solid State Cooling	Liquid Cooled		
		Solid State Power capacity	31.7 kW		
		Justification for New Transmitter	Refer to attached Transition Plan exhibit.		

Primary Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	No
		Transformer (480V)	Yes
	Power	150 kVA	
	Rigid Conduit and Wiring	Yes	
		Size	1 inches
		Length	1.0 feet
		Other Electrical Service	Yes
		Description	Disconnection of existing.

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	Other Transmitter Cost Not Listed		
Transmitter	Name	Description	
	Site Survey	Engineering visit to specify transmitter installation.	

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?	Yes	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	Yes	
	Existing Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Elliptical	
		Туре	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)	1000.0 kW	

Manufacturer	
Model	TFU-32DSC /VP-R C190
Year	2009

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?	No	
		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?	Yes	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Elliptical	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels/Bays	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Design power capacity in use	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	
		Manufacturer		
			1	

Model	TFU-38DS /VP-R C19
Year	2018
Justification for New Antenna	Existing antenna does not cover new channel

Primary	Other Antenna Costs			
Antenna	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	
Elbow (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?	Single Channel	
		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?	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?	No	

Primary Antenna	Other Antenna Cost Not Listed		
	Name	Description	
	Installation	Removal of old antenna and installation of new.	
	Transportation to site	Transportation to site on 4-wheel drive road.	
	Freight	Shipping from manufacturer to offload point in Denver.	

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?	Yes	
	New Antenna Manufacturer and Type	Class	Class A	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Elliptical	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels/Bays	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Design power capacity in use	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	115.0 kW	
		Manufacturer		
		Model	SFN-2030- 5645-16	
		Year	2019	

Justification for New Antenna	An existing RF
	Technologie
	CH 18
	antenna
	planned for
	interim use
	was found t
	have a
	burned
	center
	conductor
	and shorting
	ring. It is no
	repairable
	and therefo
	a new
	interim
	antenna is
	needed to
	stay on the
	air during
	main
	antenna
	replacemen

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 Antenna	Other Antenna Cost Not Listed		
	Name	Description	
	Coaxial Switch for Interim Antenna	Dielectric 3 Port Coaxial Switch and Elbows needed to connect new interim antenna with transmitter RF system.	

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
		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	8 3/16 inches
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	379 feet per run

Primary Existing Transmission Line

Primary	New Transmission Line			
Transmissio	on 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	19 3/4 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	379 feet per run	
		Justification for New Transmission Line	Existing transmission line is not suitable for new channel	

Other Transmission Line Expenses Not Listed Transmission

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

Response

Modify Existing

Primary (Main)

N/A

No

Yes

Yes

Yes

Leased

Primary	Existing Tower		
Tower	Section	Question	
	Existing Tower Description	Type of change	
		Tower Use	
		Description of Use	
		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?	
		Is tower compliant with Rev G?	

	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1023484
Coordinates (NAD83 (North American Datum	Latitude (NAD83)	39° 40' 17.4" N-
of 1983))	Longitude (NAD83)	105° 13' 08.0" W-
	Overall Structure Height	273.95 feet
	Support Structure Height	271.98 feet
	Ground Elevation Above Mean Sea Level (AMSL)	7685.60 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Bear Creek Development Corporation
Date Constructed	11/08/1988

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
83535	KVOD	FM
57219	KCEC	DTV

Other Types of Users

Users

2-way radio

Cellular

Primary Tower Modification Costs

Tower

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:	No 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	

Other Tower Expenses Not Listed

PrimaryOther Tower ExpenseTowerInformation not provided.

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	500
-		Explanation	Overall project management and coordination of procurement process.
	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	Yes
	Cover Application	
	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	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	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Other Professional Services Expenses Not Listed Professional Services rootsided.

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	Yes
		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?	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

Name	Description
Interim and Final Transmission Line Components	Transmission line components for interim and final configuration not covered elsewhere.
Electrical Design Engineering	Electrical requirements of new main and auxiliary transmitters require extensive electrical rework. Contractor requested drawings and panel schedules from an electrical designer.
Replacement Coaxial Switching System	Dielectric has advised that re-use of the existing waveguide switching system is not practical. A replacement coaxial system is required instead.
Temporary Antenna Installation	A temporary antenna installation on the tower ice bridge is required during installation of the new antenna.

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 ULXTE-50	\$903,135.16	\$901,885.16		\$646,025.17	
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	\$868,085.16	\$868,085.16	This amount is based on revised proposal obtained from Gates Air. See attached exhibit: Quote G- 63421.	\$646,025.17	N/A
Site Survey	\$6,500.00	\$6,500.00	Site survey is required to determine plan for replacement transmitter installation.	N/A	N/A
Other Electrical Service: Disconnection of existing.	\$1,500.00	\$1,500.00	N/A	N/A	N/A
Transformer 3 phase/480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
1" Rigid Conduit and Wiring	\$1,500.00	\$1,500.00	N/A	N/A	N/A

Auxiliary Transmitter UAXTE-6R44	\$169,061.70	\$169,061.70		\$111,241.14	
UHF - Air Cooled Solid State Transmitter 3.6 kW	\$169,061.70	\$169,061.70	See GatesAir quote Q- 63424 uploaded with this application.	\$111,241.14	N/A
Sub-total	\$1,072,196.86	\$1,070,946.86	N/A	\$757,266.31	N/A
Total for all systems	\$2,068,437.90	\$1,857,299.90	N/A	\$1,254,172.20	N/A

Components

Actual Information	
Description	File Name

UHF - Liquid Cooled Solid		
State Transmitter 31.7 kW	Component Description:	Initial payment
		with order for ULXTE-50
		Transmitter
		System
	Amount:	\$217,021.29
	Amount	ΨZ11,0Z1.20
	Component Description:	25% Payment
		due 8/30/18 for
		main transmitter
	Amount:	\$214,271.29
	Component Description:	Deionized water
		provided for
		primary
		transmitter
		installation.
	Amount:	\$461.30
	Component Description:	Invoice #2 for
		Main Transmitter -
		25% installment
		due 5/30/2018
	Amount:	\$214,271.29
Site Survey	Information not provided.	
Other Electrical Service: Disconnection of existing.	Information not provided.	
Transformer 3 phase/480v - 150 KVA	Information not provided.	
1" Rigid Conduit and Wiring	Information not provided.	

UHF - Air Cooled Solid State Transmitter 3.6 kW	Component Description:	1/3 Down Payment for Auxiliary/Backup
		Transmitter
	Amount:	\$55,620.57
	Component Description:	1/3 payment due prior to shipping
		for Auxiliary
		/Backup
		Transmitter
	Amount:	\$55,620.57

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 SFN- 2030-5645-16	\$75,507.00	\$75,327.00		\$68,777.00	
Coaxial Switch for Interim Antenna	\$23,132.00	\$23,132.00	A coaxial switch is required to feed interim antenna from transmitter RF system. See Proposal 180177SM from Dielectric for costs.	\$23,132.00	N/A
UHF - Lower Power, Side Mount, Class A, basic slot antenna, 115 kW input, directional,, elliptically or circularly polarized	\$45,645.00	\$45,645.00	Updated estimated cost includes shipping billed on invoice C2186-B.	\$45,645.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,550.00	N/A	N/A	N/A
Primary Antenna TFU- 38DSC/VP-R C190	\$486,779.00	\$446,069.00		\$356,719.00	

UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized	\$356,719.00	\$356,719.00	Several line items are now consolidated in this line, including antenna, scatter analysis, side-mount brackets, elbow complex and transmission line. This is the current total of the Dielectric sales order after change orders, not including shipping.	\$356,719.00	Actual costs are reported on the line correspondin to the antenna as the invoices from the manufacture are not broken dowr according to the categorie listed in the estimated costs columr
Freight	\$9,500.00	\$9,500.00	Freight Cost to Denver, Colorado provided in Dielectric email dated 6/22/17 (attached to Form).	N/A	N/A
Transportation to site	\$0.00	\$0.00	Included in antenna installation cost.	N/A	N/A
Installation	\$79,850.00	\$79,850.00	Installation cost determined by Rex Industries proposal 217-301 attached to Form 399.	N/A	N/A

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$0.00	This cost is now included in antenna base cost.	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$0.00	This cost is now included in antenna base cost.	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$0.00	This cost is now included in antenna base cost.	N/A	N/A
Sub-total	\$562,286.00	\$521,396.00	N/A	\$425,496.00	N/A
Total for all systems	\$2,068,437.90	\$1,857,299.90	N/A	\$1,254,172.20	N/A

Components

Actual Information Description	File Name	
Coaxial Switch for Interim Antenna	Component Description: Amount:	50% payment due with order. \$11,566.00
	Component Description: Amount:	50% due prior to shipment. \$11,566.00

Mount, Class A, basic slot antenna, 115 kW input,	Component Description:	50% payment w order
directional,, elliptically or circularly polarized	Amount:	\$22,397.50
	Component Description:	Final payment including shippir for interim CH 3 antenna.
	Amount:	\$23,247.50
Sweep test of existing antenna	Information not provided.	
UHF - High Power, Side Mount, basic slot antenna,		
1000 kW input, directional,, elliptically or circularly polarized	Component Description:	Invoice for curre balance due. Shipping and site visit to be invoice later.
	Amount:	\$32,484.73
	Component Description:	Invoice for 45% due prior to shipment; invoic
		includes adjustments for two change orders, also
		attached. This is corrected invoice to accurately describe the side
	Amount:	mount antenna. \$165,171.15
	Component Description:	Initial payment with order for TF
		38DSC/VP-R hig power antenna.
	Amount:	\$159,063.12
Freight	Information not provided.	

Transportation to site	Information not provided.
Installation	Information not provided.
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, single channel, at antenna input, per 6 1/8. feedline (if needed)	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
Primary Transmission Line	\$76,558.00	\$0.00		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$76,558.00	\$0.00	This cost is now included in antenna base cost as Dielectric provided a single sales order and invoices for antenna and transmission line.	N/A	N/A
Sub-total	\$76,558.00	\$0.00	N/A	\$0.00	N/A
Total for all systems	\$2,068,437.90	\$1,857,299.90	N/A	\$1,254,172.20	N/A

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	\$96,800.00	\$12,000.00		\$5,839.90	
Short Tower (less than 500')	\$84,200.00	\$0.00	N/A	\$0.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	\$5,839.90	N/A
Sub-total	\$96,800.00	\$12,000.00	N/A	\$5,839.90	N/A
Total for all systems	\$2,068,437.90	\$1,857,299.90	N/A	\$1,254,172.20	N/A

Components

Actual Information Description	File Name
Short Tower (less than 500')	Information not provided.
Structural engineering tower load study for well documented tower	

Component Description:	A second interim antenna study was required as the first antenna chosen and studied did not pass RFR requirements. This study was for a RF Technologies SFN antenna. \$500.00
Component Description: Amount:	Tower Analysis - Main Tower - January Labor - Includes PO #22547 \$3,275.00
Component Description:	Invoice for structural study for mounting interim antenna during main antenna replacement. \$1,000.00
Component Description:	Invoice for structural study of an Andrew ALP8 interim antenna to be mounted on ice bridge of tower. \$1,000.00

Component Description:	Tower Analysis -
	Main Tower -
	Labor for
	December 2017 -
	Includes PO
	#22547
Amount:	\$1,064.90

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	\$132,340.00	\$125,250.00		\$24,920.75	
RF Exposure Measurements	\$21,050.00	\$20,000.00	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
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$4,952.00	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A

Total for all systems	\$2,068,437.90	\$1,857,299.90	N/A	\$1,254,172.20	N/A
Sub-total	\$132,340.00	\$125,250.00	N/A	\$24,920.75	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	\$356.25	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 engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$600.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$0.00	N/A
Project management of the transition	\$79,000.00	\$75,000.00	N/A	\$19,012.50	N/A

Components

Actual Information Description	File Name
RF Exposure Measurements	Information not provided.

Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees - Negotiation of lease and other matters for shared locations	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Legal Fees \$139.00
	Component Description: Amount:	Legal Fees \$878.00
	Component Description: Amount:	Legal Fees \$917.00
	Component Description: Amount:	Legal Fees \$600.00
	Component Description: Amount:	Legal Fees \$2,418.00
Prepare and or review reimbursement form	Information not provided.	
Project management of the transition	Component Description:	Project Management Fees
	Amount:	- May 2017 \$1,125.00
	Component Description:	Project Management Fees - October 2017
	Amount:	\$225.00

Component Description: Amount:	Project Management Fees - April 2018 \$225.00
Component Description: Amount:	Project Management Fees - May 2018 \$1,218.75
Component Description: Amount:	Legal advice related to management of project \$150.00
Component Description: Amount:	Project Management Fees - March 2018 \$450.00
Component Description: Amount:	Project Management Fees - June 2017 (includes all line items except 6/26 and 6/27). \$1,275.00
Component Description: Amount:	Project Management Fees - July-August 2018 \$1,575.00
Component Description: Amount:	Repack Project Management Fees - September 2018 \$975.00

Component Description: Amount:	Project Management Fees - December 2018 \$1,275.00
Component Description: Amount:	Project Management Fees - November 2017 \$300.00
Component Description: Amount:	Legal Advice related to management of project - January 2018 \$800.00
Component Description: Amount:	Repack Project Management Fees - October 2018 \$1,218.75
Component Description: Amount:	Preparation of STA for temporary operation during main antenna replacement. \$356.25
Component Description: Amount:	Legal advice related to management of project - line item from 2/6/2018 only. \$50.00
Component Description:	Project Management Fees - August 2017 \$150.00

Component Description: Amount:	Project Management Fees - February 2018 \$506.25
Component Description: Amount:	Project Management Fees - June 2018 \$975.00
Component Description:	Project Management Fees - July 2017 (all line items except 7/6 /17)
Amount:	\$656.25
Component Description: Amount:	Repack Project Management Fees - January 2018 \$731.25
Component Description:	Project Management Fees for the month of December 2017
Amount:	\$937.50
Component Description:	Project Management Fees - November 2018
Amount:	\$2,793.75
Component Description:	Legal advice related to management of project - December 2017
Amount:	\$50.00

	Component Description: Amount:	Legal advice related to management of project - line items for 2/6 and 2/14 only \$300.00
	Component Description: Amount:	Legal Advice related to management of project \$50.00
	Component Description: Amount:	Project Management Fees - September 2017 \$450.00
	Component Description: Amount:	Project Management Fees for April 2017. \$600.00
Perform engineering study for new channel assignment and antenna development	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	Engineering Fees for Preparation of CP Application - line items for 6/26
	Amount:	and 6/27/17. \$450.00
	Component Description:	Engineering Fees for CP Application - line item for 7/6
	Amount:	only \$150.00

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare request for Special		
Temporary Authorization	Component Description:	Preparation of
		STA for temporar
		operation during
		main antenna
		replacement
	Amount:	\$356.25

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 Justificati
Other Expenses	\$128,257.04	\$127,707.04		\$40,649.24	
Equipment Delivery and Handling Charges	\$12,597.40	\$12,597.40	Towing company 4WD transport of transmitters to site. Forklift rental to lift transmitters to 2nd floor entrance of transmitter building. See individual invoices for details. Revised estimated cost includes insurance rider for equipment in transit.	\$12,597.40	Original c estimate v based c transporta direct to s actual cc also inclui tempora offloadir and stora due to b weather t delayer access to mountain site.

Interim and Final Transmission Line Components	\$5,431.84	\$5,431.84	Transmission line components required for interim and final installations, not included in other proposals. Quotes obtained and items purchased as required. Each invoice will contain a justification. Revised	\$5,431.84	N/A
			estimated cost		
			due to addition		
			of shipping.		
			or snipping.		
Temporary	\$14,870.00	\$14,870.00	RMPBS	\$14,870.00	N/A
Antenna			planned to use		
Installation			a used RF		
			Technologies		
			SFN CH 18		
			antenna during		
			main antenna		
			replacement.		
			This antenna		
			was found to be defective. It		
			required		
			troubleshooting		
			in place and		
			de-installation		
			at extra cost.		
			See Rex		
			See Rex Industries		

Replacement Coaxial Switching System	\$23,312.80	\$23,312.80	See Dielectric quote 180074ASM uploaded with this application to replace an existing waveguide switching system (main and backup transmitter, antenna and load) that Dielectric advises cannot be used on the new channel.	\$0.00	N/A
Electrical Design Engineering	\$3,000.00	\$3,000.00	Cost estimate based on verbal quote from Green Mountain Electrical Consultants.	\$2,800.00	N/A
MVPD Notification of Channel Change	\$2,500.00	\$2,500.00	N/A	\$1,963.00	N/A
Develop and air announcement of upcoming channel change	\$1,500.00	\$1,500.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	\$2,987.00	N/A
Local Zoning	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$48,495.00	\$48,495.00	N/A	N/A	N/A

Sub-total	\$128,257.04	\$127,707.04	N/A	\$40,649.24	N/A
Total for all systems	\$2,068,437.90	\$1,857,299.90	N/A	\$1,254,172.20	N/A

Components

Actual Information Description	File Name	
Equipment Delivery and Handling Charges	Component Description:	Add trip transit coverage - delivery of transmitters to
	Amount:	Mt. Morrison site. \$1,500.00
	Component Description:	Fueling charge for forklift rental.
	Amount:	\$38.33
	Component Description:	Heavy duty forklift was required to move transmitter equipment into 2nd floor entrance of transmitter building. Estimate obtained for one week rental. Due to weather delays rental had to be extended past 2 weeks (4 week rental). \$3,424.07
	Component Description:	Transportation of
		transmitters to Mt. Morrison via 4WD flatbed vehicle.
	Amount:	\$7,635.00

Interim and Final Transmission Line Components	Component Description: Amount:	1-5/8" flange gas barrier for interim antenna transmission line. \$274.05
	Component Description: Amount:	3-1/8" to type N reducer required for sweep testing of interim antenna transmission line \$637.36
	Component Description:	30 feet of 1-5/8" flexible transmission line with connectors and adapter to connect new backup transmitter to interim antenna while main transmitter and antenna are replaced. \$1,895.85
	Component Description:	A 6-1/8" directional coupler to provide test monitoring of the main RF signal was not included in the GatesAir or Dielectric proposals. This is an essential item that was ordered separately. \$2,624.58

Temporary Antenna Installation	Component Description: Amount:	Mounting and de- mounting of interim CH 18 antenna including in-place troubleshooting of high VSWR. \$14,870.00
Replacement Coaxial Switching System	Information not provided.	
Electrical Design Engineering	Component Description: Amount:	Engineering of transmitter electrical facilities \$2,800.00
MVPD Notification of Channel Change	Component Description: Amount:	DTVNotification Invoice INV-001908 - KRMA MVPD Notifications with Estimate. \$1,963.00
Develop and air announcement of upcoming channel change	Information not provided.	
DTV Medical Facility Notification	Component Description: Amount:	DTVNotification Invoice INV-001909 - KRMA Medical Notifications with Estimate \$2,987.00
Local Zoning Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$2,068,437.90	\$1,857,299.90	\$1,254,172.20	

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. 	
		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).
- 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.

	 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. 	
1	declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.	DANNA LUO CHIEF FINANCIAL OFFICER 01/30/2019

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.

	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 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	I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.	
		01/30/2019

Attachments

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