

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 313(ID:	68	Service: DCA	Call Sign:	KUOT-CD	Channel: 21 (UHF)
File 00 Number:	00027	7287			
FRN: 0026455	469	Date Submitted:	01/29 /2019		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
Edge Spectrum, Inc. Doing Business As: Edge Spectrum, Inc.	Vernon Fotheringham 7829 Center Blvd, SE, No 190 Snoqualmie, WA 98065 United States	+1 (206) 963- 2198	vf@edgespectrum. com	Corporation

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contact Name and Information					
Contact Information	Applicant	Address	Phone	Email		
	The Preparer is same as the reimbursement contact.					

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	Replace transmitter, transmission line and antenna at existing facility.

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

Primary	Existing Transmitter Information				
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Primary (Main)		
		Description of Use	N/A		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is this transmitter currently shared with another station?	No		
		Is this transmitter currently in operating condition?	Yes		
	Existing Transmitter	Manufacturer			
	Manufacturer and Type	Model	LPTV 8000 1000		
		Year	2012		
		Туре	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power Capacity	1.0 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	EC702 HP- BB D21		
		Transmitter Type	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power capacity	1.7 kW		
		Justification for New Transmitter	Existing Transmitter has reached end of life and is no longer supported by manufacturer.		

Primary	Other Transmitter Costs		
Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
		Switchgear (industrial 800 amp)	No
		Transformer (480V)	No
		Power	N/A
		Rigid Conduit and Wiring	Yes
		Size	1 inches
		Length	50.0 feet

	Other Electrical Service	Yes
	Description	Replacement of service entrance. Existing service at max. capacity.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Other Transmitter Cost Not Listed

Transmitter Information not provided.

Antennas Section		Question	Response
Antenna Rela	ated 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?	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	Class A		
		Mounting	Side Mount		
		Antenna position in stack	Not in Stack		
		Polarization	Horizontal		
		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)	15.0 kW		

Manufacturer	
Model	ACS24E
Year	2012

Primary	New Antenna Costs				
Antenna	Section	Question	Response		
	New Antenna Description	Use	Primary (Main)		
		Description of Use	N/A		
		Change Type	Purchase New		
		Is this a request for upgraded equipment?	Yes		
		Ownership	Owned		
		Owner	N/A		
		Is antenna shared?	No		
		Is antenna directional?	Yes		
		Will antenna be located on or in close proximity to an antenna farm?	No		
	New Antenna Manufacturer and Types	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)	15.0 kW		
		Manufacturer			
			1		

Model	ANT DLP12B
Year	2018
Justification for New Antenna	Existing antenna cannot be re-tuned to new channel.

Primary 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

Primary 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

Primary	Existing Transmission Line			
Transmissio	on Line Section	Question	Response	
	Existing Transmission Line Description	Type of change	Purchase New	
		Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing transmission line shared with another station or stations?	No	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission	Manufacturer		
	Line Manufacturer and Type	Туре	Flexible Air	
		Diameter	3 inches	
		Other Diameter	N/A	
		Segment Length	N/A	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	610 feet per run	

Existing Transmission Line

Primarv	New Transmission Line		
Transmissio	Section	Question	Response
	New Transmission Line Costs	Use	Primary (Main)
		Description of Use	N/A
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Туре	Flexible Air
		Diameter	3 inches
		Other Diameter	N/A
		Segment Length	N/A
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	610 feet per run
		Justification for New Transmission Line	Transmission line has suffered damage in the past. Will need to sweep test to determine if viable for new channel / power.

Primary	Other Transmission Line Expenses Not Listed		
Transmissio	on Line	Description	
	Sweep Test	Sweep test 3" vertical run of cable from tower base to 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

Existing Tower

Primary	Existing Tower			
Tower	Section	Question	Response	
	Existing Tower Description	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?	No	
		One or more FM, AM or TV radio broadcaster(s)	N/A	
		Others Types of Users	N/A	
		Is tower documented for structural analysis?	Yes	
		Is tower compliant with Rev G?	Unknown	
	Existing Tower Structure Registration	Do you have a tower registration number?	Yes	
		ASR Number	1011510	
	Coordinates (NAD83 (Latitude (NAD83)	35° 22' 10.1" N-	
	North American Datum of 1983))	Longitude (NAD83)	097° 27' 39.9" W-	
		Overall Structure Height	638.12 feet	
		Support Structure Height	600.06 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	1314.94 feet	

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	Pinnacle Towers LLC
Date Constructed	06/01/1993

Primary Tower Section

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

Other Tower Expenses Not Listed

Primary Tower

Name	Description
Remove and install antenna	Remove 24 bay antenna, install new antenna, install new 3" horizontal run of cable from tower to transmitter building.

Outside Professional	Section	Question	Response
	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	40
		Explanation	Supervise testing and installation of new antenna and transmission line. Remove old transmitter, install new transmitter and test.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	No
		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	Yes
	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 rGostsided.

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	No
		Non-zoning permits	No
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	No
		FCC License to Cover Application	Yes
		FCC Special Temporary Authority Application	No
	Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	No
		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?	No

Other Expenses Not Listed

Other	Other Expenses Not Listed			
Expenses	Name	Description		
	Crown Castle	Structural Analysis, zoning, permitting fee, post inspection fee, close out document fee		

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 EC702 HP-BB D21	\$174,650.00	\$106,281.83		\$59,331.83	
5 Ton system	\$20,250.00	\$19,250.00	N/A	N/A	N/A
Other Electrical Service: Replacement of service entrance. Existing service at max. capacity.	\$12,500.00	\$12,500.00	N/A	N/A	N/A
1" Rigid Conduit and Wiring	\$1,500.00	\$1,500.00	N/A	N/A	N/A

UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	\$126,000.00	\$59,331.83	Change due to sales tax not included in initial estimate. See S10349-2 KUOT.pdf	\$59,331.83	Initial model transmitter estimated @ \$56,590 July 2017, Model EC701HP- BB. Actual Model approved and purchased EC702HP- BB. Sales tax was not included in the 2017 estimate and is based on delivery location in 2019.
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$13,700.00	N/A	N/A	N/A
Sub-total	\$174,650.00	\$106,281.83	N/A	\$59,331.83	N/A
Total for all systems	\$643,213.00	\$353,884.83	N/A	\$64,956.83	N/A

Components

Actual Information Description	File Name
5 Ton system	Information not provided.
Other Electrical Service: Replacement of service entrance. Existing service at max. capacity.	Information not provided.
1" Rigid Conduit and Wiring	Information not provided.

UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	Component Description:	Amount equals 60% of transmitter cost
		due with order.
	Amount:	\$35,568.61
	Component Description:	Balance due for Ch 21 Transmitter.
	Amount:	\$23,763.22
Service entrance 3 phase /800 amp/208 volt	Information not provided.	

Antennas

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna ANT DLP12B	\$33,030.00	\$31,400.00		\$5,625.00	
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	\$25,000.00	N/A	\$5,625.00	N/A
Sub-total	\$33,030.00	\$31,400.00	N/A	\$5,625.00	N/A
Total for all systems	\$643,213.00	\$353,884.83	N/A	\$64,956.83	N/A

Components

Actual Information Description	File Name	
Sweep test of existing antenna	Information not provided.	
UHF - Lower Power Side Mount, Class A One Station antenna basic	Component Description: Amount:	Ch21 ANT DLP12B \$5,625.00

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	\$36,990.00	\$35,160.00		\$0.00	
Sweep Test	\$1,000.00	\$1,000.00	Sweep test vertical run of 3" coax to determine if damaged and requires replacement. Wallace Tower Specialists Quote	N/A	N/A
Flexible Air Transmission Line - dielectric, 3"	\$35,990.00	\$34,160.00	Wallace Tower Specialists Quote for removal and installation of 3" line, \$28,485	N/A	N/A
Sub-total	\$36,990.00	\$35,160.00	N/A	\$0.00	N/A
Total for all systems	\$643,213.00	\$353,884.83	N/A	\$64,956.83	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 GTOWER	\$241,468.00	\$30,968.00		\$0.00	
Remove and install antenna	\$30,968.00	\$30,968.00	Quote Wallace Tower Specialists	\$0.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$0.00	N/A	N/A	N/A
Sub-total	\$241,468.00	\$30,968.00	N/A	\$0.00	N/A
Total for all systems	\$643,213.00	\$353,884.83	N/A	\$64,956.83	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	\$129,190.00	\$122,750.00		\$0.00	
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File 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	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 engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	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
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Project management of the transition	\$6,320.00	\$6,000.00	N/A	N/A	N/A
Sub-total	\$129,190.00	\$122,750.00	N/A	\$0.00	N/A
Total for all systems	\$643,213.00	\$353,884.83	N/A	\$64,956.83	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	\$27,885.00	\$27,325.00		\$0.00	
Crown Castle	\$6,000.00	\$6,000.00	Crown Castle requires structural analysis, zoning, permitting application fee, post inspection fee, close out document fee for the change of antenna to Ch 21.	N/A	N/A
Develop and air announcement of upcoming channel change	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$5,000.00	\$5,000.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A

DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Sub-total	\$27,885.00	\$27,325.00	N/A	\$0.00	N/A
Total for all systems	\$643,213.00	\$353,884.83	N/A	\$64,956.83	N/A

Components

Cost Information	Grand Total						
		Predetermined Cost Estimate	Estimated Cost	Actual Cost			
	Total for all systems	\$643,213.00	\$353,884.83	\$64,956.83			

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.

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.	Vernon Fotheringham CEO 01/29/2019

Attachments