

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

			-		
Facility	69114	Service: DTV	Call	WUNE-TV	Channel: 36 (UHF)
ID:			Sign:		
File	000002	7167			
Number:					
FRN: 000	01910066	Date	07/20		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Information

Applicant	Address	Phone	Email	Applicant Type
University of North Carolina Doing Business As: UNIVERSITY OF NORTH CAROLINA	PO Box 27709 RESEARCH TRIANGLE PARK, NC 27709 United States	+1 (919) 549- 7000	fcc_notice@unctv. org	Government Entity

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Ontact Name and Information

Contact Information	Applicant	Address	Phone	Email
	Donald Smith , Smith .	Donald Smith	+1 (919)	dsmith@unctv.
	Director of New Technologies	10 T.W. Alexander	549-7025	org
	Compliance & Planning	Drive		
	University of North Carolina	Research Triangle		
	Center for Public Television	Park, NC 27709		
		United States		

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 transition plan is to construct an interim facility at the existing site. The interim facility would be used when operation on the new channel begins. After that the necessary changes would be made to the primary transmission system.	

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

Auxiliary	Add Transmitter Information					
Transmitter	Section	Question	Response			
	Existing Transmitter Description	Type of change	Purchase New			
		Use	Auxiliary (Backup)			
		Description of Use	Backup to Main			
		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	LU2500ATD			
		Year	2008			
		Туре	Solid State			
		Solid State Cooling	Air Cooled			
		Solid State Power Capacity	2.5 kW			

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	ULXTE-10			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	6 kW			
		Justification for New Transmitter	The transmitter support company has indicated that they may be able to provide re- channelization proposals for some models. At this time they have failed to provide a proposal. See attachment for further details.			

Auxiliary Transmitter	Other Transmitter Costs				
	Section	Question	Response		
	Electrical Service	Service Entrance (3 phases 800A 208V)	No		
		Switchgear (industrial 800 amp)	No		
		Transformer (480V)	Yes		

Ath _ mittor -~ --+

	Power	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	120.0 feet
	Other Electrical Service	Yes
	Description	Electrical feed disconnects and other items necessary to meet electrical code requiremen
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 Cost Not Listed

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	DHD45P2			
		Year	2001			
		Туре	Solid State			
		Solid State Cooling	Air Cooled			
		Solid State Power Capacity	10.5 kW			

Existing Transmitter Information

Primary	New Transmitter Costs					
Transmitter	Section	Question	Response			
	New Transmitter	Use	Primary (Main)			
		Change Type	Purchase New			
		Is this a request for upgraded equipment?	No			
		Manufacturer				
		Model	ULXTE-20			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	11.5 kW			
		Justification for New Transmitter	The transmitter manufacturer has indicated that components necessary to modify the transmitter for operation on its new channel are no longer available and it will not be able to provide re- channelization services for the transmitter. See attached letter			

Primary Transmitter	Other Transmitter Costs				
	Section	Question	Response		
	Electrical Service	Service Entrance (3 phases 800A 208V)	No		

	Switchgoor (inductrial 200 arra)	Vee
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	120.0 feet
	Other Electrical Service	Yes
	Description	Electrical feed disconnec and other items necessary to meet electrical code requireme
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

ntennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

Auxiliary Antenna	Add Antenna Information				
	Section	Question	Response		
	Existing Antenna Description	Type of change	Purchase New		
		Antenna Use	Auxiliary (Backup)		
		Description of Use	Backup to Main		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is this antenna currently shared with any other stations?	No		
		Is this 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	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)	63.0 kW		

Add Antenna Information

Manufacturer	
Model	ATW8G4- HSS-17
Year	1986

Auxiliary	New Antenna Costs				
Antenna	Section	Question	Response		
	New Antenna Description	Use	Auxiliary (Backup)		
		Description of Use	Interim Facility and Eventual Auxiliary		
		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?	No		
	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)	165.0 kW		

Manufacturer
Model
Year
Justification for New Antenna

Auxiliary 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		
		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?	Yes

Other Antenna Cost Not Listed Auxiliary Antenna

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?	No		
	Existing Antenna	Class	Full Power		
	Manufacturer and Type	Mounting	Top 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)	100.0 kW		

	Manufacturer	
	Model	ATW19HS5- ETC2-1
-	Year	1994

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?	No			
	New Antenna Manufacturer and Types	Class	Full Power			
		Mounting	Top 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)	165.0 kW			
		Manufacturer				
			1			

Model	TFU-21ETT /VP-R 4C180
Year	2019
Justification for New Antenna	The antenna is a single channel slotted pylon style antenna. It cannot operate on a channel other than what it was designed, channel 17. The only viable option is to replace the antenna.

Primary Other Antenna Costs Antenna Section

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?	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?	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 Informatio

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

Auxiliary	Add Transmission Line			
Transmissio	n Section	Question	Response	
	Existing Transmission Line Description	Type of change	Purchase New	
		Use	Auxiliary (Backup)	
		Description of Use	Backup to Main	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is this transmission currently shared with any other stations?	No	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission	Manufacturer		
	Line Manufacturer and Type	Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	210 feet per run	

Auxiliary	New Transmission Line		
Transmissio	n Linen Section	Question	Response
	New Transmission Line Costs	Use	Auxiliary (Backup)
		Description of Use	Interim and backup to main
		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	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	210 feet per run
		Justification for New Transmission Line	The existing transmission line has a stick length of 19-1/2 feet, a length that is inconsistent with operations on channel 36. The only option is to replace the transmission line.

Auxiliary Other Transmission Line Expenses Not Listed

Auxiliary Other Transmission 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

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	Owned	
		Is this tower consider Complex?	No	
		Is this tower currently shared with any other stations?	No	
		One or more FM, AM or TV radio broadcaster(s)	N/A	
		Others Types of Users	N/A	
		Is tower documented for structural analysis?	Yes	
		Is tower compliant with Rev G?	Yes	
	Existing Tower Structure	Do you have a tower registration number?	Yes	
	Registration	ASR Number	1014575	
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	36° 03' 50.0" N-	
		Longitude (NAD83)	081° 50' 32.0" W-	
		Overall Structure Height	449.14 feet	
		Support Structure Height	400.26 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	4606.24 feet	

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	UNIVERSITY OF NORTH CAROLINA
Date Constructed	01/01/1990

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

PrimaryOther Tower ExpensTowerInformation not provided.

Outside	Section	Question	Response
Professional	I Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	120
		Explanation	The transmission site is owned by the State of North Carolina. The state requires a project designer to submit plans for the project for review and approval. this is very similar to the local permitting process but done on the state level
	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	Yes
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	Yes
		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	Yes
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	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 Costs	Description	
	Additional Legal Expenses	Legal expenses for non-catalog advice and review, including transition status reports and other miscellaneous legal needs.	

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

Expenses Information not provided.

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-20	\$576,370.00	\$548,600.00		\$0.00	
Other Electrical Service: Electrical feed disconnects and other items necessary to meet electrical code requirements	\$15,000.00	\$15,000.00	Estimate for non- categorized items necessary to meet electrical code requirements	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$3,120.00	\$3,000.00	N/A	N/A	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$470,000.00	N/A	N/A	N/A
Auxiliary Transmitter ULXTE-10	\$327,070.00	\$312,200.00		\$0.00	

Other Electrical Service: Electrical feed disconnects and other items necessary to meet electrical code requirements	\$24,900.00	\$24,900.00	Estimate for non- categorized items necessary to meet electrical code requirements	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$3,120.00	\$3,000.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW	\$273,500.00	\$260,000.00	N/A	N/A	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
Sub-total	\$903,440.00	\$860,800.00	N/A	\$0.00	N/A
Total for all systems	\$1,646,973.00	\$1,674,201.00	N/A	\$4,581.82	N/A

Components

Antennas

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna TFU- 21ETT/VP-R 4C180	\$308,530.00	\$252,380.00		\$0.00	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1 /8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	N/A	N/A
UHF - High Power Top Mount (200- 1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$234,280.00	See Dielectric Antenna Quote	N/A	N/A
Auxiliary Antenna ATW10H4- ESGS-36H	\$150,540.00	\$223,100.00		\$0.00	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A

Elbow complex, single channel, at antenna input, per 6 1 /8. feedine (if needed)\$12,300.00\$11,700.00N/AN/AN/ASide redine (if needed)\$23,150.00\$22,000.00N/AN/AN/AN/ASide mount brackets for high power antennas (if not included in antenna base cost)\$23,150.00\$22,000.00N/AN/AN/APattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)\$5,000.00N/AN/AN/APuttern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)\$103,100.00\$178,000.00See line item 002 in ERI antenna quoteN/AN/AUHF - Lower Power Side Mount, One Station antenna . medium power (50- 200 kW), elliptically or circularly polarized\$459,070.00\$475,480.00N/A\$0.00N/A						
brackets for high power antennas (if not included in antenna base cost)S5,260.00N/AN/AN/APattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)\$5,000.00N/AN/AN/AUHF - Lower Power Side Mount, One Station antenna . medium power (60- 200 kW), elliptically or circularly polarized\$103,100.00\$178,000.00See line ERI antenna quoteN/AN/A	complex, single channel, at antenna input, per 6 1 /8. feedline	\$12,300.00	\$11,700.00	N/A	N/A	N/A
scatter analysis for side mount high/med power antennas (if not included in antenna base cost) UHF - Lower \$103,100.00 \$178,000.00 See line N/A N/A Power Side N/A N/A Power Side ERI Station antenna antenna . quote ERI Station antenna antenna . quote ver (50- 200 kW), elliptically or circularly polarized	brackets for high power antennas (if not included in antenna	\$23,150.00	\$22,000.00	N/A	N/A	N/A
Power Sideitem 002 inMount, OneERIStationantennaantenna .quotemedium	scatter analysis for side mount high/med power antennas (if not included in antenna	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Sub-total \$459,070.00 \$475,480.00 N/A \$0.00 N/A	Power Side Mount, One Station antenna . medium power (50- 200 kW), elliptically or circularly	\$103,100.00	\$178,000.00	item 002 in ERI antenna	N/A	N/A
	Sub-total	\$459,070.00	\$475,480.00	N/A	\$0.00	N/A
Total for all \$1,646,973.00 \$1,674,201.00 N/A \$4,581.82 N/A systems		\$1,646,973.00	\$1,674,201.00	N/A	\$4,581.82	N/A

Components

Transmission Line

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Auxiliary Transmission Line	\$42,420.00	\$57,953.00		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$42,420.00	\$57,953.00	See line items 004 - 021 & 023 in the attached ERI quote	N/A	N/A
Sub-total	\$42,420.00	\$57,953.00	N/A	\$0.00	N/A
Total for all systems	\$1,646,973.00	\$1,674,201.00	N/A	\$4,581.82	N/A

Components

Tower Equipment and Rigging Costs

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$84,200.00	\$131,700.00		\$0.00	
Short Tower (less than 500')	\$84,200.00	\$131,700.00	See line item 025 in attached ERI antenna and transmission line quote	N/A	N/A
Sub-total	\$84,200.00	\$131,700.00	N/A	\$0.00	N/A
Total for all systems	\$1,646,973.00	\$1,674,201.00	N/A	\$4,581.82	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 Outside	Predetermined Cost Estimate \$66,775.00	Estimated Cost \$63,250.00	Estimated Cost Justification	Actual Cost \$4,581.82	Actual Cost Justification
Professional Services					
Additional Legal Expenses	\$5,000.00	\$5,000.00	Preliminary estimate for legal expenses for non-catalog advice and review including transition status reports and other miscellaneous legal needs.	\$2,231.82	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	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 - 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 - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	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
Project management of the transition	\$18,960.00	\$18,000.00	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 and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Address transition timing and coordination issues w/	\$2,630.00	\$2,500.00	N/A	N/A	N/A

Total for all systems	\$1,646,973.00	\$1,674,201.00	N/A	\$4,581.82	N/A
Sub-total	\$66,775.00	\$63,250.00	N/A	\$4,581.82	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,000.00	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	\$1,687.50	N/A
engineering study for new channel assignment and antenna development		• ,			
Perform	\$7,360.00	\$7,000.00	N/A	\$662.50	N//

Components

Actual Information Description	File Name	
Additional Legal Expenses		
	Component Description:	Outside Professional
		Services
		Additional Legal
		Expenses
	Amount:	\$33.70
		4 00000
	Component Description:	Outside
		Professional
		Services
		Additional Legal
		Expenses
	Amount:	\$505.50
	Component Description:	Outside
		Professional
		Services
		Additional Legal
		Expenses
	Amount:	\$539.20
	Component Description:	Outside
		Professional
		Services
		Additional Legal
		Expenses Legal
		services benefit
		entire FCC
		Repack project
		across all 11 Call
		Signs/Facility IDs,
		2594.40/11 equal
		235.85 as outlined
		on page 1 of
		invoice.
	Amount:	\$235.85

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across 10 of 11 Call Signs/Facility IDs, 3378.88/10 equal 337.89 as outlined on page 1 of invoice.
Amount:	\$337.89
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$245.40
Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 1617.10/11 equal 147.01 as outlined on page 1 of invoice. \$147.01

	Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 2059.90/11 equal 187.27 as outlined on page 1 of invoice. \$187.27
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.	
ASR modification (prepare FCC Form 854)	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Project management of the transition	Information not provided.	

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare and or review reimbursement form	Information not provided.	
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Perform engineering study for new channel assignment and antenna development	Component Description:	Outside Professional Services Engineering Study New Channel Assignment Antenna Development \$662.50
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	Outside Professional Services Engineering Section FCC Forn 2100 Construction Permit Application Main/Primary \$1,687.50
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.	
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License	Information not provided.	
to Cover Application		

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	\$91,068.00	\$85,018.00		\$0.00	
MVPD Notification of Channel Change	\$5,500.00	\$5,500.00	Preliminary estimate of services	N/A	N/A
Develop and air announcement of upcoming channel change	\$2,000.00	\$2,000.00	Preliminary estimate	N/A	N/A
Equipment Delivery and Handling Charges	\$10,000.00	\$10,000.00	Preliminary estimate	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$62,018.00	\$62,018.00	See attached quotes for disposal of both transmitters	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$5,500.00	Preliminary estimate of service	N/A	N/A
Sub-total	\$91,068.00	\$85,018.00	N/A	\$0.00	N/A
Total for all systems	\$1,646,973.00	\$1,674,201.00	N/A	\$4,581.82	N/A

Components

Information not provided.

Cost	Grand Total					
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost		
	Total for all systems	\$1,646,973.00	\$1,674,201.00	\$4,581.82		

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. The above-named entity. The above-named entity acknowledges that all certifications and attached documentation are considered material 	
		representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8.	The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
an aut name	are, under penalty of perjury, that I am chorized representative of the above- d applicant for the Authorization(s) ied above.	don Smith Director of New Technologies Compliance & Planning 07/20/2018

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		 The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 	
		2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.	
		3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster **Relocation Fund are** necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

er th pa m	ne above-named htity acknowledges at overpayments or ayments in error ust be promptly funded to the commission.	
er is vu ar re vl ob pa	ne above-named ntity certifies that it in full compliance th all statutes, les, regulations ad governmental quirements for nich compliance is prerequisite for btaining the ayments herein quested.	
I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.		Robert Levin Director of Finance and Administration

Attachments

_