

Federal Communications Commission

#### (REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility ID:	69300	Service: DTS	Call Sign:	WUNF-TV	Channel: 20 (UHF)
File Number:	000003	3807			
	)1910066	Date	07/10		
		Submitted:	/2019		

# 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 14900 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 Contact Name and Information

Contact Information	Applicant	Address	Phone	Email
	Donald 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	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	WUNF-TV is a DTS station with 2 sites. The transition plan for WUNF-TV is to construct a new facility at a different site for site #1 due to issues outlined in the unable to construct waiver request. Site #2 will be constructed at the existing site.

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	Auxiliary - Site 1			
		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			

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	ULXTE-30			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	16 kW			
		Justification for New Transmitter	A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1.			

Auxiliary	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			
			1			

	Size	2 inches
	Length	100.0 feet
	Other Electrical Service	Yes
	Description	Electrical feed disconnects and other items necessary to meet electrical code requirements
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	1			
		Is this transmitter currently shared with another station?	No			
		Is this transmitter currently in operating condition?	Yes			
	Existing Transmitter	Manufacturer				
	Manufacturer and Type	Model	DCX-2			
		Year	1996			
		Туре	Inductive Output Tube			
		IOT Power Type	Тwo			
		Power Capacity	40 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?	Yes			
		Manufacturer				
		Model	ULXTE-100			
		Transmitter Type	Solid State			
		Solid State Cooling	Liquid Cooled			
		Solid State Power capacity	53.5 kW			
		Justification for New Transmitter	A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1.			

Primary	Other Transmitter Costs			
Transmitter	Section	Question	Response	
	Electrical Service	Service Entrance (3 phases 800A 208V)	No	
		Switchgear (industrial 800 amp)	Yes	
		Transformer (480V)	Yes	
		Power	300 kVA	
		Rigid Conduit and Wiring	Yes	

	Size	2 inches
	Length	200.0 feet
	Other Electrical Service	Yes
	Description	Electrical feed disconnects and other items necessary to meet electrical code requirements Estimate for non- categorized items necessary to meet electrical code requirements
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<br/>TransmitterOther Transmitter Cost Not ListedInformation 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	2	
		Is this transmitter currently shared with another station?	No	
		Is this transmitter currently in operating condition?	Yes	
	Existing Transmitter	Manufacturer		
	Manufacturer and Type	Model	LU250	
		Year	2003	
		Туре	Solid State	
		Solid State Cooling	Air Cooled	
		Solid State Power Capacity	0.25 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	TXUD-250		
		Transmitter Type	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power capacity	0.25 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.		

Primary Transmitter	Other Transmitter Costs				
	Section	Question	Response		
	Electrical Service	Service Entrance (3 phases 800A 208V)	No		
		Switchgear (industrial 800 amp)	No		
		Transformer (480V)	No		
		Power	N/A		

#### Other Transmitter Costs

	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	Electrical feed disconnects and other items necessary to meet electrical code requirements
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** Information not provided.

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

Auxiliary					
Antenna	Section	Question	Response		
	Existing Antenna Description	Type of change	Purchase New		
		Antenna Use	Auxiliary (Backup)		
		Description of Use	Auxiliary - Site 1		
		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)	113.5 kW		

# Add Antenna Information

Manufacturer	
Model	TFU- 16DSB-M
Year	2003

Auxiliary	New Antenna Costs				
Antenna	Section	Question	Response		
	New Antenna Description	Use	Auxiliary (Backup)		
		Description of Use	Auxiliary		
		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	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			

Model	SAA20- C170-G400 ES6R-20
Year	2019
Justification for New Antenna	A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1.

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#### Auxiliary Antenna Section Question Response **Combiner for Shared** Do you need a Combiner for a Shared No Antenna Antenna? Туре Number of channels supported N/A Frequencies of channels supported N/A N/A Frequency Do you need a combiner output splitter N/A /switcher for dual feed lines? **Elbow Complex** Do you require the separate purchase of Yes the Elbow Complex? Broadband or Single Channel? Single Channel Feed Line Size 7 3/16 inches

**Other Antenna Costs** 

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 Information not provided.

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	1	
		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	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)	125.0 kW	

Manufacturer	
Model	ATW12HS4- ESC170- 25S
Year	2010

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)	1000.0 kW	
		Manufacturer		
			1	

Model	SAA20- C170-E400 ET6R-20
Year	2019
Justification for New Antenna	A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1.

#### Primary Antenna Section Question Response **Combiner for Shared** Do you need a Combiner for a Shared No Antenna Antenna? Туре Number of channels supported N/A Frequencies of channels supported N/A N/A Frequency Do you need a combiner output splitter N/A /switcher for dual feed lines? **Elbow Complex** Do you require the separate purchase of Yes the Elbow Complex? Broadband or Single Channel? Single Channel Feed Line Size 7 3/16 inches inches

**Other Antenna Costs** 

Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

# Primary Other Antenna Cost Not Listed

Antenna Information not provided.

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	2	
		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	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Other	
		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	Narrowband Panel	
		ERP: (Effective Radiated Power)	1.5 kW	
			1	

Manufacturer	
Model	4DR-8-2HW
Year	2003

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	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Elliptical	
		Туре	Broadband Panel	
		Number of Stations Supported	1	
		Number of Panels/Bays	4	
		Lower Limit	470.00 MHz	
		Upper Limit	862.00 MHz	
		Design power capacity in use	25.0 %	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1.35 kW	
		Manufacturer		
			1	

Model	2x2 750 10325
Year	2019
Justification for New Antenna	The current antenna is designed to operate on channel 25 plus or minus one or two channels. The antenna wil not operate properly on channel 20

#### **Other Antenna Costs** Primary Antenna Question Response Section **Combiner for Shared** Do you need a Combiner for a Shared No Antenna Antenna? Туре N/A Number of channels supported Frequencies of channels supported N/A Frequency N/A Do you need a combiner output splitter N/A /switcher for dual feed lines? **Elbow Complex** Do you require the separate purchase of No the Elbow Complex? Broadband or Single Channel? N/A Feed Line Size N/A Side Mount Brackets Do you require the separate purchase of No side mount brackets for a high power antenna?

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<br/>AntennaOther Antenna Cost Not ListedInformation not provided.

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

Auxiliary Transmissio	n Line Settion	Question	Response
	Existing Transmission Line Description	Type of change	Purchase New
		Use	Auxiliary (Backup)
		Description of Use	Site #1 Emergency Auxiliary Part 1
		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 Line Section	Question	Response	
	New Transmission Line Costs	Use	Auxiliary (Backup)	
		Description of Use	Auxiliary	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Туре	Rigid	
		Diameter	7 3/16 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	650 feet per run	
		Justification for New Transmission Line	A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1.	

#### Other Transmission Line Expenses Not Listed Auxiliary Transmission to provided.

Primary Transmissio	Add Transmission Line			
	n 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	1	
		Is this transmission currently shared with any other stations?	No	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission Line Manufacturer and Type	Manufacturer		
		Туре	Rigid	
		Diameter	8 3/16 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	400 feet per run	

Add Transmission Line

Primary	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	Rigid	
		Diameter	7 3/16 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	830 feet per run	
		Justification for New Transmission Line	A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1.	

### 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

Primary Tower	Add 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?	Candelabra	
		Is this tower currently shared with any other stations?	Yes	
		One or more FM, AM or TV radio broadcaster(s)	Yes	
		Others Types of Users	No	
		Is tower documented for structural analysis?	Unknown	
		Is tower compliant with Rev G?	Unknown	
	Existing Tower Structure Registration	Do you have a tower registration number?	Yes	
		ASR Number	1023079	
	Coordinates ( <u>NAD83</u> ( North American Datum of 1983))	Latitude (NAD83)	35° 13' 20.0" N-	
		Longitude (NAD83)	082° 32' 58.0" W-	
		Overall Structure Height	721.78 feet	
		Support Structure Height	672.56 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	3425.16 feet	

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Capstar Radio Operating Company
Date Constructed	09/01/1997

#### 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
59818	WMYI	FM
70149	WYCW	DTV

# Primary Tower Rigging Costs

Tower

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

## Primary Other Tower Expenses Not Listed

**Tower** Information not provided.

Primary Tower	Existing 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?	No	
		Is tower compliant with Rev G?	Unknown	
	Existing Tower Structure Registration	Do you have a tower registration number?	No	
		ASR Number		
	Coordinates (NAD83 ( North American Datum of 1983))	Latitude (NAD83)	35° 28' 25.0" N-	
		Longitude (NAD83)	083° 19' 23.0" W-	
		Overall Structure Height	98.00 feet	
		Support Structure Height	98.00 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	2421.00 feet	
		Structure Type	TOWER - Free Standing or Guyed Structure	

Tower Owner	University of North Carolina
Date Constructed	06/07/2012

# **Tower Rigging Costs** Primary Tower

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 Information not provided.

Outside Professional	Section	Question	Response
	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	250
		Explanation	Because the transmission site is leased by the State of North Carolina, it is subject to various state construction project rules. One rule is the hiring of a designer to create submittals for project review and approval by the state.
	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	2

	Do you have Distributed Transmission System engineering services?	Yes
	Critical Facility	1
	Terrain-Shielded Facility	10
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

Outside				
Professional	Services Costs	Description		
	Additional Legal Expenses	Legal expenses for non-catalog advice and review, including transition status reports and other miscellaneous legal needs.		
	Microwave Frequency Study	Microwave system frequency search for available frequencies.		
	Microwave License Preparation	Licensing of microwave system		
	Microwave PCN	Prior coordination notices for microwave system construction to extend program content distribution to the replacement site.		
	Tower Structural Analysis	Required by State		
	Tower Structural Analysis	content distribution to the replacement site.		

# Outside Other Professional Services Expenses Not Listed

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	No
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	No
		Non-zoning permits	No
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	No
		FCC License to Cover Application	No
		FCC Special Temporary Authority Application	No
	Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
		Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	No
		Does this relocation require Equipment Storage?	No
		Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
		Does this relocation require MVPD Notification of a Channel Change?	Yes

#### Other Expenses Not Listed

Other Expenses	Other Expenses Not Listed			
	Name	Description		
	Microwave Electronics Mods	Parts necessary to modify frequencies of existing radios		
	Microwave L and A	Microwave System Antennas and Line		

# 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-100	\$1,893,100.00	\$1,801,200.00		\$1,424,866.36	
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	\$1,788,000.00	\$1,700,000.00	N/A	\$1,419,122.36	N/A
Transformer 3 phase /480v - 300 KVA	\$36,800.00	\$35,000.00	N/A	\$5,744.00	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$5,000.00	N/A	N/A	N/A

UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	\$684,000.00	\$650,000.00	N/A	\$189,142.59	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	\$1,958.60	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$2,600.00	\$2,500.00	N/A	N/A	N/A
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
Sub-total	\$2,646,190.00	\$2,518,940.00	N/A	\$1,631,007.55	N/A
Total for all systems	\$4,364,131.30	\$3,915,243.59	N/A	\$2,256,131.87	N/A

Actual Information	
Description	File Name

UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	Component Description:	Primary Transmitter Per FCC Hotline (Paige, 7/8/2019) credit for transformer applied to transmitter, otherwise causes system error. Immediate Due Date on invoice adjusted to vendor terms of 60 days. Refer to attachment pgs 2- 4 & PO/Quotes pgs 5-27.
	Amount: Component Description: Amount:	\$655,081.73 50% Primary Transmitter & Installation. Installation included w /Transmitter Cost on Form 399. Purchase Order is for all 11 Sites. Transformer on line 16 of quote is separate Form 399 Line Item. \$764,040.63

Transformer 3 phase/480v - 300 KVA		
JUU KVA	Component Description:	50% Request for Transformer that is included on invoice with the cost for transmitter. Transformer has unique 399 Line Item. See line 16 of quote for detail cost. Purchase Order is for all 11 sites.
	Amount:	\$5,744.00
Switchgear - industrial 800 amp	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Electrical Service: Electrical feed disconnects and other items necessary to meet electrical code requirements Estimate for non-categorized items necessary to meet electrical code requirements	Information not provided.	
UHF - Air Cooled Solid State Transmitter 0.25 kW	Component Description:	Primary
	Amount:	Transmitter \$15,040.00
Other Electrical Service: Electrical feed disconnects and other items necessary to meet electrical code requirements	Information not provided.	

UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	Component Description:	50% Aux Transmitter & Installation. Installation included w /Transmitter on Form 399. Purchase Order is for all 11 sites. Transformer on line 16 of quote is separate Form 399 Line Item. \$189,142.59
Transformer 3 phase/480v - 150 KVA	Component Description:	50% Transformer on line 16 of quote included w /cost of transmitte on invoice. Purchase Order includes all 11 sites. \$1,958.60
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Electrical Service: Electrical feed disconnects and other items necessary to meet electrical code requirements	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 Cos Justificatio
Primary Antenna SAA20- C170-E400- ET6R-20	\$315,390.00	\$182,236.50		\$78,818.25	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - High Power Top Mount (200- 1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$157,636.50	See attached RFS Antenna Change Narrative with Pricing	\$78,818.25	N/A
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	\$13,900.00	\$13,200.00	N/A	N/A	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A

Primary Antenna 2x2 750 10325	\$14,741.80	\$14,411.80		\$8,011.80	
UHF - High Power, Side Mount, broadband panel, 4 bay,, 1 kW input, directional,, elliptically or circularly polarized	\$0.00	\$0.00	N/A	N/A	N/#
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N//
UHF - High Power, Side Mount, broadband panel, 4 bay,, 1 kW input, directional,, horizontally polarized	\$8,011.80	\$8,011.80	***System Notice: Estimate adjusted and locked because line has been superseded. ***Manufacturer's estimated cost	\$8,011.80	N/A
Auxiliary Antenna SAA20- C170-G400- ES6R-20	\$170,061.50	\$167,621.50		\$60,510.75	
Pattern 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

Side mount brackets for high power antennas (if not included in antenna	\$23,150.00	\$22,000.00	N/A	N/A	N/A
base cost)					
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized	\$121,021.50	\$121,021.50	See attached RFS Antenna Change Narrative with Pricing	\$60,510.75	N/A
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	\$13,900.00	\$13,200.00	N/A	N/A	N/A
Sub-total	\$500,193.30	\$364,269.80	N/A	\$147,340.80	N/A
Total for all systems	\$4,364,131.30	\$3,915,243.59	N/A	\$2,256,131.87	N/A

Actual Information Description	File Name
Sweep test of existing antenna	Information not provided.

UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Component Description:	50% Primary Antenna included in Inv & PO Line 7. Invoice & Purchase Order are for 10 sites. \$78,818.25
		<i></i>
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	Information not provided.	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
UHF - High Power, Side Mount, broadband panel, 4 bay,, 1 kW input, directional,, elliptically or circularly polarized	Information not provided.	
Sweep test of existing antenna	Information not provided.	
UHF - High Power, Side Mount, broadband panel, 4 bay,, 1 kW input, directional,, horizontally polarized	Component Description: Amount:	Primary Antenna w/freight cost. \$8,011.80
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.	
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: Amount:	50% Auxilliary Antenna included in Inv & PO Line 7. Invoice & Purchase Order are for 10 sites. \$60,510.75
Elbow complex, single channel, at antenna input, per 7 3/16. 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 Primary Transmission Line	Predetermined Cost Estimate \$240,700.00	Estimated Cost \$172,486.63	Estimated Cost Justification	Actual Cost \$86,243.32	Actual Cost Justification
Rigid Transmission Line - copper, 7 3 /16"	\$240,700.00	\$172,486.63	See attached RFS Antenna Change Narrative with Pricing	\$86,243.32	N/A
Auxiliary Transmission Line	\$188,500.00	\$146,788.88		\$73,394.44	
Rigid Transmission Line - copper, 7 3 /16"	\$188,500.00	\$146,788.88	See attached RFS Antenna Change Narrative with Pricing	\$73,394.44	N/A
Sub-total	\$429,200.00	\$319,275.51	N/A	\$159,637.76	N/A
Total for all systems	\$4,364,131.30	\$3,915,243.59	N/A	\$2,256,131.87	N/A

Actual Information	
Description	File Name

Rigid Transmission Line - copper, 7 3/16"	Component Description:	50% Primary Transmission Line included in Inv & PO Line 7. Invoice & Purchase Order are for 10 sites.
	Amount:	\$86,243.32
Rigid Transmission Line - copper, 7 3/16"	Component Description:	50% Auxilliary
	component Description.	Transmission Line
		included in Inv &
		PO Line 7. Invoice
		& Purchase Order
		are for 10 sites.
	Amount:	\$73,394.44

# **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	\$10,000.00		\$0.00	
Short Tower (less than 500')	\$84,200.00	\$10,000.00	N/A	N/A	N/A
Primary Tower TOWER	\$421,000.00	\$312,255.28		\$156,127.64	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$312,255.28	See attached RFS Antenna Change Narrative with Pricing	\$156,127.64	N/A
Sub-total	\$505,200.00	\$322,255.28	N/A	\$156,127.64	N/A
Total for all systems	\$4,364,131.30	\$3,915,243.59	N/A	\$2,256,131.87	N/A

Actual Information Description	File Name
Short Tower (less than 500')	Information not provided.

or example, those with	<b>Component Description:</b>	50% Primary
candelabras and/or stacked		/Complex Tower
antennas)		Installation for
		Auxilliary Antenna
		included in Inv &
		PO Line 8.
		Invoice &
		Purchase Order
		are for 10 sites.
	Amount:	\$24,217.81
	Component Description:	50% Primary
	<b>Component Description:</b>	50% Primary
		/Complex Tower
		Installation for
		Primary Antenna
		included in Inv &
		PO Line 8.
		Invoice &
		Purchase Order
		are for 10 sites.
	Amount:	\$131,909.83

# **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 Co Justificati
Outside Professional Services	\$156,185.00	\$268,890.00		\$158,268.12	
Project management of the transition	\$39,500.00	\$147,540.00	See attachment "WUNF Program Designer - Manager Narrative" for details on estimated cost	\$117,316.78	N/A
Tower Structural Analysis	\$24,000.00	\$24,000.00	N/A	\$18,820.00	N/A
Microwave PCN	\$1,000.00	\$1,000.00	Preliminary estimate of services	N/A	N/A
Microwave License Preparation	\$1,000.00	\$1,000.00	Preliminary Estimate for Services	N/A	N/A
Microwave Frequency Study	\$1,100.00	\$1,100.00	Preliminary Estimate of Engineering Services	N/A	N/A

Additional Legal Expenses	\$10,000.00	\$10,000.00	Preliminary estimate for legal expenses for non-catalog advice and review including transition status reports and other miscellaneous legal needs; estimate exceeds predetermined cost estimate.	\$4,452.94	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	\$10,000.00	Cost estimated to exceed Predetermined Cost Estimate.	\$4,976.50	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	\$2,089.40	N/A
DTS Site RF Consulting Engineer - Terrain- shielded Facility	\$26,300.00	\$25,000.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$6,250.00	N/A

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$2,937.50	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$5,000.00	Estimated Cost Exceeds PreDetermined Cost Estimate	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
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
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	N/A	\$1,425.00	N/A

DTS Site RF Consulting Engineer - Critical Facility	\$8,420.00	\$8,000.00	N/A	N/A	N/A
Sub-total	\$156,185.00	\$268,890.00	N/A	\$158,268.12	N/A
Total for all systems	\$4,364,131.30	\$3,915,243.59	N/A	\$2,256,131.87	N/A

Actual Information Description	File Name	
Project management of the transition		
	Component Description:	Outside
		Professional
		Services Project Management of
		Transition See
		attachment pg 3-5
		for Contract
		/Invoice Summary.
	Amount:	\$12,375.40
	Component Description:	Outside
	component Description.	Professional
		Services Project
		Management of
		Transition See
		attachment pg 3-5
		for Contract
		/Invoice Summary.
	Amount:	\$5,312.27
	Component Description:	Outside
		Professional
		Services Project
		Management of
		Transition See
		attachment pg 3-5
		for Contract
	Amount:	/Invoice Summary.
	Amount:	\$26,350.00

Component Description:	Outside Professional Services Project Management of Transition See attachment pg 3-5 for Contract /Invoice Summary. \$4,446.41
Component Description: Amount:	See project & invoice summary in attachment pgs 3-6 \$53,102.70
Component Description: Amount:	Outside Professional Services Project Management \$9,022.50
Component Description: Amount:	Outside Professional Services Project Management See attachment pg. 3 & 4 for Project Summary \$6,707.50
Component Description: Amount:	Outside Professional Services Project Management See Attachment Pg. 3 & 4 for Summary \$9,022.50

Component Description: Amount:	Outside Professional Services Project Management of Transition See attachment pg 3-5 for Contract /Invoice Summary. \$53,102.70
Component Description: Amount:	Outside Professional Services Tower Structural Analysis \$18,820.00
Information not provided.	
Information not provided.	
Information not provided.	
Component Description: Amount:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$323.00 /11 as indicated on page 1 of Invoice \$29.36
	Amount:   Component Description:   Amount:   Information not provided.   Information not provided.   Information not provided.   Component Description:

Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$33.70
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$630.00
Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$350.00 /11 as indicated on page 1 of Invoice \$31.82
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$182.50
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$175.00

Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$175.00 /11 as indicated on page 1 of Invoice \$15.91
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$70.00
Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$959.50 /11 as indicated on page 1 of Invoice \$87.22
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$303.30

Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$315.00 /11 as indicated on page 1 of Invoice \$28.64
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$292.00 for Attorney Fees STA \$146.00
Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$368.00 /11 as indicated on page 1 of Invoice \$33.46

Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$303.30
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 for 187.27 as outlined on page 1 of invoice. \$187.27
Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$168.50 /11 as indicated on page 1 of Invoice \$15.32

<b>Component Description:</b>	Outside
	Professional
	Services
	Additional Legal
	Expenses Legal
	services benefit
	entire FCC
	Repack project
	across all 11 Call
	Signs/Facility IDs,
	2594.40/11 for
	235.85 as outlined
	on page 1 of
	invoice.
Amount:	\$235.85
<b>Component Description:</b>	Outside
	Professional
	Services
	Additional Legal
	Expenses
Amount:	\$105.00
Component Description:	Outside
	Professional
	Services
	Additional Legal
	Expenses Invoice
	applies to all 11
	repack stations,
	amount requested
	reflects portion
	payable per
	Station: \$572.90
	/11 as indicated on
	page 1 of Invoice
Amount:	\$52.08

Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$3472.00 /11 as indicated on page 1 of Invoice \$315.63
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 for \$147.01 as outlined on page 1 of invoice. \$147.01
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$105.00
Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$175.00

Component Description: Amount:	Outside Professional Services Additional Legal Expenses \$35.00
Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$67.40/11 as indicated on page 1 of Invoice \$6.13
Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$245.00 /11 as indicated on page 1 of Invoice \$22.27
Component Description:	Outside Professional Services Additional Legal
Amount:	Expenses \$868.70

Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$765.00 /11 as indicated on page 1 of Invoice \$69.55
Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$70.00/11 as indicated on page 1 of Invoice \$6.37
Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$402.00 /11 as indicated on
Amount:	page 1 of Invoice \$36.55

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	Component Description:	Outside Professional Services Attorney Fees STA
	Amount:	\$560.40
	Component Description:	Outside Professional Services Attorney Fees STA
	Amount:	\$2,604.30
	Component Description:	Outside Professional Services Attorney Fees STA
	Amount:	\$1,519.80
	Component Description:	Outside Professional Services Attorney Fees STA \$146.00 Other Legal Expenses
	Amount:	\$292.00
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	Information not provided.	

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description:	Outside Professional Services Attorney Fees Construction Permit
	Amount:	\$2,089.40
DTS Site RF Consulting Engineer - Terrain-shielded Facility	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	<b>Component Description:</b>	Outside
and antenna development		Professional
		Services
		Engineering Study
		New Channel
		Assignment
		Antenna
		Development
	Amount:	, \$2,600.00
	Component Description:	Outside
		Professional
		Services Perform
		Engineering
		Studies Quote is
		RATE CARD
		furnished by
		vendor for
		Professional
		Services they offe
		and are not
		specific to any
		particular station.
	Amount:	\$1,775.00
	Component Description:	Outside
	Component Description.	Professional
		Services
		Engineering Study New Channel
		Assignment
		Antenna
		Development
	Amount:	\$1,875.00

of FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Outside Professional Services RF Engineering Consulting Fees Construction Permit Applicati Main/Primary \$2,937.50
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.	
Prepare request for Special Temporary Authorization	Component Description:	Outside Professional Services Prepar STA
	Amount:	\$1,425.00
DTS Site RF Consulting Engineer - Critical Facility	Information not provided.	

## **Other Expenses**

## Cost Information

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

	Predetermined	Estimated	Estimated Cost		Actual C
Description	Cost Estimate	Cost	Justification	Actual Cost	Justifica
Other Expenses	\$127,163.00	\$121,613.00		\$3,750.00	
DTV Medical Facility Notification	\$11,550.00	\$6,000.00	Preliminary Service Estimate	\$3,750.00	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$24,900.00	\$24,900.00	The decommissioning of site #1 is an unknown due to the current site access issues.	N/A	N/A
Develop and air announcement of upcoming channel change	\$2,000.00	\$2,000.00	N/A	N/A	N/A
MVPD Notification of Channel Change	\$6,000.00	\$6,000.00	Preliminary Service Estimate	N/A	N/A
Microwave Electronics Mods	\$24,900.00	\$24,900.00	Estimated costs for replacement microwave oscillators and filters.	N/A	N/A
Microwave L and A	\$57,813.00	\$57,813.00	See attached quote	N/A	N/A
Sub-total	\$127,163.00	\$121,613.00	N/A	\$3,750.00	N/A
Total for all systems	\$4,364,131.30	\$3,915,243.59	N/A	\$2,256,131.87	N/A

## Components

Actual Information Description	File Name	
DTV Medical Facility Notification	Component Description: Amount:	Medical Notification, See schedule of services. PO /quote for multiple call/locations. \$3,750.00
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	
Microwave Electronics Mods	Information not provided.	
Microwave L and A	Information not provided.	

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$4,364,131.30	\$3,915,243.59	\$2,256,131.87

Reimbursem	enrestatus	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.	
		<ol> <li>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.</li> <li>The above-named entity.</li> <li>The above-named entity acknowledges that all certifications and attached documentation are considered material</li> </ol>	
		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.	Donald Smith Director of New Technologies Compliance & Planning 07/10/2019

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).	
		<ol> <li>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.</li> </ol>	
		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.

	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 autl named	re, under penalty of perjury, that I am horized representative of the above- I applicant for the Authorization(s) ed above.	Robert Levin Director of Finance and Administration 07/10/2019

## Attachments

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