

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

72145 Service: DTV Channel: 42 (UHF) Facility Call WHDH Sign:

ID:

File 0000027185

Number:

FRN: 0003613825 Date 06/21

> Submitted: /2018

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
WHDH-TV Doing Business As: WHDH-TV	Paul Magnes GOVERNMENT CENTER 7 BULFINCH PLACE BOSTON, MA 02114 United States	+1 (617) 725-0710	pmagnes@whdh. com	Trust

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Address	Phone	Email
	Address	Address Phone

The Preparer is same as the reimbursement contact.

Broadcaster Information and **Transition** Plan

Question Response

Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	Install interim antenna/transmission line. Broadcast on interim antenna while tower structural work is completed. Install new (upgrade) Solid State Transmitter. Go on air with new Transmitter and main antenna during testing window.

Transmitters

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

Primary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	DCX Paragon
	Year	2009
	Туре	Inductive Output Tube
	IOT Power Type	Three
	Power Capacity	75 kW

Primary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULTE 90
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	53 kW
	Justification for New Transmitter	Unlike with WHDH's existing Comark IOT Transmitter, the requested transmitter will permit WHDH to remain on air at full power during the transition

Primary Transmitter

Other Transmitter Costs

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

Power N/A Rigid Conduit and Wiring No Size N/A Length N/A Other Electrical Service Yes Description Electrician materials and labor to install
Size N/A Length N/A Other Electrical Service Yes Description Electrician materials and labor to
Length N/A Other Electrical Service Yes Description Electrician materials and labor to
Other Electrical Service Pescription Electrician materials and labor to
Description Electrician materials and labor to
materials and labor to
transmitter
HVAC Service Does the replacement transmitter require Yes HVAC Service?
Type Cooling Only
Size 15 tons
Other Size N/A
Transmitter Building Addition/Modification or Leasehold Improvement Does the Transmitter Building require an addition, modification, other leashold improvement?
Size N/A
Channel 14 Costs
Is a channel 14 Mask Filer needed? N/A
Is additional field engineering time needed? N/A
Number of Days N/A
· · · · · · · · · · · · · · · · · · ·

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
System Design, Site Survey	Transmitter installation site survey

Antennas

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

Add 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 this antenna currently shared with any other stations?	No
	Is this antenna directional?	No
	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	Middle
	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)	1000.0 kW

Manufacturer	
Model	TFU- 24GBH-R 06
Year	1998

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Top Mount
	Antenna position in stack	Тор
	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	TFU-28JTH /VP-R 06
Year	2017
Justification for New Antenna	Current Main antenna cannot be retuned to new frequency

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Туре	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	8 3/16 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
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Other Antenna Cost Not Listed

Name	Description
Bottom Support Pole	Approximate 50' support pole and wedding cake adapter to support main antenna to maintain overall structure height
Feed Through Components	6-1/8" 75 OHM elbows, cut lengths, hangers, and transition to 8-3/16" 75 OHM to extend antenna input through support pole into tower top

Interim Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	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	TFU-16WB
	Year	2017

Justification for New Antenna	Interim
	Antenna
	allows
	station to
	broadcast
	during
	replacement
	of Main
	antenna and
	during major
	tower
	structural
	modifications

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	В
	Feed Line Size	6 1/8 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

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

Primary Transmission Line

Existing Transmission Line

n Line Settion	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission	Manufacturer	
Line Manufacturer and Type	Туре	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1045 feet per run

Primary Transmi

New Transmission Line

ansmissio	n Settion	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	8 3/16 inches
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	1085 feet per
		Justification for New Transmission Line	Current Transmission line will not work on new Frequency

Primary Other Transmission Line Expenses Not Listed

Transmission loine tion not provided.

Interim

New Transmission Line

Transmission	Section	Question	Response
	New Transmission Line	Use	Interim
	Costs	Description of Use	N/A
		Change Type	Purchase New
		Туре	Rigid
		Diameter	6 1/8 inches
		Segment Length	20'
		Other Segment Length	
		Number of parallel runs	1
		Length	910 feet per run
		Justification for New Transmission Line	To feed Interim Antenna required for transition

Interim

Other Transmission Line Expenses Not Listed

Interim Transmissio	n _{Naine}	Description	
-	Nitrogen Generator	N2-Gen TL-1050 for Interim and Main Transmission Lines	
	3' Waveguide	Custom Waveguide to connect Waveguide switch	
	Motorized Waveguide Switch	Waveguide Switch allows transmitter output to switch between interim and main antenna	

Tower Equipment And Rigging Costs

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

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	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?	No
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1005862
Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	42° 18' 41.0" N-
1983))	Longitude (NAD83)	071° 12' 58.0" W-
	Overall Structure Height	1062.30 fe
	Support Structure Height	1009.50 fe
	Ground Elevation Above Mean Sea Level (AMSL)	108.60 fee

Structure Type	other -
Tower Owner	WHDH TV
Date Constructed	04/20/1962

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Serious Reinforcements needed

Primary Tower

Tower Rigging Costs

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

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

Outside Professional

Section	Question	Response	
I Services Costs Outside Project Management Services	Do you require outside project management services?	Yes	
	Number of Hours	760	
	Explanation	Internal project management. 760 hours anticipated	
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	3	
	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	3
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	No
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside
Professional Services Expenses Not Listed
Professional Services Costsided.

Other Expenses

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

Other Expenses Not Listed

Expenses Information not provided.

Cost Information

Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULTE 90	\$1,945,600.00	\$1,809,691.00		\$15,300.00	
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	\$1,788,000.00	\$1,654,891.00	N/A	N/A	N/A
Other Electrical Service: Electrician materials and labor to install transmitter	\$86,500.00	\$86,500.00	N/A	N/A	N/A
15 Ton system	\$55,800.00	\$53,000.00	N/A	N/A	N/A
System Design, Site Survey	\$15,300.00	\$15,300.00	N/A	\$15,300.00	N/A
Sub-total	\$1,945,600.00	\$1,809,691.00	N/A	\$15,300.00	N/A
Total for all systems	\$4,783,601.25	\$4,338,036.95	N/A	\$198,469.74	N/A

Actual Information Description	File Name
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	Information not provided.

Other Electrical Service: Electrician materials and labor to install transmitter	Information not provided.	
15 Ton system	Information not provided.	
System Design, Site Survey		
	Component Description:	System Design
		Site Survey Down
		Payment
	Amount:	\$2,000.00
	Component Description:	System Design,
		Site Survey final
		balance
	Amount:	\$13,300.00

Cost Information

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna TFU-16WB	\$152,300.00	\$133,641.00		\$60,138.05	
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, horizontally polarized	\$108,720.00	\$108,720.00	N/A	\$48,924.00	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$10,312.00	N/A	\$4,640.00	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$8,209.00	N/A	\$3,694.05	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,880.00	N/A
Primary Antenna TFU-28JTH /VP-R 06	\$492,970.00	\$434,095.00		\$0.00	

UHF - High Power Top Mount (200- 1000 kW), One station antenna, elliptically or circularly polarized	\$289,500.00	\$231,717.00	N/A	N/A	N/A
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 8 3/16. feedline (if needed)	\$15,250.00	\$14,488.00	N/A	N/A	N/A
Feed Through Components	\$24,530.00	\$24,530.00	Transition from 8-3 /16" 70 OHM to 6-1 /8" 75 OHM increases costs	N/A	N/A
Bottom Support Pole	\$156,960.00	\$156,960.00	N/A	N/A	N/A
Sub-total	\$645,270.00	\$567,736.00	N/A	\$60,138.05	N/A
Total for all systems	\$4,783,601.25	\$4,338,036.95	N/A	\$198,469.74	N/A

Actual Information		
Description	File Name	

UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, horizontally polarized	Component Description: Amount:	Interim Antenna- UHF Broadband Side Mount \$48,924.00
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description:	Antenna Mounting Brackets for Tapered Tower
	Amount:	\$4,640.00
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	Component Description:	Transition WR1500 X 8-75 CH35
	Amount:	\$1,714.05
	Component Description:	Transition WR1500 X 6-50 UHF System Use Per Rev-E 013A77140
	Amount:	\$990.00
	Component Description: Amount:	TRANS WR1500 X 6-50 CH35 \$990.00
Sweep test of existing antenna	Component Description: Amount:	Repack Sweep \$2,880.00
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Information not provided.	
Sweep test of existing antenna	Information not provided.	

Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed)	Information not provided.
Feed Through Components	Information not provided.
Bottom Support Pole	Information not provided.

Cost Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$216,671.25	\$205,553.75		\$92,499.19	
Rigid Transmission Line - copper, 6 1/8"	\$183,820.00	\$172,702.50	N/A	\$77,716.12	N/A
Nitrogen Generator	\$18,273.25	\$18,273.25	N/A	\$8,222.97	N/A
Motorized Waveguide Switch	\$13,778.00	\$13,778.00	N/A	\$6,200.10	N/A
3' Waveguide	\$800.00	\$800.00	N/A	\$360.00	N/A
Primary Transmission Line	\$376,495.00	\$243,671.20		\$0.00	
Rigid Transmission Line - copper, 8 3 /16"	\$376,495.00	\$243,671.20	N/A	N/A	N/A
Sub-total	\$593,166.25	\$449,224.95	N/A	\$92,499.19	N/A
Total for all systems	\$4,783,601.25	\$4,338,036.95	N/A	\$198,469.74	N/A

Actual Information		
Description	File Name	

Rigid Transmission Line - copper, 6 1/8"	Component Description:	T/L 6-50 EIA Length 15' To 20'
	Amount:	Fixed FLG 1 End /Swivel FLG 1 End \$5,568.75
	Component Description:	Rigid Transmission Line- Copper 6-1/8" 50 OHM EIA - 800FT
	Amount:	(830' V and 80' H) \$72,147.37
Nitrogen Generator		
	Component Description:	Installation Plumbing Kit for N2-Gen Nitrogen Generator
	Amount:	\$67.05
	Component Description:	Portable Nitrogen Purity Sensor for N2-Gen Nitrogen
	Amount:	Generator \$228.60
	Component Description:	Nitrogen Generator N2-Gen TL-1050. 110V,
	Amount:	15A \$4,905.00
	Component Description:	Dew Point Alarm W /touch screen PLC Upgrade for N2- Gen Nitrogen
	Amount:	Generator \$2,459.25

	Component Description:	Nitrogen Purity Sensor Sampling Kit for N2-Gen Nitrogen Generator
	Amount:	\$88.20
	Component Description: Amount:	Failure Alarm for N2-Gen Nitrogen Generator \$67.05
	Amount	ψ01.03
	Component Description:	Annual Filter Replacement Kit for N2-Gen Nitrogen Generator
	Amount:	\$42.19
	Component Description:	Regulator Kit W /low pressure alarm for N2-Gen Nitrogen Generator
	Amount:	\$365.63
Motorized Waveguide Switch	Component Description:	Switch WR1150 H Plane 115 VAC 60000
	Amount:	\$6,200.10
3' Waveguide		IMIO IVI IMPARO
	Component Description:	W/G Kit WR1500 RF System Use for inside Building Non Pressurized Painted Black
	Amount:	\$360.00
Rigid Transmission Line - copper, 8 3/16"	Information not provided.	

Cost Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower other	\$1,275,100.00	\$1,212,500.00		\$12,500.00	
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,500.00	Complex self supporting tower. Structural analysis came in higher than \$12,000.00	\$12,500.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$200,000.00	N/A	N/A	N/A
Serious tower reinforcement /modifications	\$1,052,000.00	\$1,000,000.00	N/A	N/A	N/A
Sub-total	\$1,275,100.00	\$1,212,500.00	N/A	\$12,500.00	N/A
Total for all systems	\$4,783,601.25	\$4,338,036.95	N/A	\$198,469.74	N/A

Actual Information	
Description	File Name

Structural engineering tower load study for well		
documented tower	Component Description:	Structural
		engineering tower
		load study for well
		documented tower
		progress payment
	Amount:	\$5,250.00
	Component Description:	Structural
		engineering tower
		load study for well
		documented tower
		final payment
	Amount:	\$2,000.00
	Component Description:	Structural
	Component Description.	engineering tower
		load study for well
		documented tower
		down payment
	Amount:	\$5,250.00
Tall Tower (greater than 500')	Information not provided.	
Serious tower reinforcement	Information not provided.	

Cost Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$272,765.00	\$247,750.00		\$16,682.50	
Prepare request for Special Temporary Authorization	\$6,150.00	\$1,500.00	N/A	\$2,100.00	Additional information was required by the FCC for this submission. Carl T. Jones created Population Contours to inform the FCC of population coverage loss while broadcasting on Aux /Interim facility.
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$11,040.00	\$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	\$3,572.50	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$1,950.00	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	\$2,617.50	I mistakenly assigned the wrong invoice to the aux construction permit component (029-03-0010)- that invoice should have been assigned here. it too was over the estimated costs-\$1,860 vs. the estimate of \$1,500. CTJC invoice is higher than the estimate

Project management of the transition	\$120,080.00	\$114,000.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$2,962.50	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$1,620.00	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	\$1,860.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$0.00	N/A
Sub-total	\$272,765.00	\$247,750.00	N/A	\$16,682.50	N/A
Total for all systems	\$4,783,601.25	\$4,338,036.95	N/A	\$198,469.74	N/A

Components

Actual Information Description	File Name	
Prepare request for Special Temporary Authorization	Component Description: Amount:	Preparation of engineering in support of a Request for STA and waiver request to transition in Phase 7 instead of Phase 8 \$2,100.00
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	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	Component Description:	Matter 320205.00208 draft and file aux antenna construction permit
	Amount:	\$2,502.50
	Component Description:	FCC filing fee, Aux construction permit. Reimbursable costs 5/3/18
	Amount:	\$1,070.00

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit	Component Description:	Attorney Fees- Prepare and file
Application		FCC form 2100 (main)
	Amount:	Construction Permit
	Amount:	\$1,950.00
RF Consulting Engineer		
Fees- Aux Antenna: Prepare engineering	Component Description:	Consulting Engineer prepare
section of FCC Form 2100, License to Cover Application		prepare and
License to Cover Application		submit application for aux antenna
	A	construction permit
	Amount:	\$2,617.50
Project management of the	Information not provided.	
transition		
Prepare and or review reimbursement form	Information not provided.	
Perform engineering study		
for new channel assignment and antenna	Component Description:	Performance of
development		engineering studies for the new
		channel
		assignment and
		antenna development
	Amount:	\$2,962.50
Prepare engineering		
section of FCC Form 2100	Component Description:	Preparation of the
(main), Construction Permit		engineering
Application		section, Schedule
		A, of FCC Form
		2100 Construction Permit Application

RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Component Description: Amount:	Preparation of FCC Form 2100 Interim antenna construction permit \$1,860.00
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	

Cost Information

Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$51,700.00	\$51,135.00		\$1,350.00	
MVPD Notification of Channel Change	\$3,500.00	\$3,500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Equipment Storage	\$7,120.00	\$7,120.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$9,000.00	\$9,000.00	N/A	\$1,350.00	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$10,000.00	\$10,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A

FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
Non-zoning permits	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Sub-total	\$51,700.00	\$51,135.00	N/A	\$1,350.00	N/A
Total for all systems	\$4,783,601.25	\$4,338,036.95	N/A	\$198,469.74	N/A

Components

Actual Information Description	File Name	
MVPD Notification of Channel Change	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage	Information not provided.	
Equipment Delivery and Handling Charges	Component Description:	Interim Antenna and Transmission line Shipping and Handling to Site
	Amount:	\$1,350.00
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
DTV Medical Facility Notification	Information not provided.	
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	

Non-zoning permits

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$4,783,601.25	\$4,338,036.95	\$198,469.74

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

Section Question Response

Submission of Estimated Expenses Statements

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.

- 1. The Authorized
 Person signing
 below certifies that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

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

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. James
Edmund
Shultis
Director of
Engineering

06/21/2018

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).

- 1. 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.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.

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

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. 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.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. James
Edmund
Shultis
Director of
Engineering

06/21/2018

Attachments