

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File		Service: DTV 28212	Call Sign:	WCAU	Channel: 34 (UHF)
Number:					
FRN: 001	9509470	Date	10/03		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
NBC TELEMUNDO LICENSE LLC	Margaret L. Tobey 300 NEW JERSEY AVENUE, NW SUITE 700 WASHINGTON, DC 20001 United States	+1 (202) 524- 6401	MARGARET. TOBEY@NBCUNI. COM	Limited Liability Company

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Contact InformationApplicantAddressPhoneEmailMargaret L300 New Jersey Ave.+1 (202) 524- 6401Margaret.Tobey@nbcuni. comTobeyNW6401comNBCUniversal,Suite 700	Preparer	Preparer Contact Name and Information				
TobeyNW6401comNBCUniversal,Suite 700LLCWashington, DC20001		Applicant	Address	Phone	Email	
		Tobey NBCUniversal,	NW Suite 700 Washington, DC 20001		o <i>y</i>	

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.	Yes
	Briefly describe transition plan	Use existing main transmitter on existing aux antenna. Remove main antenna,. Install new antenna, replace IOT aux with new solid state on new channel for use as main on new antenna. Replace IOT main with solid state as aux and replace aux antenna.

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

Primary Existing Transmitter Information

Transmitter	Section	Question	Response
	Existing Transmitter Description	Type of change	Retune Existing
		Use	Primary (Main)
		Ownership	Owned
		Owner	N/A
		Is this transmitter currently shared with another station?	No
		Is this transmitter currently in operating condition?	Yes
	Existing Transmitter Manufacturer and Type	Manufacturer	Comark

Model	DCXP-2
Year	2009
Туре	Inductive Output Tube
IOT Power Type	Two
Power capacity	55 kW

Primary	Retuning Transmitter Costs				
Transmitter	Section	Question	Response		
	New IOT Tubes	Number of Tubes (including accessories) needed	2		
	New Mask Filter	Power	60 kW		
		Other Power	N/A		
	New Exciter	Is a new exciter needed?	Yes		
		Exciter Type	Dual exciter with changeover		

Other Transmitter Costs Primary

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

	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Other Transmitter Cost Not Listed

Primary Other Transmitter Co Transmitter Information not provided.

Auxiliary	Existing Transmitter Information					
Transmitter	Section	Question	Response			
	Existing Transmitter Description	Type of change	Purchase New			
		Use	Auxiliary (Backup)			
		Description of Use	To maintain coverage when main transmitter or antenna are unavailable			
		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 Millenium			
		Year	1998			
		Туре	Inductive Output Tube			
		IOT Power Type	Two			
		Power Capacity	40 kW			

Existing Transmitter Information

Auxiliary Transmitter	New Transmitter Costs			
	Section	Question	Response	
	New Transmitter	Use	Auxiliary (Backup)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	Yes	
		Manufacturer		
		Model	THU9-36	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	55 kW	
		Justification for New Transmitter	New Solid State transmitter is requested as existing IOT is EOL. A Solid State transmitter is less expensive then a replacement IOT.	

Auxiliary Other Transmitter Costs

Transmitter	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	Contractor estimate on electrical disconnect and reconnect.
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	Name	Description
	Transmission Facility Design	Design of floor plan and electrical plans for transmitter room
	RF System	RF System for new transmitter: Filter and Output Switching

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

Auxiliary	Existing Antenna Information			
Antenna	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Auxiliary (Backup)	
		Description of Use	To maintain coverage when primary antenna is unavailable	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing antenna shared with another station or stations?	No	
		Is the existing antenna directional?	No	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	Yes	
	Existing Antenna Manufacturer and Type	Class	Full Power	
	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	

Existing Antenna Information

Other Antenna Type	N/A
ERP: (Effective Radiated Power)	739.0 kW
Manufacturer	
Model	TFU-24JTH /VP-R O6
Year	2011

Auxiliary	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Auxiliary (Backup)	
		Description of Use	Used to maintain coverage when main antenna is unavailable	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		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?	Yes	
	New Antenna	Class	Full Power	
	Manufacturer and Types	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)	618.0 kW
Manufacturer	
Model	TFU-22JTH /VP-R O6
Year	2019
Justification for New Antenna	New antenna required because existing auxiliary is single channel and will not work on new channel (Ch 28)

Other Antenna Costs

Auxiliary 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?	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

Other Antenna Cost Not Listed

Auxiliary Antenna Information not provided.

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?	No	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	Yes	
	Existing Antenna	Class	Full Power	
	Manufacturer and Type	Mounting	Top Mount	
		Antenna position in stack	Тор	
		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)	700.0 kW	

Manufacturer	
Model	TFU-24ETT /VP-R O6
Year	2009

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

Model	TFU-22JTH /VP-R O6
Year	2019
Justification for New Antenna	Existing antenna will not work on new channel (ch 28)

Primary	Other Antenna Costs			
Antenna	Section	Question	Response	
	Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No	
		Туре		
		Number of channels supported	N/A	
		Frequencies of channels supported	N/A	
		Frequency	N/A	
		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?	No	

Primary	Other Antenna Cost Not Listed	
Antenna	Name	Description
	Transmission Line accessories	transitions and connectors for installation

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

Existing Transmission Line Primary Existing Transmission

ssior	n Section	Question	Response
	Existing Transmission Line Description	Type of change	Utilize Existing
		Use	Primary (Main)
		Description of Use	N/A
		Ownership	Owned
		Owner	N/A
		Site	N/A
Existing Transmission	Is the existing transmission line shared with another station or stations?	No	
	Is Transmission Line in operating condition?	Yes	
	Manufacturer	Dielectric	
	Line Manufacturer and Type	Туре	Rigid
	Diameter	7 3/16 inches	
		Other Diameter	N/A
		Segment Length	19 3/4 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	1375 feet per run

Primary Other Transmission Line Expenses Not Listed

Other Transmission Transmission

ransmissio	Section	Question	Response
	Existing Transmission Line Description	Type of change	Purchase New
		Use	Auxiliary (Backup)
		Description of Use	used to maintain coverage when primary antenna is unavailable
		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	Existing Transmission Line Manufacturer and	Manufacturer	
	Type	Туре	Rigid
		Diameter	7 3/16 inches
		Other Diameter	N/A
		Segment Length	19 3/4 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	1375 feet per run

Auxiliary Existing Transmission Line

Transmission	on Line Section	Question	Response
	New Transmission Line Costs	Use	Auxiliary (Backup)
		Description of Use	used to maintain coverage when primary antenna is unavailable
		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	670 feet per run
		Justification for New Transmission Line	Existing line (19 3 /4") will not work on new channel (ch 28)

Auxiliary Other Transmission Line Expenses Not Listed

Transmission to me tion not provided.

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

Existing Tower Description Type of change Modify Existing Tower Use Auxiliary (Backup Description of Use used to maintain coverage when maintain antennage	uxiliary ^E	ixisting Tower		
DescriptionExistingTower UseAuxiliar (BackupDescription of Useused to maintair coverag when m antenna unavailaOwnershipOwnershipIs this tower consider Complex?No	wer :	Section	Question	Response
Description of Useused to maintain coverag when m 		-	Type of change	Modify Existing
Image: state of the state of			Tower Use	Auxiliary (Backup)
Is this tower consider Complex? No Is this tower currently shared with any other No			Description of Use	used to maintain coverage when main antenna is unavailable
Is this tower currently shared with any other No			Ownership	Owned
			Is this tower consider Complex?	No
				No
One or more FM, AM or TV radio N/A broadcaster(s)				N/A
Others Types of Users N/A			Others Types of Users	N/A
Is tower documented for structural analysis? No			Is tower documented for structural analysis?	No
Is tower compliant with Rev G? No			Is tower compliant with Rev G?	No
Existing Tower Structure Do you have a tower registration number? Yes Registration Yes		Existing Tower Structure Registration	Do you have a tower registration number?	Yes
-			ASR Number	1025386
		North American Datum of	Latitude (NAD83)	40° 02' 31.2" N-
		1903))	Longitude (NAD83)	075° 14' 10.4" W-
Overall Structure Height 582.01			Overall Structure Height	582.01 feet

Support Structure Height	507.87 feet
Ground Elevation Above Mean Sea Level (AMSL)	284.12 feet
Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	NBC Telemundo License LLC
Date Constructed	07/29/2005

Auxiliary Tower Section Ou

ver	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

Auxiliary Tower Rigging Costs

Auxiliary Tower

lower	Rigging	00313

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

Other Tower Expenses Not Listed

Auxiliary Tower

Information not provided.

Primary	Existing Tower				
Tower	Section	Question	Response		
	Existing Tower	Type of change	Modify Existing		
	Description	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?	No		
		Is tower compliant with Rev G?	No		
	Existing Tower Structure Registration	Do you have a tower registration number?	Yes		
		ASR Number	1231524		
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	40° 02' 30.1" N-		
		Longitude (NAD83)	075° 14' 10.1" W-		
		Overall Structure Height	1254.91 feet		
		Support Structure Height	1124.00 feet		
		Ground Elevation Above Mean Sea Level (AMSL)	292.98 feet		
		Structure Type	GTOWER - Guyed Structure Used for Communication Purposes		

Tower Owner	Global Tower, LLC. through American Towers, LLC
Date Constructed	11/02/2011

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
65190	WRTI	FM
1283	KJWP	DTV
12211	WPPZ-FM	FM
12499	WPSG	DTV
74213	WXTU	FM
74216	WFPA-CD	DTV
60560	WUVP-DT	DTV
72278	WPHA-CD	DTV
55305	WTVE	DTV
9622	WOGL	FM
51984	WPPX-TV	DTV
7623	WGTW-TV	DTV
51434	WTDY-FM	FM
30572	WPHI-FM	FM
28628	WIP-FM	FM
28480	WYBE	DTV

Tower Modification Costs

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

Primary Tower Rigging Costs

Tower

Primary 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.

Outside	Section	Question	Response
Professional	I Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	1040
		Explanation	Project oversight of transmitter install, electrical connectivity, tower work, and antenna installation. Additional time will be spent tracking financial and legal process and coordinating with other broadcasters.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	No
		Prepare engineering section of Form FCC Construction Permit Application	No
		For Auxiliary Facility	N/A
		For Main Facility	N/A
		Prepare engineering section of Form FCC License to Cover Application	No
		For Auxiliary Facility	N/A
		For Main Facility	N/A
		Prepare request for Special Temporary Authority	No
		Quantity	N/A
		Do you have Distributed Transmission System engineering services?	N/A

	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	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	No
	Quantity	N/A
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	Yes
	Number of Days	40
	Justification	Ground leve RF design

Other Professional Services Expenses Not Listed Professional Services rCostsided.

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	Yes
		Non-zoning permits	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.

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 DCXP-2	\$748,250.00	\$807,000.00		\$0.00	
Dual exciter system with change over	\$47,350.00	\$45,000.00	N/A	N/A	N/A
60 kW mask filter	\$89,400.00	\$85,000.00	N/A	N/A	N/A
Two IOT system (55 kW)	\$356,500.00	\$435,000.00	see attached proposal from comark	N/A	N/A
2 IOT Tubes	\$255,000.00	\$242,000.00	N/A	N/A	N/A
Auxiliary Transmitter THU9-36	\$2,105,634.30	\$1,609,875.35		\$85,904.02	
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	\$1,788,000.00	\$1,292,241.05	N/A	N/A	N/A
Other Electrical Service: Contractor estimate on electrical disconnect and reconnect.	\$15,000.00	\$15,000.00	N/A	N/A	N/A
Transmission Facility Design	\$214,534.30	\$214,534.30	N/A	\$85,904.02	N/A

RF System	\$88,100.00	\$88,100.00	see attached transmitter proposal	N/A	N/A
Sub-total	\$2,853,884.30	\$2,416,875.35	N/A	\$85,904.02	N/A
Total for all systems	\$5,856,761.30	\$4,518,964.15	N/A	\$234,907.61	N/A

Components

Actual Information Description	File Name		
Dual exciter system with change over	Information not provided.		
60 kW mask filter	Information not provided.		
Two IOT system (55 kW)	Information not provided.		
2 IOT Tubes	Information not provided.		
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	Information not provided.		
Other Electrical Service: Contractor estimate on electrical disconnect and reconnect.	Information not provided.		

Transmission Facility Design		
	Component Description:	Review Equipment Data, Design Team Site Survey and Report Brief
	Amount:	\$9,307.36
	Component Description:	Design Coordination and Construction /Permit Set, Expenses
	Amount:	\$61,439.41
	Component Description:	Demo Plans
	Amount:	\$17,796.34
	Component Description:	Room air- conditioning design to support new transmitter design; Demo plans
	Amount:	\$68,107.68
RF System	Information not provided.	

Antennas

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna TFU- 22JTH/VP-R O6	\$344,340.00	\$242,933.00		\$109,319.85	
UHF - High Power Top Mount (200- 1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$188,010.00	N/A	\$84,604.50	N/A
Elbow complex, single channel, at antenna input, per 6 1 /8. feedline (if needed)	\$12,300.00	\$12,383.00	See attached quote	\$5,572.35	N/A
Transmission Line accessories	\$42,540.00	\$42,540.00	Included in antenna proposal	\$19,143.00	N/A
Auxiliary Antenna TFU- 22JTH/VP-R O6	\$193,735.00	\$191,403.00		\$0.00	
UHF - High Power, Side Mount, basic slot antenna, 618 kW input, elliptically or circularly polarized	\$174,705.00	\$174,705.00	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 6 1 /8. feedline (if needed)	\$12,300.00	\$10,298.00	N/A	N/A	N/A
Sub-total	\$538,075.00	\$434,336.00	N/A	\$109,319.85	N/A
Total for all systems	\$5,856,761.30	\$4,518,964.15	N/A	\$234,907.61	N/A

Actual Information Description	File Name	
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Component Description: Amount:	See line 1 of invoice \$84,604.50
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description: Amount:	See line 3 of invoice \$5,572.35
Transmission Line accessories	Component Description: Amount:	See lines 2, 4-6 of invoice \$19,143.00
UHF - High Power, Side Mount, basic slot antenna, 618 kW input, elliptically or circularly polarized	Information not provided.	
Sweep test of existing antenna	Information not provided.	

Elbow complex, single	Information not provided.
channel, at antenna input,	
per 6 1/8. feedline (if needed)	

Transmission Line

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	\$0.00	\$0.00		\$0.00	
Auxiliary Transmission Line	\$135,340.00	\$103,637.80		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$135,340.00	\$103,637.80	N/A	N/A	N/A
Sub-total	\$135,340.00	\$103,637.80	N/A	\$0.00	N/A
Total for all systems	\$5,856,761.30	\$4,518,964.15	N/A	\$234,907.61	N/A

Components

Information not provided.

Tower Equipment and Rigging Costs

Cost Information

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

	Predetermined	Estimated	Estimated Cost		Actual Cost
Description	Cost Estimate	Cost	Justification	Actual Cost	Justification
Auxiliary Tower TOWER	\$1,275,100.00	\$712,000.00		\$0.00	
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	\$500,000.00	N/A	N/A	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	N/A	N/A
Primary Tower GTOWER	\$605,300.00	\$464,783.00		\$0.00	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$400,000.00	N/A	N/A	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$50,000.00	N/A	N/A	N/A

Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$14,783.00	Tower mapping and structural engineering	N/A	N/A
Sub-total	\$1,880,400.00	\$1,176,783.00	N/A	\$0.00	N/A
Total for all systems	\$5,856,761.30	\$4,518,964.15	N/A	\$234,907.61	N/A

Information not provided.

Outside Professional Services

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$326,665.00	\$272,250.00		\$39,683.74	
Additional Field Engineering Service, 40 Days	\$40,000.00	\$40,000.00	N/A	\$5,074.81	N/A
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	\$40,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	N/A	N/A	N/A
Project management of the transition	\$164,320.00	\$156,000.00	N/A	\$33,507.24	N/A

Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$648.09	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
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$453.60	N/A
Sub-total	\$326,665.00	\$272,250.00	N/A	\$39,683.74	N/A
Total for all systems	\$5,856,761.30	\$4,518,964.15	N/A	\$234,907.61	N/A

Actual Information Description	File Name	
Additional Field Engineering Service, 40 Days	Component Description: Amount:	Engineering Site Survey, see attached site survey report for supporting documentation. \$5,074.81
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	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.	
Project management of the transition	Component Description:	August 2018 Project Management
	Amount:	\$150.00
	Component Description:	Project Management Services
	Amount:	\$1,365.00
	Component Description:	August 2018 Project Management
	Amount:	\$5,215.00
	Component Description:	Project Management Services
	Amount:	\$975.00
	Component Description:	Project management and expenses, see attachments for expense receipts
	Amount:	\$3,356.09

Component Description: Amount:	Project Management Services \$4,200.00
Component Description: Amount:	Project management April 18 \$3,024.70
Component Description: Amount:	July 2018 Project Management \$6,905.00
Component Description: Amount:	Project Management Services \$348.95
Component Description: Amount:	Project Management Services \$2,145.00
Component Description: Amount:	Project Management Services \$1,072.50
Component Description: Amount:	June 2018 Project Management \$4,750.00

Prepare and or review reimbursement form		
	Component Description:	See lines 2-4 of invoice, less 10%
		vendor discount.
	Amount:	\$371.79
	Component Description:	Review of Form
		399
	Amount:	\$43.65
	Component Description:	Review of Form
		399.
	Amount:	\$43.65
	Component Description:	Amendment of 399
		estimates
	Amount:	\$189.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Attorney Fees - Prepare		
and File FCC Form 2100	Component Description:	Preparation of
(main), Construction Permit		minor change
Application		application
	Amount:	\$415.80
	Component Description:	Preparation of
		minor change
		application, see
		line 1 of invoice
		less 10% vendor
		discount.
	Amount:	\$37.80

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	\$122,397.00	\$115,082.00		\$0.00	
MVPD Notification of Channel Change	\$12,000.00	\$12,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$30,000.00	\$30,000.00	N/A	N/A	N/A
Equipment Storage	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$20,000.00	\$20,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Non-zoning permits	\$2,500.00	\$2,500.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$4,250.00	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
Local Zoning	\$10,817.00	\$10,817.00	\$4,700 to prepare tower documents \$4,700 to prepare ground documents \$750 permit application \$667 public hearing	N/A	N/A
Sub-total	\$122,397.00	\$115,082.00	N/A	\$0.00	N/A
Total for all systems	\$5,856,761.30	\$4,518,964.15	N/A	\$234,907.61	N/A

Information not provided.

Cost	Grand Total				
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$5,856,761.30	\$4,518,964.15	\$234,907.61	

Reimbursem	entestiatus	Response
	The facility has ceased operating on its pre- auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	Νο
	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 acknowledges that all certifications and attached documentation are considered material representations.	
		3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

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

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.	Margaret L Tobey Assistant Secretary
	10/03/2018

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.

	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	
an au	payments herein requested. are, under penalty of perjury, that I am thorized representative of the above-	Margaret L Tobey Assistant
	d applicant for the Authorization(s) ied above.	Assistant Secretary 10/03/2018

Attachments