



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **74112** | Service: **DTV** | Call **WTOG** | Channel: **19 (UHF)** |
ID:
File **0000027117** | Sign:
Number:
FRN: **0028930774** | Date **07/10**
Submitted: **/2017**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
CBS OPERATIONS INC. Doing Business As: CBS OPERATIONS INC.	Edwin L Nass 1725 DESALES ST NW SUITE 501 WASHINGTON, DC 20036 United States	+1 (202) 457-4505	elnass@cbs. com	Corporation

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Edwin L Nass , Nass . CBS	Edwin L Nass 1725 DeSales Street NW Suite 501 Washington, DC 20036 United States	+1 (202) 457- 4602	elnass@cbs. com

**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.		Yes
Briefly describe transition plan		Move to a facility that will have broadband antenna and combiners. One transmitter will be pre-tuned to the post-transition channel and enabled at the appropriate time.

Transmitters

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 and Type	Manufacturer	
	Model	DCX
	Year	2001
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	50 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	ULXTE-72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47.2 kW
	Justification for New Transmitter	Comark will not re-tune any IOT transmitter (see Attachment 1). Proposed "upgraded" transmitter (see Attachment 2) costs less than "non-upgraded" transmitter (see Attachment 3). New antenna has less gain and requires more transmitter power.

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	500 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	200.0 feet
	Other Electrical Service	Yes
	Description	100 linear feet of 4-inch conduit.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	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 leasehold improvement?	Yes
	Size	3200.0 square feet
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
Transmitter**

Other Transmitter Cost Not Listed

Name	Description
RF Accessories	Coaxial switch, switch controller, dummy load, etc. See Attachment 2, Item C.
Surge Suppressor	Parallel Surge Suppressor. Required for proper transmitter operation. See Attachment 2, Item D.
Transformer	300 Kva Transformer. Required for proper transmitter operation. See Attachment 2, Item D.
New Sub Panels	Five (5) new sub panels at approximately 200 amps each, to provide proper voltage and current for each additional transmitter, house power, HVAC, and ancillary equipment. See Attachment 5.

Antennas

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

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	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	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Type	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)	550.0 kW

Manufacturer	
Model	TFU-30E
Year	1987

**Primary
Antenna**

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	Leased
	Owner	American Tower Corporation
	Is antenna shared?	Yes
	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	Not in Stack
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	3
	Number of Panels/Bays	56
	Lower Limit	530.00 MHz
	Upper Limit	656.00 MHz
	Design power capacity in use	50.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	326.0 kW
	Manufacturer	

	Model	PEPL56D
	Year	2017
	Justification for New Antenna	Existing antenna cannot be retuned.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	3
	Frequencies of channels supported	Upper and lower frequency
	Frequency	470.0 MHz - 698.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Broadband
	Feed Line Size	7 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

**Primary
Antenna**

Other Antenna Cost Not Listed

Name	Description
Combiner Installation	Install dual chain of 3 constant impedance waveguide modules, and/or dual chains of 3 directional filter modules per Dielectric layout. See Attachment 5.

**Interim
Antenna**

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Lease New
	Ownership	Leased
	Owner	American Tower Corporation
	Is antenna shared?	Yes
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	3
	Number of Panels/Bays	24
	Lower Limit	470.00 MHz
	Upper Limit	806.00 MHz
	Design power capacity in use	38.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	450.0 kW
	Manufacturer	
	Model	8-8-8 1230EH

Year	2017
Justification for New Antenna	Pro rata share of two antennas is less than the replacement cost of one antenna.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	3
	Frequencies of channels supported	Upper and lower frequency
	Frequency	470.0 MHz - 698.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	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

Name	Description
Combiner Installation	Installation of combiner; Dual chain of 3 high power constant impedance waveguide modules, and/or dual chains of 3 directional filter modules per Dielectric layout. See Attachment 6.

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary
Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Lease 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 Line Manufacturer and Type	Manufacturer	
	Type	Waveguide
	Diameter	N/A
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1492 feet per run

Primary
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Lease New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	7 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	2
	Length	1725 feet per run
	Justification for New Transmission Line	Required for new, shared antenna.

Primary
Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Interim
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Lease New
	Type	Rigid
	Diameter	6 1/8 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	2
	Length	1440 feet per run
	Justification for New Transmission Line	Required for interim antenna.

Interim
Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

**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**

Add Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	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?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1057473
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	27° 49' 10.8" N-
	Longitude (NAD83)	082° 15' 38.0" W-
	Overall Structure Height	1592.83 feet
	Support Structure Height	1443.88 feet
	Ground Elevation Above Mean Sea Level (AMSL)	75.13 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	American Towers, LLC.
Date Constructed	09/07/2011

**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
6601	WXPX-TV	DTV
53819	WMOR-TV	DTV
11125	WCLF	DTV
11290	WTSP	DTV
16788	WVEA-TV	DTV

**Primary
Tower**

Tower Modification Costs

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

**Primary
Tower**

Tower Rigging Costs

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

**Primary
Tower**

Other Tower Expenses Not Listed

Name	Description
Tower Permit Packages	Construction drawings for tower, ground and building. Required for local permits.

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	Leased
	Is this tower consider Complex?	
	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?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1030952
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	27° 49' 47.0" N-
	Longitude (NAD83)	082° 15' 58.0" W-
	Overall Structure Height	1574.78 feet
	Support Structure Height	1451.75 feet
	Ground Elevation Above Mean Sea Level (AMSL)	74.80 feet
	Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
	Tower Owner	American Tower, LLC

	Date Constructed	01/01/1998
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**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
11559	WSPF-CD	DTV

**Primary
Tower**

Tower Rigging Costs

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

**Primary
Tower**

Other Tower Expenses Not Listed

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	Company lacks sufficient internal resources.
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	No
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	No
	For Auxiliary Facility	N/A
	For Main Facility	N/A
	Prepare and file 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
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	Yes
	ASR Modification	Yes
	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	No
	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	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
RF System Test	Testing of the combiner to ensure all frequencies are tuned for optimal patterns. See Attachment 5.
Migratory Bird Assessment	Conduct a migratory bird assessment study. See Attachment 5.

Site Coordination Meeting	Site coordination meetings with all broadcasters, contractors and vendors involved with the site project. See Attachment 5.
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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	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?	No
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	No
	Does this relocation require MVPD Notification of a Channel Change?	Yes

**Other
Expenses**

Other Expenses Not Listed

Name	Description
STL Antennas	Microwave antennas, mounting kits, and hardware. See Attachment 9.
STL Microwave Radios	Redundant microwave transmitters and receivers. See Attachment 8.

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 ULXTE-72	\$1,808,562.11	\$1,548,136.14		\$0.00	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,291,894.03	Upgraded transmitter costs less than non-upgraded transmitter. See Attachment 2, Items A, B, and D and Attachment 3.	N/A	N/A
Transformer 3 phase /480v - 500 KVA	\$48,400.00	\$18,400.00	Install 500 KVA transformer to support transmitter, heat exchangers and other equipment on the new repack frequency into the broadband antenna. See Attachment 5.	N/A	N/A

Other Electrical Service: 100 linear feet of 4-inch conduit.	\$3,840.00	\$3,840.00	100' L/F of 4" conduit and larger conductor to adequately bring an additional 500 KVA power needed for the new transmitters, HVAC, Air handlers, and house power. See Attachment 5.	N/A	N/A
Other -- Building Addition Size: 3200.0	\$91,200.00	\$91,200.00	2 story building with tiltup walls to match existing broadcast facility. Includes galvanized stairs, steel doors, and concrete block walls for separate tenant suites. See Attachments 5 and 6.	N/A	N/A
New Sub Panels	\$7,500.00	\$7,500.00	Five new sub panels at approximately 200 amps each, to provide proper voltage and current for each additional transmitter, house power, HVAC, and ancillary equipment. See Attachments 5 and 6.	N/A	N/A

15 Ton system	\$55,800.00	\$42,400.00	See Attachment 5.	N/A	N/A
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$5,480.00	Pro rata cost. See Attachment 5.	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$14,400.00	New Switchgear required accommodating additional repack equipment. This switch is used with the addition of the 500 KVA transformer installation. This space does lacks required power for multiple transmitters. See Attachment 6.	N/A	N/A
Transformer	\$11,488.00	\$11,488.00	300 Kva transformer is required for proper operation of transmitter. See Attachment 2, Item D2.	N/A	N/A
Surge Suppressor	\$1,510.82	\$1,510.82	Surge suppressor is required for proper operation of transmitter. See Attachment 2, Item D2.	N/A	N/A

2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$2,000.00	This cost includes 200 L /F of 2" conduit and conductor to adequately supply the HVAC, Airhandlers and House power. The existing power supply is inadequate for the additional power demands of the new repack equipment. See Attachment 5.	N/A	N/A
RF Accessories	\$58,023.29	\$58,023.29	Required for proper operation of transmitter. See Attachment 2, Item C.	N/A	N/A
Sub-total	\$1,808,562.11	\$1,548,136.14	N/A	\$0.00	N/A
Total for all systems	\$5,378,161.87	\$2,974,732.90	N/A	\$0.00	N/A

Components

Information not provided.

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 8-8-8 1230EH	\$151,328.00	\$86,548.00		\$0.00	
UHF - High Power, Side Mount, broadband panel, 24 bay,, 450 kW input, directional,, elliptically or circularly polarized	<i>\$20,048.00</i>	\$20,048.00	New IRTE 8+8+8 I230EH 8 bay, 24 elements total, 1 assembly mast, 1272' AGL on NNW leg of existing candelabra tower. Required to accommodate new repack frequencies. See Attachment 6.	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$3,000.00	Pro rata amount. See Attachment 6.	N/A	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$33,000.00	Pro rata amount. Dual chain of 3 constant impedance waveguide modules and /or dual chains of 3 directional filter modules per Dielectric layout. See Attachment 6.	N/A	N/A

Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$5,000.00	Two elbow complexes for the input of the new side mount Broadband antenna. See Attachment 6.	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	Side-mount antenna specified. Widelity Cost Catalog pricing.	N/A	N/A
Combiner Installation	\$3,500.00	\$3,500.00	Installation of combiner; Dual chain of 3 high power constant impedance waveguide modules, and /or dual chains of 3 directional filter modules per Dielectric layout. See Attachment 6.	N/A	N/A
Primary Antenna PEPL56D	\$251,105.00	\$225,992.00		\$0.00	
New combiner, cost per channel (without antenna)	\$84,200.00	\$66,000.00	See Attachment 5.	N/A	N/A

Elbow complex, broadband, at antenna input, per 7 3 /16. feedline (if needed)	\$16,850.00	\$10,667.00	Two (2) Elbow complexes for the input of the new top mount Broadband antenna. See Attachment 5.	N/A	N/A
UHF - High Power Top Mount Three Station broadband panel antenna elliptically or circularly polarized	\$136,325.00	\$136,325.00	Pro rata share of proposed antenna (see Attachment 5) is far less than like-for-like replacement (see Attachment 4).	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,000.00	See Attachment 5.	N/A	N/A
Combiner Installation	\$7,000.00	\$7,000.00	Install dual chain of 3 constant impedance waveguide modules, and /or dual chains of 3 directional filter modules per Dielectric layout. See Attachment 5.	N/A	N/A
Sub-total	\$402,433.00	\$312,540.00	N/A	\$0.00	N/A
Total for all systems	\$5,378,161.87	\$2,974,732.90	N/A	\$0.00	N/A

Components

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	\$668,160.00	\$97,920.00		\$0.00	
Rigid Transmission Line - copper, 6 1/8" broadband	\$668,160.00	\$97,920.00	Material cost for two (2) 6-1 /8" Broadband rigid transmission lines, three (6) elbows (3 each line) and a nitrogen generator for pressurization control on the dual lines. Required for interim antenna. See Attachment 6.	N/A	N/A
Primary Transmission Line	\$1,148,850.00	\$175,950.00		\$0.00	
Rigid Transmission Line - copper, 7 3/16" broadband	\$1,148,850.00	\$175,950.00	Pro rata share. See Attachment 5.	N/A	N/A
Sub-total	\$1,817,010.00	\$273,870.00	N/A	\$0.00	N/A
Total for all systems	\$5,378,161.87	\$2,974,732.90	N/A	\$0.00	N/A

Components

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 GTOWER	\$421,000.00	\$400,000.00		\$0.00	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$400,000.00	Cost for removal of existing antenna and waveguide, based on Widelity Cost Catalog pricing. Existing tower is complex due to stacked antennas and does not have a candelabra.	N/A	N/A
Primary Tower GTOWER	\$608,400.00	\$164,488.00		\$0.00	
Structural engineering tower load study for a documented tower with candelabra	\$20,000.00	\$11,088.00	Structural tower mapping and rigorous structural analysis to access structural capacity and modifications needed to accommodate repacked equipment. See Attachment 5.	N/A	N/A

Minor tower reinforcement /modifications	\$158,000.00	\$75,000.00	Minor tower reinforcement required for main and interim antennas. See Attachments 5 and 6.	N/A	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$69,000.00	Pro rata share of rigging cost to install main and interim antenna. See Attachments 5 and 6.	N/A	N/A
Tower Permit Packages	\$9,400.00	\$9,400.00	Generate construction drawings of tower, ground, and building for local permits. See Attachments 5 and 6.	N/A	N/A
Sub-total	\$1,029,400.00	\$564,488.00	N/A	\$0.00	N/A
Total for all systems	\$5,378,161.87	\$2,974,732.90	N/A	\$0.00	N/A

Components

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	\$103,198.00	\$64,455.00		\$0.00	
Project management of the transition	\$39,500.00	\$37,500.00	Company lacks sufficient internal resources. See also Attachment 5.	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$5,000.00	See Attachment 5.	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$1,350.00	See Attachment 5.	N/A	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$1,250.00	See Attachment 5.	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$167.00	See Attachment 5.	N/A	N/A
RF Exposure Measurements	\$21,050.00	\$3,750.00	RF Exposure measurements to demonstrate RF fields are less than FCC limits. See Attachment 5.	N/A	N/A

RF System Test	\$5,000.00	\$5,000.00	Testing of combiner to ensure all frequencies are tuned for optimal patterns. See Attachment 5.	N/A	N/A
Migratory Bird Assessment	\$438.00	\$438.00	See Attachment 5.	N/A	N/A
Site Coordination Meeting	\$1,500.00	\$1,500.00	See Attachment 5.	N/A	N/A
Sub-total	\$103,198.00	\$64,455.00	N/A	\$0.00	N/A
Total for all systems	\$5,378,161.87	\$2,974,732.90	N/A	\$0.00	N/A

Components

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	\$217,558.76	\$211,243.76		\$0.00	
DTV Medical Facility Notification	\$11,550.00	\$5,250.00	See Attachment 12.	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
Local Zoning	<i>\$4,700.00</i>	\$4,700.00	N/A	N/A	N/A
STL Antennas	<i>\$46,189.76</i>	\$46,189.76	Along with STL microwave radios, required to transport programming from the studio to the new transmitter site. See Attachment 9.	N/A	N/A
Non-zoning permits	<i>\$4,700.00</i>	\$4,700.00	N/A	N/A	N/A

Disposal Costs (for equipment and other waste, net of any salvage value)	\$30,000.00	\$30,000.00	Assorted disposal cost for equipment and other waste. For example, see Attachments 10 and 11.	N/A	N/A
Equipment Delivery and Handling Charges	\$19,250.00	\$19,250.00	See Attachment 2 and Exhibit 5.	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
MVPD Notification of Channel Change	\$1,000.00	\$1,000.00	N/A	N/A	N/A
STL Microwave Radios	\$99,639.00	\$99,639.00	STL microwave radios, along with STL antennas (shown separately) transport programming from the studio to the new transmitter site. See Attachment 8.	N/A	N/A
Sub-total	\$217,558.76	\$211,243.76	N/A	\$0.00	N/A
Total for all systems	\$5,378,161.87	\$2,974,732.90	N/A	\$0.00	N/A

Components

Information not provided.

**Cost
Information**

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$5,378,161.87	\$2,974,732.90	\$0.00

Reimbursement Status

Question	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	<p>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.</p>	
		<ol style="list-style-type: none"> 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.

<p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Andrew J. Siegel <i>Assistant Secretary</i></p> <p>07/10/2017</p>

Attachments