



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **74112** | Service: **DTV** | Call **WTOG** | Channel: **19 (UHF)** |  
ID:  
File **0000027117**  
Number:  
FRN: **0028930774** | Date **04/02**  
Submitted: **/2019**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>CBS OPERATIONS INC.</b> Doing Business As: CBS OPERATIONS INC.	Daniel G. Ryson 1725 DESALES ST NW SUITE 501 WASHINGTON, DC 20036 United States	+1 (202) 457-4505	dryson@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
<b>Daniel G Ryson</b> CBS	Daniel G. Ryson 1725 DeSales Street NW Suite 501 Washington, DC 20036 United States	+1 (202) 457-4074	dryson@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		Temporarily move to an interim site with a broadband antenna. Install a broadband transmitter capable of operating on pre and post transition channels for use when present site is rebuilt with new antenna, transmission line, and transmitter equipment.

**Transmitters**

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

**Primary  
Transmitter**

**Existing Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	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	ULXTED-80
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	50.6 kW
	Justification for New Transmitter	Comark will not re-tune any IOT transmitter (see Attachment 1). Proposed "upgraded" transmitter (see Attachment 15) costs more than "non-upgraded" transmitter (see Attachment 3) which is basis for reimbursement.

**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.
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	15 tons
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	3200.0 square feet
<b>Channel 14 Costs</b>	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**  
Information not provided.

**Interim  
Transmitter**

**New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	ULXTE-60
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	30 kW
	Justification for New Transmitter	Interim transmitter and site required while main tower is reinforced and main site is rebuilt. Broadband PAs specified. See Statement 2.

**Interim  
Transmitter**

**Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	150 kVA

	Rigid Conduit and Wiring	Yes
	Size	3 inches
	Length	100.0 feet
	Other Electrical Service	No
	Description	N/A
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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
<b>Inside RF System</b>	Is an additional interior RF system required to support this interim transmitter?	Yes

**Interim Transmitter**      **Other Transmitter Cost Not Listed**  
Information not provided.

**Antennas**

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



**Auxiliary  
Antenna****Add Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	Type of change	Purchase New
	Antenna Use	Auxiliary (Backup)
	Description of Use	Emergency Only
	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
<b>Existing Antenna Manufacturer and Type</b>	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	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) .....	298.0 kW

Manufacturer	
Model	SW-16
Year	1988

## Auxiliary Antenna

### New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Post Transition)
	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 Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	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) .....	298.0 kW
	Manufacturer	

Model	TFU-24DSC-R O4
Year	2019
Justification for New Antenna	Existing auxiliary antenna is narrowband and not suitable for use on channel 19.

## Auxiliary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	No
	Type	
	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
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No

<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes
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**Auxiliary  
Antenna**

**Other Antenna Cost Not Listed**

Information not provided.

**Primary  
Antenna**

**Existing Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	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
<b>Existing Antenna Manufacturer and Type</b>	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	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 Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	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) .....	700.0 kW
	Manufacturer	



Model	TFU-27ETT /VP-R O6
Year	2019
Justification for New Antenna	Present owned antenna is narrowband and will not work on post-transition channel.

## Primary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	No
	Type	
	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
<b>Elbow Complex</b>	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
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	No
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No

<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes
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**Primary  
Antenna**

**Other Antenna Cost Not Listed**

<b>Name</b>	<b>Description</b>
<b>Mounting Adapter</b>	Five foot Mounting Adapter allows antenna to mount onto tower top plate.

**Interim  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	Use	Interim
	Description of Use	N/A
	Change Type	Rent Temporary
	Ownership	Leased
	Owner	Florida West Coast Public Broadcasting, Inc.
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
<b>New Antenna Manufacturer and Type</b>	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels/Bays	12
	Lower Limit	470.00 MHz
	Upper Limit	713.00 MHz
	Design power capacity in use	0.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power) .....	417.0 kW
	Manufacturer	

Model	TUP-05-12-60-1
Year	2006
Justification for New Antenna	Renting Existing Antenna.

## Interim Antenna

### Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an 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

## Interim Antenna

### Other Antenna Cost Not Listed

Name	Description
Test Adapter	Test adapter for detailed measurement of interim antenna and line.

**Transmission Line**

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

# Auxiliary Transmission Line

## Add Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmission currently shared with any other stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	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	1000 feet per run

**Auxiliary**      **New Transmission Line**  
**Transmission Line**      **Section**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Auxiliary (Backup)
	Description of Use	Backup
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	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	1000 feet per run
	Justification for New Transmission Line	Please see Statement 2.

**Auxiliary**      **Other Transmission Line Expenses Not Listed**  
**Transmission Line**      **Information not provided.**

**Primary  
Transmission Line**

**Existing Transmission Line**

Section	Question	Response
<b>Existing Transmission Line Description</b>	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
<b>Existing Transmission Line Manufacturer and Type</b>	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
<b>New Transmission Line Costs</b>	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	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	1540 feet per run
	Justification for New Transmission Line	Present waveguide will not work on post- transition channel and must be removed to reduce tower windloading. (Line Length reduced from 1600 to 1540 feet after 3/2019 site survey)

Primary Transmission Line	Other Transmission Line Expenses Not Listed
Information not provided.	

**Interim**  
**Transmission Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Rigid
	Diameter	6 1/8 inches
	Segment Length	20'
	Other Segment Length	
	Number of parallel runs	1
	Length	100 feet per run
	Justification for New Transmission Line	Required for interconnect to 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?	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?	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' 47.1" N-
	Longitude (NAD83)	082° 15' 58.3" W-
	Overall Structure Height	1574.13 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 Towers LLC
Date Constructed	02/01/2018

### Primary Tower

#### 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:	Major 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

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

**Outside  
Professional Services Costs**

Section	Question	Response
<b>Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	250
	Explanation	Company lacks sufficient internal resources.
<b>Outside RF consulting Engineering Services</b>	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	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
<b>Attorney and Other Outside Consulting Services</b>	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
<b>RF Field Engineering Services</b>	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**

Services not provided.

## Other Expenses

Section	Question	Response
<b>AM Pattern Disturbance</b>	Is an Impact Study needed?	No
	Is Remediation needed?	No
<b>Facility Expenses</b>	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
<b>Permit and Filing Costs</b>	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
<b>Other Miscellaneous Expenses</b>	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



<b>Other Expenses</b>	<b>Other Expenses Not Listed</b> Information not provided.
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## 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
<b>Interim Transmitter ULXTE-60</b>	<b>\$1,125,250.00</b>	<b>\$1,135,082.22</b>		<b>\$681,468.47</b>	
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$5,000.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$977,574.60	Includes Attachment 21 Items A,B, E and change orders shown in Attachment 22. Does not include RF Accessories, Step-Down transformer, and shipping shown elsewhere.	\$633,859.80	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$9,007.62	See Attachment 21, Item D	\$6,543.38	N/A
UHF inside RF system including switching	\$147,500.00	\$143,500.00	Includes Attachment 21 Item C. There will also be some labor involved to install switching and transmission line.	\$41,065.29	N/A

<b>Primary Transmitter ULXTED-80</b>	<b>\$1,645,510.00</b>	<b>\$1,566,190.00</b>		<b>\$430,923.86</b>	
Other -- Building Addition Size: 3200.0	<b>\$91,200.00</b>	\$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
15 Ton system	\$55,800.00	\$42,400.00	See Attachment 5.	N/A	N/A
Other Electrical Service: 100 linear feet of 4-inch conduit.	<b>\$3,840.00</b>	\$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

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
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
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$5,480.00	Pro rata cost. See Attachment 5.	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 50.6 kW	<b>\$1,388,470.00</b>	\$1,388,470.00	See Statement 2 and Attachment 3. Comparable IOT pricing is less expensive than solid state transmitter being proposed.	\$430,923.86	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
<b>Sub-total</b>	\$2,770,760.00	\$2,701,272.22	N/A	\$1,112,392.33	N/A
<b>Total for all systems</b>	\$5,492,989.11	\$4,685,853.83	N/A	\$1,397,271.91	N/A

## Components

Actual Information	
Description	File Name
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.

UHF - Liquid Cooled Solid  
State Transmitter 21 - 31 kW

**Component Description:**

Invoice is for transmitter down payment originally based on Attachment 21 items A, B, C, D, E. The portion shown here is the split appropriate for items A&B only.

**Amount:**

\$310,446.81

**Component Description:**

Invoice is for transmitter down payment originally based on Attachment 21 items A, B, C, D, E. The portion shown here is the split appropriate for items A&B only.

**Amount:**

\$323,412.99

Transformer 3 phase/480v -  
150 KVA

**Component Description:**

Invoice is for  
transmitter down  
payment originally  
based on  
Attachment 21  
items A, B, C, D,  
E. The portion  
shown here is the  
split appropriate  
for items D only.

**Amount:**

\$3,204.76

**Component Description:**

Invoice is for  
transmitter down  
payment originally  
based on  
Attachment 21  
items A, B, C, D,  
E. The portion  
shown here is the  
split appropriate  
for items D only.  
(Fractional cent  
rounded up to  
assure split cost  
equals total  
invoice.)

**Amount:**

\$3,338.62

<p>UHF inside RF system including switching</p>	<table> <tr> <td data-bbox="719 174 1029 208"><b>Component Description:</b></td><td data-bbox="1161 174 1374 566"> <p>Invoice is for transmitter down payment originally based on Attachment 21 items A, B, C, D, E. The portion shown here is the split appropriate for item C only.</p> </td></tr> <tr> <td data-bbox="719 577 831 611"><b>Amount:</b></td><td data-bbox="1161 577 1294 611">\$20,952.66</td></tr> <tr> <td data-bbox="719 719 1029 752"><b>Component Description:</b></td><td data-bbox="1161 719 1374 1111"> <p>Invoice is for transmitter down payment originally based on Attachment 21 items A, B, C, D, E. The portion shown here is the split appropriate for item C only.</p> </td></tr> <tr> <td data-bbox="719 1122 831 1155"><b>Amount:</b></td><td data-bbox="1161 1122 1294 1155">\$20,112.63</td></tr> </table>	<b>Component Description:</b>	<p>Invoice is for transmitter down payment originally based on Attachment 21 items A, B, C, D, E. The portion shown here is the split appropriate for item C only.</p>	<b>Amount:</b>	\$20,952.66	<b>Component Description:</b>	<p>Invoice is for transmitter down payment originally based on Attachment 21 items A, B, C, D, E. The portion shown here is the split appropriate for item C only.</p>	<b>Amount:</b>	\$20,112.63
<b>Component Description:</b>	<p>Invoice is for transmitter down payment originally based on Attachment 21 items A, B, C, D, E. The portion shown here is the split appropriate for item C only.</p>								
<b>Amount:</b>	\$20,952.66								
<b>Component Description:</b>	<p>Invoice is for transmitter down payment originally based on Attachment 21 items A, B, C, D, E. The portion shown here is the split appropriate for item C only.</p>								
<b>Amount:</b>	\$20,112.63								
<p>Other -- Building Addition Size: 3200.0</p>	<p>Information not provided.</p>								
<p>15 Ton system</p>	<p>Information not provided.</p>								
<p>Other Electrical Service: 100 linear feet of 4-inch conduit.</p>	<p>Information not provided.</p>								
<p>2" Rigid Conduit and Wiring (Cost per foot)</p>	<p>Information not provided.</p>								
<p>Transformer 3 phase/480v - 500 KVA</p>	<p>Information not provided.</p>								
<p>Service entrance 3 phase /800 amp/208 volt</p>	<p>Information not provided.</p>								



UHF - Liquid Cooled Solid State Transmitter 50.6 kW	<div> <div> <b>Component Description:</b> </div> <div> Invoice is for main transmitter down payment originally based on Attachment 2, which has since been superseded by Attachment 2A. See Statement 2. </div> </div> <div> <b>Amount:</b> </div> <div> \$430,923.86 </div>
Switchgear - industrial 800 amp	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
<b>Interim Antenna TUP-05-12- 60-1</b>	<b>\$374,144.11</b>	<b>\$123,599.11</b>		<b>\$11,099.11</b>	
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$0.00	Renting an existing but unused antenna.	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,185.00	Please see estimates in Attachment 34 (preliminary measurement) and Attachment 36 (final measurement).	\$6,185.00	N/A
Interim antenna rental and installation - Cost will depend on antenna size and height and /or complexity of tower.	\$115,500.00	\$112,500.00	Cost is preliminary. Still being negotiated.	N/A	N/A

Test Adapter	<b>\$4,914.11</b>	\$4,914.11	See Attachment 30 for quote. Also Includes shipping shown in invoice 237003, Attachment 33B.	\$4,914.11	Includes shipping.
<b>Primary Antenna TFU-27ETT /VP-R O6</b>	<b>\$337,280.00</b>	<b>\$243,078.00</b>		<b>\$109,385.10</b>	
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$197,295.00	See Attachment 13 Line 1 minus \$29,175 for non-reimbursable V-Pol contribution.	\$88,782.75	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	See Attachment 13 - Line item 24	\$2,880.00	N/A
Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed)	\$15,250.00	\$13,583.00	See Attachment 13 Line Item 3	\$6,112.35	N/A
Mounting Adapter	<b>\$25,800.00</b>	\$25,800.00	See Attachment 13 Line Item 2	\$11,610.00	N/A
<b>Auxiliary Antenna TFU-24DSC-R O4</b>	<b>\$269,180.00</b>	<b>\$144,575.00</b>		<b>\$3,275.00</b>	

Sweep test of existing antenna	\$6,730.00	\$3,275.00	Auxiliary and Interim antenna were measured at the same time so measurement cost was split 50/50 between cost categories. See Attachment 38.	\$3,275.00	N/A
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	\$227,000.00	\$115,725.00	See Attachment 16 Line Item 1. This is for the comparable Dielectric TFU-16DSC-R O4 H-Pol antenna, not the upgraded (due to higher gain) Dielectric TFU-24DSC-R O4 antenna (Attachment 19) that we're installing.	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$9,150.00	See Attachment 16 Line Item 4. This is for the comparable Dielectric TFU-16DSC-R O4 antenna, not the upgraded Dielectric TFU-24DSC-R O4 antenna (Attachment 19) that we're installing.	N/A	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$16,425.00	See Attachment 16 Line Item 3. This is for the comparable Dielectric TFU-16DSC-R O4 antenna, not the upgraded Dielectric TFU-24DSC-R O4 antenna (Attachment 19) that we're installing.	N/A	N/A
<b>Sub-total</b>	\$980,604.11	\$511,252.11	N/A	\$123,759.21	N/A
<b>Total for all systems</b>	\$5,492,989.11	\$4,685,853.83	N/A	\$1,397,271.91	N/A

## Components

Actual Information	
Description	File Name
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	Information not provided.

Sweep test of existing antenna	<div> <div> <b>Component Description:</b> </div> <div> See Attachment 34 for quotation </div> </div> <div> <b>Amount:</b> </div> <div> \$2,910.00 </div>
Interim antenna rental and installation - Cost will depend on antenna size and height and/or complexity of tower.	Information not provided.
Test Adapter	<div> <div> <b>Component Description:</b> </div> <div> Test adapter for 7-inch line. Required to determine that WEDU antenna and transmission line are viable and do not need to be replaced. </div> </div> <div> <b>Amount:</b> </div> <div> \$4,914.11 </div>
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	<div> <div> <b>Component Description:</b> </div> <div> Primary Antenna Minus V-Pol down payment. See Attachment 13 for quote. </div> </div> <div> <b>Amount:</b> </div> <div> \$88,782.75 </div>

Sweep test of existing antenna	<p><b>Component Description:</b> Sweep Test down payment. See Attachment 13 for quote.</p> <p><b>Amount:</b> \$2,880.00</p>
Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed)	<p><b>Component Description:</b> Elbow Complex down payment. See Attachment 13 for quote.</p> <p><b>Amount:</b> \$6,112.35</p>
Mounting Adapter	<p><b>Component Description:</b> Mounting Adapter Down Payment. See Exhibit 13 for quote.</p> <p><b>Amount:</b> \$11,610.00</p>
Sweep test of existing antenna	<p><b>Component Description:</b> Interim and Aux antenna and line were measured in the same trip so measurement cost was divided between cost categories. (Note: The company name includes an ampersand that Form won't accept.)</p> <p><b>Amount:</b> \$3,275.00</p>
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	Information not provided.

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.
Side mount brackets for high power antennas (if not included in antenna base cost)	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	\$20,200.00	\$19,700.00		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$20,200.00	\$19,700.00	N/A	N/A	N/A
Primary Transmission Line	\$534,380.00	\$338,085.00		\$152,138.25	
Rigid Transmission Line - copper, 8 3/16"	\$534,380.00	\$338,085.00	See Attachment 13, Line Item 4 and Attachment 39.	\$152,138.25	N/A
Auxiliary Transmission Line	\$347,000.00	\$338,000.00		\$0.00	
Rigid Transmission Line - copper, 8 3/16"	\$347,000.00	\$338,000.00	Widely Cost Catalog Price	N/A	N/A
Sub-total	\$901,580.00	\$695,785.00	N/A	\$152,138.25	N/A
Total for all systems	\$5,492,989.11	\$4,685,853.83	N/A	\$1,397,271.91	N/A

Components

Actual Information	
Description	File Name

Rigid Transmission Line - copper, 6 1/8"	Information not provided.
Rigid Transmission Line - copper, 8 3/16"	<div> <div> <b>Component Description:</b> </div> <div> Primary Transmission Line. See Attachments 13 and 39 for quotes. </div> </div> <div> <b>Amount:</b> </div> <div> \$152,138.25 </div>
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
<b>Primary Tower GTOWER</b>	<b>\$667,200.00</b>	<b>\$649,500.00</b>		<b>\$0.00</b>	
Tall Tower (greater than 500')	\$210,500.00	\$205,000.00	Cost Catalog Pricing.	N/A	N/A
Major tower reinforcement /modifications	\$421,000.00	\$409,500.00	Cost Catalog Pricing.	N/A	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,600.00	Cost Catalog Pricing.	N/A	N/A
Tower Permit Packages	<i>\$9,400.00</i>	\$9,400.00	Generate construction drawings of tower, ground, and building for local permits. See Attachments 5 and 6.	N/A	N/A
<b>Sub-total</b>	<b>\$667,200.00</b>	<b>\$649,500.00</b>	<b>N/A</b>	<b>\$0.00</b>	<b>N/A</b>
<b>Total for all systems</b>	<b>\$5,492,989.11</b>	<b>\$4,685,853.83</b>	<b>N/A</b>	<b>\$1,397,271.91</b>	<b>N/A</b>

## 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
<b>Outside Professional Services</b>	<b>\$98,365.00</b>	<b>\$59,879.50</b>		<b>\$8,982.12</b>	
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
ASR modification (prepare FCC Form 854)	\$2,105.00	\$167.00	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
NEPA Section 106 environmental review, if needed	\$6,310.00	\$1,350.00	See Attachment 5.	N/A	N/A
Project management of the transition	\$39,500.00	\$37,500.00	Company lacks sufficient internal resources. See also Attachment 5.	\$2,132.12	N/A

Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$5,000.00	See Attachment 5.	\$3,537.50	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,312.50	Additional engineering work and Construction Permit modification was required when initial site became unavailable. See Exhibits 20, 27, and 29.	\$3,312.50	Unexpected loss of main and interim site See Statement 2.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,050.00	Cost Catalog Pricing.	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
<b>Sub-total</b>	\$98,365.00	\$59,879.50	N/A	\$8,982.12	N/A
<b>Total for all systems</b>	\$5,492,989.11	\$4,685,853.83	N/A	\$1,397,271.91	N/A

## Components

Actual Information	
Description	File Name
RF Exposure Measurements	Information not provided.
ASR modification (prepare FCC Form 854)	Information not provided.
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	Information not provided.
NEPA Section 106 environmental review, if needed	Information not provided.
Project management of the transition	<p><b>Component Description:</b> Project Management.</p> <p><b>Amount:</b> \$2,132.12</p>
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.

Perform engineering study for new channel assignment and antenna development	<b>Component Description:</b>  <b>Amount:</b>	Evaluate ATC Riverview-1 antenna and site. \$937.50
	<b>Component Description:</b>  <b>Amount:</b>	Study suitability of WEDU antenna as primary. See Statement 2. \$812.50
	<b>Component Description:</b>  <b>Amount:</b>	Evaluate viability of existing Riverview-2 Site. \$1,062.50
	<b>Component Description:</b>  <b>Amount:</b>	Preliminary evaluation of WEDU site suitability. \$725.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	<b>Component Description:</b>  <b>Amount:</b>	Preliminary Engineering for CP at Riverview-2 site. \$1,125.00
	<b>Component Description:</b>  <b>Amount:</b>	Prepare CP Engineering for Riverview-1 site. \$1,387.50
	<b>Component Description:</b>  <b>Amount:</b>	Complete Engineering for CP Mod back to Riverview-2 site. \$800.00



RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.
Prepare request for Special Temporary Authorization	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
<b>Other Expenses</b>	<b>\$74,480.00</b>	<b>\$68,165.00</b>		<b>\$0.00</b>	
MVPD Notification of Channel Change	<i>\$1,000.00</i>	\$1,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$5,250.00	See Attachment 12.	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	<i>\$4,700.00</i>	\$4,700.00	N/A	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)	<i>\$30,000.00</i>	\$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	<b>\$22,000.00</b>	\$22,000.00	See Attachments 2A and Exhibit 21 (\$11,000 each).	N/A	N/A
<b>Sub-total</b>	\$74,480.00	\$68,165.00	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$5,492,989.11	\$4,685,853.83	N/A	\$1,397,271.91	N/A

## Components

Information not provided.

<b>Cost Information</b>	<b>Grand Total</b>		
		<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>
			<b>Actual Cost</b>
	<b>Total for all systems</b>	\$5,492,989.11	\$4,685,853.83
			\$1,397,271.91

<b>Reimbursement Status</b>	<b>Question</b>	<b>Response</b>
	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"> <li>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.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>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.</li> </ol>	

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><b>Andrew J Siegel</b>  <i>Assistant Secretary</i></p> <p>04/02/2019</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS 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 AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> <li>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.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> </ol>	



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.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>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.</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><b>Andrew J Siegel</b>  <i>Assistant Secretary</i></p> <p>04/02/2019</p>

## Attachments