

(REFERENCE COPY - Not for submission)

## FCC Form 399: Reimbursement Request

Facility 25456 Service: DTV Call WBZ-TV Channel: 20 (UHF)

Sign:

0000027825

Number:

ID:

File

FRN: **0021079769** Date **08/12** 

Submitted: /2020

## Applicant Information

#### **Applicant Name, Type, and Contact Information**

Applicant	Address	Phone	Email	Applicant Type
CBS TELEVISION LICENSES LLC Doing Business As: CBS TELEVISION LICENSES LLC	Daniel G. Ryson 1725 DeSales St. NW Suite 501 Washington, DC 20036 United States	+1 (202) 457-4505	dryson@cbs. com	Limited Liability Company

## Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

#### Preparer Contact Information

#### **Preparer Contact Name and Information**

Applicant	Address	Phone	Email
Daniel G. Ryson 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	American Tower will build an interim site in Needham, MA, including a broadband antenna and transmitter building to be used while building the permanent site in Needham Heights, MA

#### **Transmitters**

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

## Auxiliary Transmitter

#### **Add Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	When Main TX 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	Diamond
	Year	2008
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	14 kW

## Auxiliary Transmitter

#### **New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	ULXTE-24
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	14.4 kW
	Justification for New Transmitter	Manufacturer Cannot Retune Existing Transmitter (see Exhibit 1).

## Auxiliary 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	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

## Auxiliary

**Other Transmitter Cost Not Listed** 

**Transmitter** Information not provided.

## Primary Transmitter

## **Existing Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	Sigma
	Year	1999
	Туре	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	46 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	GatesAir won't retune (see Exhibit 1). Non- upgraded IOT transmitter is more expensive (see Exhibit 2). Proposed transmitter is less expensive (See Exhibit 3).

## Primary Transmitter

## **Other Transmitter Costs**

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

	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	Transformer and surge suppressor. See Exhibit 3 Item C.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Transmitter Other Transmitter Cost Not Listed

**Transmitter** 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-72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47.2 kW
	Justification for New Transmitter	Required to maintain WBZ-TV operations from Interim site while main antenna is rebuilt. See also Exhibit 4.

#### Interim 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	Various Electrical Service from attached GatesAir Estimate (see Exhibit 3).
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	20 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	Yes
	Size	1500.0 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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	No

#### Interim Transmitter

#### **Other Transmitter Cost Not Listed**

Name	Description
TX Room Electrical	Various Electrical work. See proposal in Exhibit 22
100 Feet 4-Inch Conduit	100 Feet 4-Inch Conduit

New Sub Panels	Four (4) new sub panels at approximately 200 amps each.
Ice Shield	For HVAC Equipment
Core Drill Eight Holes	Core Drill Eight Holes at Interim Transmitter Site
Emergency Generator	Primary site has an emergency generator. This cost replicates backup power at the interim site.

#### **Antennas**

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

#### **Existing Antenna Information**

Section	Question	Response
Existing Antenna Description	Type of change	Lease New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Owner	American Tower Corporation
	Site	N/A
	Is the existing antenna shared with another station or stations?	Yes
	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	Class	Full Power
Manufacturer and Type	Mounting	Top Mount
	Antenna position in stack	Тор
	Polarization	Horizontal
	Туре	Broadband Panel
	Number of Stations Supported	4
	Number of Panels	99
	Design power capacity in use	87.0 %
	Lower Limit	470.00 MHz
	Upper Limit	698.00 MHz
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	825.0 kW

Manufacturer	
Model	TAD- 24UDA-5 /60-MR
Year	1999

# Facility ID's and Call Signs of all stations with whom the antenna is shared.

Facility ID	Call Sign
65684	WCVB-TV
72098	WGBX-TV
73982	WSBK-TV

#### **New Antenna Costs**

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Lease 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?	No
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Туре	Broadband Panel
	Number of Stations Supported	4
	Number of Panels/Bays	70
	Lower Limit	470.00 MHz
	Upper Limit	608.00 MHz
	Design power capacity in use	99.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	740.0 kW
	Manufacturer	
	Model	PEP70E

Justification for New Antenna	Top Mount Broadband antenna required to accommodate the new repack frequencies. This antenna will be a four- sided assembly mast. In use power capacity is unknown. Pre- transition antenna has 120 panels. See Exhibit

#### **Other Antenna Costs**

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	4
	Frequencies of channels supported	Upper and lower frequency
	Frequency	470.0 MHz - 608.0 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	8 3/16 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

#### **Other Antenna Cost Not Listed**

Name	Description
Install Combiner	Installation of combiner; Single chain of 5 high power constant impedance waveguide modules, and/or dual chains of 5 directional filter modules per Dielectric layout. required for broadband antenna system. See Exhibit 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?	No
New Antenna	Class	Full Power
Manufacturer and Type	Mounting	Top Mount
	Antenna position in stack	Bottom
	Polarization	Elliptical
	Туре	Broadband Panel
	Number of Stations Supported	5
	Number of Panels/Bays	56
	Lower Limit	470.00 MHz
	Upper Limit	608.00 MHz
	Design power capacity in use	99.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	740.0 kW
	Manufacturer	
	Model	TUM-AP- O4-14/56H- 2-T

Year	2018
Justification for New Antenna	Required for shared use by five stations at interim site. See Exhibit 4 for interim site justification.

#### Interim Antenna

#### **Other Antenna Costs**

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	5
	Frequencies of channels supported	Upper and lower frequency
	Frequency	470.0 MHz - 608.0 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?	В
	Feed Line Size	8 3/16 inches
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
Combiner Installation	Installation of combiner; Single chain of 5 high power constant impedance waveguide modules, and/or dual chains of 5 directional filter modules per Dielectric layout. required for broadband antenna system. See Exhibit 16.

Transmission Seffien	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	Utilize Existing
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Owner	American Tower Corporation
	Site	N/A
	Is the existing transmission line shared with another station or stations?	Yes
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	Dielectric
	Туре	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1440 feet per run

#### Facility ID's and Call Signs of all stations with whom the transmission line is shared.

Facility ID	Call Sign
72098	WGBX-TV
65684	WCVB-TV
73982	WSBK-TV

## Primary

#### Other Transmission Line Expenses Not Listed

Transmission	Description	
	Nitrogen Generator	Nitrogen Generator Upgrade. See Exhibit 15, Line 1-B-1.

#### Interim Transmission

#### **New Transmission Line**

New Transmission Line			
on Line Section	Question	Response	
New Transmission Line	Use	Interim	
Costs	Description of Use	N/A	
	Change Type	Lease New	
	Туре	Rigid	
	Diameter	8 3/16 inches	
	Segment Length	Broadband	
	Other Segment Length		
	Number of parallel runs	2	
	Length	1250 feet per run	
	Justification for New Transmission Line	Two (2) 8-3 /16" Broadband rigid transmission lines, six (6) elbows (3 each line) and	

a nitrogen generator for pressurization. Required for Interim antenna. See Exhibit 16.

## Other Transmission Line Expenses Not Listed

Transmission Line		Description	
	Nitrogen Generator	Nitrogen Generator Upgrade. See Exhibit 16, Line 1-B-1.	

#### Tower Equipment And Rigging Costs

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

## Auxiliary Tower

#### **Add Tower**

Section	Question	Response
Existing Tower	Type of change	Modify Existing
Description	Tower Use	Auxiliary (Backup)
	Description of Use	Interim Use
	Ownership	Leased
	Is this tower consider Complex?	Candelabra
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	Unknown
	Is tower compliant with Rev G?	Unknown
Existing Tower	Do you have a tower registration number?	Yes
Structure Registration	ASR Number	1004233
Coordinates (NAD83 (	Latitude (NAD83)	42° 18' 10.7" N-
North American Datum of 1983))	Longitude (NAD83)	071° 13' 04.9" W-
	Overall Structure Height	1200.77 feet
	Support Structure Height	1101.04 feet
	Ground Elevation Above Mean Sea Level (AMSL)	150.92 feet
	Structure Type	GTOWER - Guyed

	Structure Used for Communication Purposes
Tower Owner	American Towers, LLC
Date Constructed	04/19/2005

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
26897	WWBX	FM
6463	WFXT	DTV
73238	WLVI	DTV
1901	WBZ-FM	FM
23439	WBOS	FM
9639	WODS	FM

#### Auxiliary Tower

#### **Tower Modification Costs**

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

#### Auxiliary Tower

#### **Tower Rigging Costs**

Section	Question	Response
Tower Rigging Costs	Complex Tower	Candelabra

<b>Helicopter Services</b>
Required

Are helicopter services required?

No

## Auxiliary Tower

## Other Tower Expenses Not Listed

Name	Description
Interim Tower Rent	Interim Tower Rent. See Exhibit 6.
Tower Permit Packages	Tower and ground equipment drawing package. Required for local approvals. See Exhibit 6.
Construction Management	Nine hours on Modification project management and fifteen hours for RF installation project management for a total of twenty days. See Exhibit 6.

## Primary Tower

#### **Existing Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	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?	Unknown
Existing Tower	Do you have a tower registration number?	Yes
Structure Registration	ASR Number	1003433
Coordinates (NAD83 (	Latitude (NAD83)	42° 18' 37.0" N-
North American Datum of 1983))	Longitude (NAD83)	071° 14' 12.0" W-
	Overall Structure Height	1296.24 feet
	Support Structure Height	1192.24 feet
	Ground Elevation Above Mean Sea Level (AMSL)	152.89 feet
	Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
	Tower Owner	American Tower, LLC
	Date Constructed	01/01/1957

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
65684	WCVB-TV	DTV
18783	WYDN	DTV
72098	WGBX-TV	DTV
68241	WBUR-FM	FM
72099	WGBH-TV	DTV
73982	WSBK-TV	DTV
10542	WKLB-FM	FM

#### Primary Tower

#### **Tower Modification Costs**

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

#### Primary Tower

## **Tower Rigging Costs**

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

## Primary Tower

## Other Tower Expenses Not Listed

Name	Description
Tower Project Management	(44) hours on Modification project management and RF installation project management.
Tower Permit Packages	The generation of a construction drawing package for one (1) broadcasters /customers. See Exhibit 5.

#### 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 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	Prepare and file Form FCC Construction Permit Application	No
Services	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	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	Yes
	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	No
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

#### Outside Professional

## Other Professional Services Expenses Not Listed

I Services Costs	Description
LocalPermits	Prepare and submit forms for necessary electrical, building and other permits.
RF System Test	Testing of the combiners to ensure one frequency is tuned for optimal patterns. See Exhibits 5 and 6.

# Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	Yes
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	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)?	No
	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
Site Security	Site security for installation and storage of Transmission line and materials for 30 days X 12 hours. These materials are a high risk of theft due to the material makeup such as copper, brass and aluminum. (See Exhibit 3.)
Disconnect Transmitters	Labor and expenses for disconnect and removal of existing transmitters. See Exhibit 3 Item F and Exhibit 9 Item F.
Asbestos and Lead Paint Testing	Asbestos testing, removal and abatement for walls which could contain lead paint and /or the flooring may contain asbestos, because of the age of the facility and the era when the original construction took place. (See Exhibit 3.)
Building Partition	This cost is to provide permitting for building partition and electrical service installation in the shared space. This install is to provide security for broadcasters and sufficient power for transmitters. See Exhibit 3.
Ice Shield for HVAC	Ice protection for HVAC compressor units near tower in areas prone to ice and snow. See Exhibit 3.
Public Hearing	Public hearing to alter height of primary tower by changing top antenna. See Exhibit 2.
Site Coordination Meeting	Site coordination meetings with all broadcasters, contractors and vendors involved with the site deliveries and construction. This cost is for travel and logistics expenses accrued. See Exhibits 2 and 3.

# **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 Co
Interim Transmitter ULXTE-72	\$1,841,852.82	\$1,569,668.06		\$1,542,886.06	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,286,815.24	Please see Exhibit 8, Items A, B, C, and E (\$1,279,267.42) plus Change Orders Q-76708 (\$1,894.44 - Exhibit 20), Q- 84712 (\$4,378.60), and Q-86012 (1,274.78). Please see Exhibit 52, GatesAir Estimate Correction Statement.	\$1,286,815.24	N/A
Emergency Generator	\$111,802.00	\$111,802.00	Interim Tower Generator. See Exhibit 33 for lease. Includes \$100,000 connection fee and \$1,686 rent for an assumed 7 months.	\$100,000.00	N/A
Core Drill Eight Holes	\$2,360.00	\$2,360.00	Core drill eight holes at interim transmitter site. Please see Exhibit 40 for quotation.	\$2,360.00	N/A
Ice Shield	\$4,000.00	\$4,000.00	Required to protect outdoor HVAC units.	\$3,000.00	N/A

New Sub Panels	\$10,000.00	\$10,000.00	Provide proper voltage and current for each additional transmitter, house power, HVAC, and ancillary equipment. See Exhibit 6.	\$7,500.00	N/A
100 Feet 4- Inch Conduit	\$1,920.00	\$1,920.00	conduit and larger conductor. Brings in an additional 500 KVA for new transmitters, HVAC, Air handlers and house power. The existing power supply is is inadequate for the new repack equipment. See Exhibit 6.	\$1,440.00	N/A
TX Room Electrical	\$95,772.00	\$95,772.00	Transmitter Room Electrical Work - Various. See proposal attached as Exhibit 39 (\$92,802) plus Exhibit 32 (\$2,970.00).	\$95,772.00	N/A
Other Building Addition Size: 1500.0	\$1,800.00	\$1,800.00	This cost is to provide permitting for building partition and electrical service installation in the shared space. This install is to provide security for broadcasters and sufficient power for	\$1,350.00	N/A

			transmitters. See Exhibit 6.		
Other HVAC Service Type: C Size:20 (Other)	\$22,000.00	\$22,000.00	20 ton HVAC split units to maintain operational temperatures. This is to supplement existing HVAC. Calculation for the HVAC size is calculated using the power of the three transmitters at 30% efficiency. See Exhibit 6.	\$16,500.00	N/A
Other Electrical Service: Various Electrical Service from attached GatesAir Estimate (see Exhibit 3).	\$12,998.82	\$12,998.82	Transformer and surge suppressor required to support interim transmitter. See Exhibit 8, Item D.	\$12,998.82	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$1,000.00	This cost includes 200 L/F of 2" conduit and conductor to supply HVAC, Air handlers and House power. The existing power supply is inadequate for the additional power demands of the new repack equipment. See Exhibit 6.	\$750.00	N/A
Transformer	\$48,400.00	\$9,200.00	Install additional	\$6,900.00	N/A

3 phase /480v - 500 KVA			500 KVA transformer for new tenant space to operate transmitter, heat exchangers and other equipment on the new repack frequency into the broadband antenna. See Exhibit 6.		
Switchgear - industrial 800 amp	\$38,200.00	\$7,260.00	New Switchgear required accommodate the repack equipment and new 500 KVA transformer. The existing service does not have sufficient capacity to support transmitters. See Exhibit 6.	\$5,445.00	N/A
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$2,740.00	Install 3 phase, 800 amp, 480 VAC in existing common area of the building being changed to a shared space for one transmitter which currently does not support the required power capacity. See Exhibit 6.	\$2,055.00	N/A
Primary Transmitter ULXTE-72	\$1,485,998.82	\$1,295,661.27		\$1,295,661.27	
UHF - Liquid Cooled Solid State	\$1,473,000.00	\$1,282,662.45	See Exhibit 3, Items A, B, C, and E (\$1,299,555.90)	\$1,282,662.45	N/A

Total for all systems	\$7,757,691.10	\$4,495,451.36	N/A	\$3,986,885.43	N/A
Sub-total	\$3,874,186.58	\$3,410,414.27	N/A	\$3,299,566.19	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	\$2,503.03	N/A
UHF - Air Cooled Solid State Transmitter 14.4 kW	\$520,784.94	\$520,784.94	Proposed transmitter is a like-for-like replacement of existing transmitter. An estimate is provided as Exhibit 9. Category D (Electrical) is listed separately.	\$458,515.83	N/A
Auxiliary Transmitter ULXTE-24	\$546,334.94	\$545,084.94		\$461,018.86	
Other Electrical Service: Transformer and surge suppressor. See Exhibit 3 Item C.	\$12,998.82	\$12,998.82	Transformer and surge suppressor. Required for proper operation of transmitter. See Exhibit 3, Item D.	\$12,998.82	N/A
Transmitter 35 - 50 kW			plus change order Q-79635 (-\$17,822.63) and Q-83226 (\$929.18). Please see Exhibit 52, GatesAir Estimate Correction Statement.		

#### Components

#### **Actual Information**

Description	File Name	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Component Description:  Amount:	Invoice is for Change Orders, Installation & Proof, Freight, and Old Transmitter Removal. This is for the Change Orders and Installation & Proof. Other items are listed separately. Please see Exhibit 52. \$97,967.73
	Component Description: Amount:	Interim Transmitter Down Payment \$435,088.75
	Component Description:  Amount:	Invoice is for Interim Transmitter (See Exhibit 8 Items A, B, C, and D plus Exhibit 21). This dollar amount is total invoice amount minus 100% of Electrical - Exhibit 8 Item D, shown in a different cost category. \$323,003.35
	Component Description:	Interim Transmitter Progress Payment.
	Amount:	\$430,755.41

	Component Description:	Generator Connection Fee. Please see Exhibit 33 for lease.
	Amount:	\$100,000.00
Core Drill Eight Holes		
	Component Description:	Core drill eight holes. Please see Exhibit 40 for quote.
	Amount:	\$2,360.00
Ice Shield		
	Component Description:	Invoice is 25%  Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Ice Shield, Exhibit 6, 3-C-6. \$14,400.00
	Amount:	\$1,000.00
	Component Description:	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Ice Shield, Exhibit 6, 3-C-6.
	Amount:	\$2,000.00
New Sub Panels		

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Electrical Sub Panels, Exhibit 6, 3-C-6.

**Amount:** \$2,500.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Electrical Sub Panels, Exhibit 6, 3-C-6.

**Amount:** \$5,000.00

100 Feet 4-Inch Conduit

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 4-inch conduit, Exhibit 6,

3-C-1.

**Amount:** \$960.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 4-inch conduit, Exhibit 6,

3-C-1.

**Amount:** \$480.00

#### TX Room Electrical

Component Description: Progress Payment

Requisition 2 for WBZ Interim Transmitter Electrical. Form 399 won't take an ampersand in company name.

**Amount:** \$39,600.00

Component Description: Interim Site

Electrical Work. Form 399 won't accept ampersand in company name.

**Amount:** \$2,970.00

Component Description: Progress Payment

Requisition 3 for WBZ Interim Transmitter Electrical. Form 399 won't take an ampersand in company name. \$10,334,10

**Amount:** \$10,334.10

Component Description: Various Electrical

Work, Requisition #1. Note: Form 399 will not accept a vendor name

with an ampersand.

**Amount:** \$42,867.90

Other -- Building Addition

Size: 1500.0

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Building Addition, Exhibit 6,

3-C-3.

**Amount:** \$900.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Building Addition, Exhibit 6,

3-C-3.

**Amount:** \$450.00

Other -- HVAC Service Type: C Size:20 (Other)

**Component Description:** Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 20-Ton HVAC, Exhibit 6,

3-C-2.

**Amount:** \$5,500.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 20-Ton HVAC, Exhibit 6,

3-C-2.

**Amount:** \$11,000.00

Other Electrical Service: Various Electrical Service from attached GatesAir Estimate (see Exhibit 3).

Component Description: Invoice is for

Interim

Transmitter (See Exhibit 8 Items A, B, C, and D plus Exhibit 21). This dollar amount is for Electrical - Exhibit 8 Item D. The remainder is shown in the transmitter cost category.

**Amount:** \$12,998.82

2" Rigid Conduit and Wiring (Cost per foot)

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 2-inch conduit, Exhibit 6,

3-C-1.

**Amount:** \$250.00

**Component Description:** Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 2-inch conduit, Exhibit 6,

3-C-1.

**Amount:** \$500.00

Transformer 3 phase/480v - 500 KVA

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 500 KVA Transformer, Exhibit 6, 3-C-1.

**Amount:** \$4,600.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 500 KVA Transformer, Exhibit 6, 3-C-1.

**Amount:** \$2,300.00

Switchgear - industrial 800 amp

**Component Description:** Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Switchgear, Exhibit 6, 3-C-1.

**Amount:** \$1,815.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Switchgear, Exhibit 6, 3-C-1.

**Amount:** \$3,630.00

Service entrance 3 phase /800 amp/208 volt

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Service Entrance, Exhibit 6, 3-C-1.

Amount:

\$1,370.00

**Component Description:** 

Invoice is 25%
Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A
Service Entrance, Exhibit 6, 3-C-1.

Amount:

\$685.00

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW

Component Description: Transmitter

Installation, Proof, and misc parts. See Exhibit 28 (\$92,314.35 plus \$929.18). Freight shown separately.

**Amount:** \$93,243.53

Component Description: Please see Exhibit

31.

**Amount:** \$313,338.41

**Component Description:** Primary

Transmitter Final
Payment Before
Shipment.
Includes all but
Electrical (Item D)
which is listed
separately.

**Amount:** \$426,403.74

Component Description: Primary

Transmitter Down

Payment

**Amount:** \$449,676.77

Other Electrical Service: Transformer and surge suppressor. See Exhibit 3 Item C.

Component Description: Invoice is for

Primary

Transmitter Final
Payment Before
Shipment. This
electrical
component is
listed separately
from the rest of
the transmitter.

**Amount:** \$12,998.82

UHF - Air Cooled Solid State Transmitter 14.4 kW

Component Description: Invoice for

transmitter, mask

filter, RF

accessories, and electrical shown separately. See Exhibit 25.

**Amount:** \$119,512.45

Installation &

Proof, Freight, and Old Transmitter Removal. This is for the Installation & Proof. Other items are listed separately. See

Exhibit 45A for cost explanation.

**Amount:** \$35,206.35

Component Description: Invoice for

transmitter,

electrical, and old

transmitter removal is split among three cost categories. See Exhibit 24.

**Amount:** \$163,999.61

Component Description: Auxiliary

Transmitter Down

Payment

**Amount:** \$175,003.77

Transformer 3 phase/480v - 150 KVA

Component Description: Invoice is for

transmitter, mask

filter, RF

accessories, and electrical. This cost is just electrical. See Exhibit 25.

**Amount:** \$1,094.24

Component Description: Invoice is split

among three cost categories. See

Exhibit 24.

Corrected typo in dollar amount March 21, 2019.

**Amount:** \$1,408.79

# **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 Cos
Interim Antenna TUM-AP- O4-14/56H- 2-T	\$196,667.00	\$231,787.00		\$125,567.00	
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	\$18,950.00	\$6,600.00	Two (2) Elbow complex for the input of the new Broadband antenna. See Exhibit 16.	\$5,400.00	N/A
Combiner Installation	\$10,000.00	\$10,000.00	Installation of dual chain combiner. See Exhibit 16 Line 3-C-2 for this cost estimate.	\$5,250.00	N/A
Sweep test of existing antenna	\$6,730.00	\$3,000.00	See Exhibit 6.	\$2,250.00	N/A
UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized	\$76,787.00	\$76,787.00	New Dielectric 14 bay, 56 elements total, 1 assembly mast. See Exhibit 16.	\$62,417.00	N/A
New combiner, cost per	\$84,200.00	\$135,400.00	Dual chains of mask filter /combiner	\$50,250.00	N/A

channel	modules per
(without	Dielectric
antenna)	layout.
	Includes input
	power
	dividers and
	output
	switching to
	allow
	transmitter
	alignment
	/testing not
	otherwise
	available.
	Eliminates
	need for
	mask filter.
	See Exhibit
	16 Line 3-C-
	1.

Primary Antenna PEP70E	\$1,211,130.00	\$266,362.50		\$170,581.87	
Install Combiner	\$11,250.00	\$11,250.00	Installation cost of the new combiner. Required to replace existing combiner and support required multi- station antenna. See Exhibit 15.	\$6,562.50	N/A
Elbow complex, croadband, at antenna nput, per 8 3/16. reedline (if needed)	\$18,950.00	\$10,000.00	Elbow complex for top mount antenna being used for repacked stations. See Exhibit 15.	\$6,750.00	N/A
New combiner, cost per channel	\$84,200.00	\$91,500.00	Constant impedance waveguide modules, and	\$56,250.00	N/A

(without antenna)			/or dual chains of 4 directional filter modules per Dielectric layout. Eliminates need for transmitter mask filter. See Exhibit 15.		
Sweep test of existing antenna	\$6,730.00	\$5,000.00	N/A	\$3,750.00	N/A
UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized	\$1,090,000.00	\$148,612.50	RFS PEP70E Top Mount Broadband antenna, required to accommodate the new repack frequencies. See Exhibit 35.	\$97,269.37	N/A
Sub-total	\$1,407,797.00	\$498,149.50	N/A	\$296,148.87	N/A
Total for all systems	\$7,757,691.10	\$4,495,451.36	N/A	\$3,986,885.43	N/A

### Components

Actual Information Description	File Name
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Elbow Complex, Exhibit

6, 3-C-2.

**Amount:** \$1,800.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Elbow Complex, Exhibit

6, 3-C-2.

**Amount:** \$3,600.00

#### Combiner Installation

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Combiner

Installation, Exhibit 6, 3-C-2.

**Amount:** \$1,750.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Combiner

Installation, Exhibit 6, 3-C-2.

**Amount:** \$3,500.00

Sweep test of existing antenna	Component Description:  Amount:	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Sweep Line/Antenna, Exhibit 6, 3-C-1. \$750.00
	Component Description:  Amount:	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Sweep Line/Antenna, Exhibit 6, 3-C-1. \$1,500.00
UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized	Component Description:  Amount:	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Antenna, Exhibit 6, 3-B. \$20,805.50
	Component Description:  Amount:	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Antenna, Exhibit 6, 3-B. \$41,611.50

New combiner, cost per

channel (without antenna)		
	Component Description:  Amount:	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Interim Combiner, Exhibit 6, 3-C-1. \$16,750.00
	Component Description:  Amount:	Invoice is 50%  Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Interim Combiner, Exhibit 6, 3-C-1 \$33,500.00
Install Combiner		
	Component Description:  Amount:	Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary combiner 25% down payment minus costs for E-Pol. Please see Exhibit 35C. \$2,187.50

Milestone 2
Payment at
Primary site. This
cost is for the
primary combiner
50% progress
payment. Please
see Exhibit 44.

**Amount:** \$4,375.00

Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)

Component Description: Invoice is for

Milestone 1
Payment at
Primary site. This
cost is for the
primary antenna
elbow complex
25% down
payment minus
costs for E-Pol.
Please see Exhibit

35C.

**Amount:** \$2,250.00

Component Description: Invoice is for

Milestone 2
Payment at
Primary site. This
cost is for the
primary antenna
elbow complex
50% progress
payment minus
costs for E-Pol.
Please see Exhibit

44.

**Amount:** \$4,500.00

New combiner, cost per channel (without antenna)

Milestone 1
Payment at
Primary site. This
cost is for the

primary combiner

25% down

payment. Please see Exhibit 35C.

**Amount:** \$18,750.00

Component Description: Invoice is for

Milestone 2
Payment at
Primary site. This

cost is for the primary combiner

50% down

payment. Please see Exhibit 44.

**Amount:** \$37,500.00

Sweep test of existing antenna

Component Description: Invoice is for

Milestone 1
Payment at
Primary site. This
cost is for the
primary antenna
system sweep test

25% down payment minus costs for E-Pol. Please see Exhibit

35C.

**Amount:** \$1,250.00

Milestone 2
Payment at
Primary site. This
cost is for the
primary antenna

system sweep test 50% progress payment minus costs for E-Pol. Please see Exhibit

44.

**Amount:** \$2,500.00

UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized

Component Description: Invoice is for

Milestone 1
Payment at

Primary site. This cost is for the primary antenna

25% down
payment minus
costs for E-Pol.
Please see Exhibit

35C.

**Amount:** \$32,423.12

Component Description: Invoice is for

Milestone 2 Payment at

Primary site. This cost is for the primary antenna 50% progress payment minus costs for E-Pol. Please see Exhibit

44.

**Amount:** \$64,846.25

# **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	\$1,000,500.00	\$99,672.57		\$54,351.22	
Rigid Transmission Line - copper, 8 3 /16" broadband	\$997,500.00	\$96,672.57	Material cost for two (2) 83 /16" Broadband rigid transmission lines, six (6) elbows (3 each line) and a nitrogen generator. Cost shared with other stations. See Exhibit 16 (\$84,900.00). Also see Exhibits 37 (11,772.57).	\$54,351.22	N/A
Nitrogen Generator	\$3,000.00	\$3,000.00	Nitrogen Generator Upgrade. See Exhibit 16, Line 1-B- 1.	N/A	N/A
Primary Transmission Line	\$3,000.00	\$3,000.00		\$0.00	
Nitrogen Generator	\$3,000.00	\$3,000.00	Nitrogen Generator Upgrade. See Exhibit 15, Line 1-B- 1.	N/A	N/A

Sub-total	\$1,003,500.00	\$102,672.57	N/A	\$54,351.22	N/A
Total for all systems	\$7,757,691.10	\$4,495,451.36	N/A	\$3,986,885.43	N/A

### Components

Actual Information Description	File Name	
Rigid Transmission Line - copper, 8 3/16" broadband	Component Description:	Transmission Line
		to connect interim transmitter to interim combiner.  Please see Exhibit
	Amount:	49 for quotation. \$6,069.72
	Component Description:	Invoice is 50%  Down Payment for \$230,591.50 ATC total estimated
		cost. (See Exhibit 6). This amount is 50% of Interim Transmission Line,
	Amount:	Exhibit 6, 3-A. \$32,187.50
	Component Description:	Additional transmission lines
		within transmitter room. Installation and freight
		invoiced separately.
	Amount:	\$6,069.72

	Component Description:  Amount:	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Interim Transmission Line, Exhibit 6, 3-A. \$16,094.00
Nitrogen Generator	Information not provided.	
Nitrogen Generator	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 Primary	Predetermined Cost Estimate \$606,250.00	Estimated Cost \$122,660.00	Cost Justification	Actual Cost \$70,308.25	Actual Cos Justification
Tower GTOWER					
Tower Project Management	\$5,250.00	\$5,250.00	(44) hours on tower modification project management and RF installation project management. See Exhibit 15.	\$2,250.00	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$25,000.00	It is expected that the additional loads imposed on the tower by the new appurtenances required for the repack project will cause the tower to fail. The structural failure is expected to be in the minor category. See Exhibit 5.	\$7,500.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$8,760.00	Structural tower mapping to ensure the proper structural information is relayed to	\$3,326.25	N/A

engineering
for proposed
repack
equipment.
Rigorous
Structural
analysis to
access the
structural
capacity and
modifications
needed. See
Exhibit 15 3-A-
1.

			needed. See Exhibit 15 3-A- 1.		
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$74,250.00	This tower has stacked antennas and is classified as a complex structure. The cost includes the installation of the new antenna, refurbishing of two (2) transmission Lines, any required transmission brackets. See Exhibit 15.	\$50,182.00	N/A
Tower Permit Packages	\$9,400.00	\$9,400.00	Construction drawing packages for tower and ground construction. Required for local permits. See Exhibit 5.	\$7,050.00	N/A
Auxiliary Tower GTOWER	\$664,100.00	\$164,487.50		\$132,518.48	
Minor tower reinforcement /modifications	\$158,000.00	\$25,000.00	It is expected that the additional loads imposed	\$18,750.00	N/A

on the tower
by new repack
equipment will
cause the
tower to fail.
Minor
reinforcement
is necessary.
See Exhibit
5A.

			5A.		
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$55,900.00	This candelabra is classified as complex structure. The cost includes the installation of the new antenna, two transmission lines and tower brackets for additional transmission lines. See Exhibit 16.	\$51,077.85	N/A
Construction Management	\$5,500.00	\$5,500.00	(9) hours on Modification project management and (15) hours for RF installation project management for a total of twenty (20) days. See Exhibit 5A.	\$4,125.00	asdf
Tower Permit Packages	\$9,400.00	\$9,400.00	Prepare tower, building, and ground drawings for local permits and approvals. Required to support required	\$7,050.00	N/A

			modifications needed for repack. See Exhibit 6.		
Interim Tower Rent	\$57,600.00	\$57,600.00	Interim Tower Rent - For Market Repack Period. See Exhibit 6, 1-B- 1.	\$43,200.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$11,087.50	Mapping and Rigorous Structural analysis to access the structural capacity and modifications needed to accommodate the repacked equipment.  See Exhibit 5A Item 3-A-1 (\$6,200 for mapping; \$4887.50 for structural engineering)	\$8,315.63	N/A
Sub-total	\$1,270,350.00	\$287,147.50	N/A	\$202,826.73	N/A
Total for all systems	\$7,757,691.10	\$4,495,451.36	N/A	\$3,986,885.43	N/A

### Components

<b>Actual Information</b>	
Description	File Name

Tower Project Management

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is

25% of Construction Project

Management, Exhibit 6, 3-D-1.

**Amount:** \$750.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is

50% of

Construction

Project

Management, Exhibit 6, 3-D-1.

**Amount:** \$1,500.00

Minor tower reinforcement /modifications

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower Reinforcement, Exhibit 6, 3-A-2.

**Amount:** \$2,500.00

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower Reinforcement, Exhibit 6, 3-A-2.

**Amount:** \$5,000.00

Structural engineering tower load study for well documented tower

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower Mapping PLUS Tower Structural Engineering. See Exhibit 6, 3-A-1 (25% of \$2480 plus

\$1,955). **Amount:** \$1,108.75

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower Mapping PLUS Tower Structural Engineering. See Exhibit 6, 3-A-1 (50% of \$2480 plus

\$1,955). **Amount:** \$2,217.50

Complex Tower (includes, for example, those with candelabras and/or stacked antennas)

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.

**Amount:** \$14,000.00

Component Description: Install 7-inch line

between

transmitter and combiner.

**Amount:** \$8,182.00

**Component Description:** Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.

**Amount:** \$28,000.00

**Tower Permit Packages** 

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower and Building Permits, Exhibit 6, 3-D-1.

**Amount:** \$2,350.00

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower and Building Permits, Exhibit 6, 3-D-1.

**Amount:** \$4,700.00

Minor tower reinforcement /modifications

Component Description: WBZ-TV pro rata

cost for tower reinforcement.
Please see Exhibit

35C.

**Amount:** \$6,250.00

Component Description: WBZ-TV pro rata

cost for tower reinforcement.
Please see Exhibit

44.

**Amount:** \$12,500.00

Complex Tower (includes, for example, those with candelabras and/or stacked antennas)

Component Description: Pro rata cost for

rigging a complex tower. Please see

Exhibit 35C.

**Amount:** \$15,125.00

Component Description: Invoice is for

installing

transmission line from transmitter to combiner and transmission line freight. This cost is for the installation.

**Amount:** \$5,702.85

**Component Description:** Pro rata cost for rigging a complex tower. Please see Exhibit 44. \$30,250.00 Amount: **Construction Management Component Description:** Pro rata cost for construction project management. Please see Exhibit 35C. Amount: \$1,375.00 **Component Description:** Pro rata cost for construction project management. Please see Exhibit 44. Amount: \$2,750.00 **Tower Permit Packages Component Description:** Pro rata cost for tower and building permit drawings. Please see Exhibit 35C. Amount: \$2,350.00 **Component Description:** Pro rata cost for tower and building permit drawings. Please see Exhibit 44. Amount: \$4,700.00 Interim Tower Rent

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower

Rent, Exhibit 6, 1-B-

1.

**Amount:** \$14,400.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower

Rent, Exhibit 6, 1-B-

1.

**Amount:** \$28,800.00

Structural engineering tower load study for well documented tower

Component Description: Tower mapping

(\$1,550) and structural

(\$1,221.88). Please see Exhibit 35C.

**Amount:** \$2,771.88

Component Description: Tower mapping

(\$3,100) and structural

(\$2,443.75). Please see Exhibit 44.

**Amount:** \$5,543.75

## **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	\$69,985.00	\$72,500.00		\$35,220.00	
RF System Test	\$8,000.00	\$8,000.00	Testing of the combiner to ensure one frequency is tuned for optimal patterns.  See Exhibits 5 and 6.	\$6,187.50	N/A
LocalPermits	\$1,500.00	\$1,500.00	Prepare and submit applications for electrical, building and other required permits required for installation of repack equipment. See Exhibits 5 and 6.	\$562.50	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	N/A	N/A

Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
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 engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$3,000.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$10,500.00	Please see Exhibit 5A (\$5,500) and Exhibit 6 (\$5,000)	\$7,875.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$5,000.00	Transition timing is necessary at two sites. See quotes provided as Exhibits 5 and 6.	\$3,375.00	N/A
Project management of the transition	\$39,500.00	\$37,500.00	Company lacks internal resources.	\$14,220.00	N/A
Sub-total	\$69,985.00	\$72,500.00	N/A	\$35,220.00	N/A
Total for all systems	\$7,757,691.10	\$4,495,451.36	N/A	\$3,986,885.43	N/A

### Components

•		
Actual Information Description	File Name	
RF System Test	Component Description:  Amount:	Pro rata charge for RF System test. Please see Exhibit 35C. \$1,375.00
	Component Description:	Prepare coverage maps of new facilities. Please see Exhibit 36.
	Amount:  Component Description:	Pro rata charge for RF System test. Please see Exhibit
	Amount:	44. \$2,750.00
	Component Description:	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of RF System Test, Exhibit 6, 1- B-1.
	Amount:	\$625.00

	Component Description:  Amount:	Invoice is 50%  Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of RF System Test, Exhibit 6, 1-B-1. \$1,250.00
LocalPermits	Component Description:  Amount:	Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Building Permits, Exhibit 6, 1-A-3. \$375.00
	Component Description:  Amount:	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Building Permits, Exhibit 6, 1-A-3. \$187.50
Attorney Fees - Negotiation of lease and other matters for shared locations	Information not provided.	
Prepare request for Special Temporary Authorization	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application

Component Description: Coordinate "work

around" to solve

concerns
regarding
Canadian
coordination.

**Amount:** \$550.00

Component Description: Preliminary

Engineering and CP Application, Engineering Section.

**Amount:** \$2,450.00

Perform engineering study for new channel assignment and antenna development

Component Description: Engineering -

Antenna
Development.

Please see Exhibit

35C.

**Amount:** \$1,375.00

Component Description: Engineering -

Antenna
Development.
Please see Exhibit

44.

**Amount:** \$2,750.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is

25% of Engineering Antenna Development, Exhibit 6, 1-A-2.

**Amount:** \$1,250.00

**Component Description:** Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is

50% of Engineering Antenna Development, Exhibit 6, 1-A-2.

**Amount:** \$2,500.00

Address transition timing and coordination issues w/ other stations and wireless

Component Description: Pro rata fee for

addressing transition timing. Please see Exhibit

35C.

**Amount:** \$500.00

Component Description: Pro rata fee for

addressing transition timing. Please see Exhibit

44.

**Amount:** \$1,000.00

**Component Description:** Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Address Transition Timing, Exhibit 6, 1-A-1.

**Amount:** \$625.00

**Component Description:** Invoice is 50%

> Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Address Transition Timing, Exhibit 6, 1-A-1.

\$1,250.00 **Amount:** 

Project management of the transition

**Component Description: American Tower** 

> outside project management. Please see Exhibit

35C.

Amount: \$2,370.00

**Component Description:** Invoice is 50%

> Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Outside

**Project** 

Management, Exhibit 6, 1-A-1.

Amount: \$4,740.00

**Component Description:** Invoice is 25%

> Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Outside

**Project** 

Management, Exhibit 6, 1-A-1.

Amount: \$2,370.00 Component Description: American Tower

outside project management. Please see Exhibit

44.

**Amount:** \$4,740.00

## **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	\$131,872.52	\$124,567.52		\$98,772.42	
Site Coordination Meeting	\$2,000.00	\$2,000.00	Site coordination meeting with other broadcasters, contractors, vendors, and tower landlord. See Exhibit 15.	\$1,320.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$4,250.00	See Exhibit 7. (Note: Corrected cost typo March 21, 2019)	\$4,250.00	N/A
Public Hearing	\$840.00	\$840.00	Public hearing cost (See Exhibits 5A \$440 and 6 \$400.)	\$630.00	N/A
Ice Shield for HVAC	\$4,000.00	\$4,000.00	Ice protection for HVAC compressor split units placed in close proximity of tower in areas prone to ice and snow. (See Exhibit 6)	N/A	N/A
Building Partition	\$1,800.00	\$1,800.00	This cost is to provide	N/A	N/A

			permitting for building partition and electrical service installation in the shared space. This install is to provide security for broadcasters and sufficient power for transmitters. (See Exhibit 6.)		
Asbestos and Lead Paint Testing	\$1,800.00	\$1,800.00	Asbestos testing, removal and abatement for walls which could contain lead paint and/or the flooring may contain asbestos, because of the age of the facility and the era when the original construction took place. (See Exhibit 6.)	\$1,350.00	N/A
Disconnect Transmitters	\$52,378.35	\$52,378.35	Disconnect and Remove to Staging Area the WBZ-TV Primary and two Auxiliary Transmitters. See Exhibit 3 Item F (\$23,475.60),	\$42,756.15	asdf

			Exhibit 9 Item F (\$14,433.30), and Exhibit 42 (\$14,469.45).		
Site Security	\$3,600.00	\$3,600.00	for installation and storage of Transmission line and materials for 30 days X 12 hours. These materials are a high risk of theft due to the material makeup such as copper, brass and aluminum. (See Exhibit 6.)	\$2,700.00	N/A
MVPD Notification of Channel Change	\$1,000.00	\$1,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$51,209.17	\$51,209.17	Delivery of three transmitters, tower equipment, and transmission line required for repack based on actual costs.	\$45,203.77	N/A
Non-zoning permits	\$1,500.00	\$1,500.00	Per estimates. See Exhibits 5 and 6.	\$562.50	N/A
FCC Filing					

Special Temporary Authorization request

Sub-total	\$131,872.52	\$124,567.52	N/A	\$98,772.42	N/A
Total for all systems	\$7,757,691.10	\$4,495,451.36	N/A	\$3,986,885.43	N/A

### Components

Actual Information Description	File Name	
Site Coordination Meeting	Component Description	Site coordination
	Component Description:	meetings. Please see Exhibit 35C.
	Amount:	\$440.00
	Component Description:	Site coordination meetings. Please
	Amount:	see Exhibit 44. \$880.00
DTV Medical Facility Notification		
	Component Description:	Health Care  Notification. See  quote in Exhibit 7.
	Amount:	\$4,250.00
Public Hearing		
	Component Description:	Public hearing costs. Please see Exhibit 35C.
	Amount:	\$110.00
	Component Description:	Public hearing
		costs. Please see Exhibit 44.
	Amount:	\$220.00

Component Description:	Invoice is 25%
------------------------	----------------

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Public Hearing, Exhibit 6,

1-B-1.

**Amount:** \$100.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Public Hearing, Exhibit 6,

1-B-1.

**Amount:** \$200.00

Ice Shield for HVAC Information not provided.

Building Partition Information not provided.

Asbestos and Lead Paint Testing

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Asbestos and Lead Paint Testing, Exhibit 6,

1-B-1.

**Amount:** \$450.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Asbestos and Lead Paint Testing, Exhibit 6,

1-B-1.

**Amount:** \$900.00

#### **Disconnect Transmitters**

Component Description: Invoice is for

Change Orders, Installation &

Proof, Freight, and Old Transmitter Removal. This is

for the Old Transmitter Removal. Other items are listed separately.

**Amount:** \$23,475.60

Component Description: Uninstall Auxiliary

Transmitter.

Please see Exhibit 42 for quotation.

**Amount:** \$14,469.45

Component Description: Invoice is for

Installation &

Proof, Freight, and Old Transmitter Removal. This is for the transmitter removal. Other items are listed separately. See Exhibit 45A for cost explanation.

**Amount:** \$9,622.20

	Component Description:  Amount:	Invoice is split among three cost categories. See Exhibit 24. \$4,811.10
Site Security		
	Component Description:  Amount:	Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Site Security, Exhibit 6, 1-B-1. \$900.00
	Component Description:	Invoice is 50%  Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Site  Security, Exhibit 6, 1-B-1.
	Amount:	\$1,800.00
MVPD Notification of Channel Change	Information not provided.	
Equipment Delivery and Handling Charges	Component Description:	Invoice is for installing transmission line between interim transmitter and combiner plus transmission line freight. This cost is freight. Other costs are listed
		separately.

Component Description: Equipment

delivery and handling. Please see Exhibit 35C.

**Amount:** \$1,375.00

Component Description: WBZ-TV Main

Transmitter Freight.

**Amount:** \$19,805.30

Component Description: Invoice is for

Installation &

Proof, Freight, and Old Transmitter Removal. This is for the freight. Other items are listed separately.

**Amount:** \$6,005.40

Component Description: Invoice is for

Change Orders, Installation &

Proof, Freight, and Old Transmitter Removal. This is for the Freight. Other items are listed separately. Please see Exhibit 52, GatesAir

Estimate Correction Statement. \$18,505.08

**Amount:** \$18,505.08

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower equipment and delivery, Exhibit 6,

1-A-4.

**Amount:** \$1,500.00

Component Description: Equipment

delivery and handling. Please see Exhibit 44.

**Amount:** \$2,750.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower equipment and delivery, Exhibit 6,

1-A-4.

**Amount:** \$750.00

Non-zoning permits

Component Description: Pro rata cost for

building permits.
Please see Exhibit

35C.

**Amount:** \$187.50

Component Description: Pro rata cost for

building permits.
Please see Exhibit

44.

**Amount:** \$375.00

FCC Filing Fees - Special
Temporary Authorization
request

Information not provided.

# Cost Information

### **Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$7,757,691.10	\$4,495,451.36	\$3,986,885.43

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

Section Question Response

### Submission of Estimated Expenses Statements

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

- 1. The Authorized
  Person signing
  below certifies that he
  /she is authorized to
  submit this TV
  Broadcaster
  Relocation Fund
  Reimbursement
  Form on behalf of
  the above-named
  entity.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the

signal of a broadcaster that changes channels (MVPD).

- 5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Andrew J Siegel Assistant Secretary

08/12/2020

Section Question Response

# Submission of Actual Cost Documentation Statements

WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).

- 1. The Authorized
  Person signing
  below certifies and
  represents that he
  /she is authorized to
  submit this TV
  Broadcaster
  Relocation Fund
  Reimbursement
  Form on behalf of
  the above-named
  entity.
- 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 4. The above-named entity acknowledges the submission of the information herein

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

must be promptly refunded to the Commission.

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

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Andrew J Siegel Assistant Secretary

08/12/2020

#### **Attachments**