

(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility 67792 Service: DTV Call WAQP Channel: 36 (UHF)

ID:

Sign:

File **0000028021** 

Number:

FRN: **0005077524** 

Date **08/05** 

Submitted: /2019

# Applicant Information

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

Applicant	Address	Phone	Email	Applicant Type
TCT OF MICHIGAN, INC.	Michael Daly PO Box 1010 MARION, IL 62959 United States	+1 (618) 997- 4700	mjd@tct. tv	Not-for-Profit

# 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

The Preparer is same as the reimbursement contact.

Broadcaster Information and Transition Plan Question Response

Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	WAQP will transition from ch. 48 to ch. 36 service at its existing transmission location. WAQP will be required to replace its main and back up transmitters, as well as antenna and trans line. WAQP is presently operating on channel 36 STA facilities.

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

# Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Back up to main txmtr
	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	Visionary
	Year	2003
	Туре	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	30 kW

#### **New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-50
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	31.7 kW
	Justification for New Transmitter	This transmitter is no longer manufactured or supported (Axcera is no longer in business) and its components are not returnable for use on WAQP's repack channel, so quotes for an appropriately sized solid state transmitter and upgrade have been attached.

# **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	Yes
	Description	WAQ will require the assistance of a licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A

Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

# **Other Transmitter Cost Not Listed**

Name	Description
Transmitter removal	WAQP's existing IOT transmitter(s) will require complete removal and disposal. WAQP estimate of deconstruction and disposal costs attached.

# **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	2006
	Туре	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	30 kW

#### **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-50
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	31.7 kW
	Justification for New Transmitter	Existing single IOT transmitter is no longer produced or supported by its manufacturer (Harris /Gates Air) and it is not able to be retuned to repack channel. Quotations attached are for an equivalent power level solid state transmitter and upgrade.

#### **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	Yes
	Description	WAQP will require the assistance of a licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A

Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

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

Name	Description
Transmitter removal	WAQP's existing IOT transmitter(s) will require physical removal and disposal to accommodate construction of repack transmitters). WAQP estimate of deconstruction and disposal costs attached.

#### **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	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?	
	Is the existing antenna directional?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	Yes
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Full Power  Top Mount  Not in Stack
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	851.0 kW

Manufacturer	
Model	ATW28H3- HTCU-49H
Year	2006

#### **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?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes Full Power
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Circular
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	673.0 kW
	Manufacturer	

Model	ATW28H3- ETC1-36H
Year	2019
Justification for New Antenna	WAQP's existing channel 48 /49 antenna is channel specific and not compatible with the station's repack channel.

#### **Other Antenna Costs**

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Туре	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	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 a high power antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No

Sweep Test	Do you require the sweep testing of	Yes
	transmission line and antenna?	

**Other Antenna Cost Not Listed** 

Information not provided.

#### Interim Antenna

#### **New Antenna Costs**

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	250.0 kW
	Manufacturer	
	Model	TFU 8B8-R
	Year	2018

Justification for New Antenna	Required to
	maintain on
	air station
	signal
	continuity
	during main
	antenna
	replacement
	operations.

#### 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?	No

#### Interim Antenna

**Other Antenna Cost Not Listed** 

Information not provided.

Transmission <sup>Seffien</sup>	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

# Primary Transmission Line

#### **Existing Transmission Line**

on Line Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission	Manufacturer	
Line Manufacturer and Type	Туре	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1150 feet per run

## Primary Transmiss

#### **New Transmission Line**

on Line Settion	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Туре	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 3/4 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1150 feet per run
	Justification for New Transmission Line	The existing line segment length is not compatible with channel 36.

Primary Other Transmission Line Expenses Not Listed Transmission Loine tion not provided.

#### Interim

#### **New Transmission Line**

Transmission Line	n Section	Question	Response
New Transmission Line Costs		Use	Interim
	Costs	Description of Use	N/A
		Change Type	Purchase New
		Туре	Flexible Air
		Diameter	3 inches
		Segment Length	N/A
		Other Segment Length	
		Number of parallel runs	1
		Length	1000 feet per run
	Justification for New Transmission Line	Required for interim antenna installation	

Interim

Other Transmission Line Expenses Not Listed

Transmission loine tion 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

# **Existing Tower**

Section	Question	Response
Existing Tower Description	Type of change	Move Equipment
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	Candelabra
	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?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1002081
Coordinates (NAD83 ( North American Datum of	Latitude (NAD83)	43° 13' 18.0" N-
1983))	Longitude (NAD83)	084° 03' 14.0" W-
	Overall Structure Height	988.83 feet
	Support Structure Height	945.85 feet
	Ground Elevation Above Mean Sea Level (AMSL)	609.90 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	TRI STATE CHRISTIAN TV
Date Constructed	03/01/1985

# Primary Tower

# **Tower Rigging Costs**

Section	Question	Response
Tower Rigging Costs	Complex Tower	Candelabra
Helicopter Services Required	Are helicopter services required?	Yes

# Primary Tower

# Other Tower Expenses Not Listed

Name	Description
Tower Inspection - Tower Mapping	Tower mapping required for equipment movement

## Outside Professional

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	595
	Explanation	WAQP does not have adequate qualified internal staff to manage the construction planning, scheduling, coordination and inspection tasks required to complete this project in a timely and safe manner.
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	No
	Quantity	N/A

	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A

Jus	tification	N/A

#### Outside Professional

# Other Professional Services Expenses Not Listed

Services Costs	Description
Construction management expense	Outside construction management fee

# Other Expenses

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

# Other Expenses

# Other Expenses Not Listed

Name	Description
Antenna system unloading	Rigging fee for unloading antenna system upon delivery

# **Cost Information**

#### **Transmitters**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTE-50	\$888,115.56	\$868,802.44		\$464,502.45	
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$6,236.88	Please see quote Q- 59787 - this is for upgraded equipment. Like-for-like documentation called out on quote Q-78038	\$3,561.66	N/A
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	\$856,565.56	\$856,565.56	Please see quote Q- 59787 - this is for upgraded equipment. Like-for-like documentation called out on quote Q-78038	\$460,940.79	N/A

Electrical Service: WAQP will require the assistance of a licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N.
WAQP will require the assistance of a licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.	\$3,000.00	\$3,000.00	N/A	N/A	N/
require the assistance of a licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.	\$3,000.00	\$3,000.00	N/A	N/A	N/
assistance of a licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
of a licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter. Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
contractor to disconnect and reconnect existing transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
disconnect and reconnect existing transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
and reconnect existing transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
reconnect existing transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/:
existing transmitter electrical service to the repack transmitter. Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
transmitter electrical service to the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/a
electrical service to the repack transmitter. Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/A
service to the repack transmitter.	\$3,000.00	\$3,000.00	N/A	N/A	N//
the repack transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/.
transmitter.  Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/
Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/A
	\$3,000.00	\$3,000.00	N/A	N/A	N/
removal					
Auxiliary Transmitter ULXTE-50	\$881,878.68	\$862,565.56		\$428,853.28	
Transformer	\$25,550.00	\$6,236.88	Please see	\$3,561.66	N/A
3 phase			quote Q-		
/480v - 150			59787 - this is		
KVA			for upgraded		
			equipment.		
			Like-for-like		
			documentation		
			called out on		
			quote Q-78253		
UHF -	\$850,328.68	\$850,328.68	Please see	\$425,291.62	N/
Liquid			quote Q-		
Cooled			59787 - this is		
Solid State			for upgraded		
Transmitter			equipment.		
31.7 kW			Like-for-like		
			documentation called out on		
			quote Q-78253		
Transmitter	\$3,000.00	\$3,000.00	N/A	N/A	N/

Other	\$3,000.00	\$3,000.00	N/A	N/A	N/A
Electrical	ψο,σσο.σσ	ψο,οοο.οο	1 4// 1	14//1	14//1
Service:					
WAQ will					
require the					
assistance					
of a					
licensed					
electrical					
contractor					
to					
disconnect					
and					
reconnect					
existing					
transmitter					
electrical					
service to					
the repack					
transmitter.					
Sub-total	\$1,769,994.24	\$1,731,368.00	N/A	\$893,355.73	N/A
Total for all systems	\$3,453,752.24	\$3,135,941.52	N/A	\$1,231,466.40	N/A

# Components

Actual Information Description	File Name	
Transformer 3 phase/480v - 150 KVA	Component Description:  Amount:	WAQP-110-1st Primary Transmitter - Transformer 3 phase/480v - 150 KVA \$1,780.83
	Component Description:  Amount:	WAQP-110-1st Primary Transmitter - Transformer 3 phase/480v - 150 KVA \$1,780.83

State Transmitter 31.7 kW	Component Description:	ULXTE-40 Main Transmitter
	Amount:	\$225,145.24
	Component Description:	ULXTE-40 Main
	Amount:	Transmitter \$235,795.55
Other Electrical Service: WAQP will require the assistance of a licensed electrical contractor to disconnect and reconnect existing transmitter electrical service to the repack ransmitter.	Information not provided.	
Fransmitter removal	Information not provided.	
Transformer 3 phase/480v -		
150 KVA	Component Description:	WAQP-150-1st Auxiliary Transmitter - Transformer 3 phase/480v - 150 KVA
	Amount:	\$1,780.83
	Component Description:	WAQP-150-1st Auxiliary Transmitter - Transformer 3 phase/480v - 150
	Amount:	KVA \$1,780.83

JHF - Liquid Cooled Solid State Transmitter 31.7 kW		
State Transmitter 51.7 KW	Component Description:	ULXTE-40
		Backup
		Transmitter
	Amount:	\$213,593.73
	Component Description:	ULXTE-40
		Backup
		Transmitter
	Amount:	\$211,697.89
Transmitter removal	Information not provided.	
Other Electrical Service:	Information not provided.	
WAQ will require the		
assistance of a licensed		
electrical contractor to		
disconnect and reconnect		
existing transmitter electrical		
service to the repack		
transmitter.		

# **Cost Information**

#### **Antennas**

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

Description   Cost Estimate   Cost   Justification   Actual Cost   Justification   Antenna   TFU 8B8-R						
Antenna TFU 8B8-R  UHF - \$189,500.00 \$51,325.00 N/A N/A N/A Lower Power Side Mount, One station - 200-500 kW, horizontally polarized  Primary Antenna ATW28H3- ETC1-36H  UHF - High \$289,500.00 \$439,460.95 Please see \$125,871.28 N/A Mount (200-1000 kW), One station 200-500 \$451,260.95 Please see \$125,871.28 N/A  The mount (200-1000 kW), One station 200-1000 kW), One station 200-100	Description			Cost	Actual Cost	Actual Cost Justification
Lower Power Side Mount, One station - 200-500 kW, horizontally polarized  Primary \$296,230.00 \$451,260.95 \$129,411.28  Antenna ATW28H3- ETC1-36H  UHF - High \$289,500.00 \$439,460.95 Please see the attached quote from DTVPros station antenna, elliptically or circularly polarized  Sweep test of existing antenna  **Text	Antenna	\$189,500.00	\$51,325.00		\$0.00	
Antenna ATW28H3- ETC1-36H  UHF - High \$289,500.00 \$439,460.95 Please see \$125,871.28 N/A Power Top the attached (200-1000 quote from DTVPros station #JEHQ1299- antenna, 08 elliptically or circularly polarized  Sweep test \$6,730.00 \$11,800.00 Please see \$3,540.00 N/A of existing antenna attached quote from DTVPros # S17967	Lower Power Side Mount, One station - 200-500 kW, horizontally	\$189,500.00	\$51,325.00	N/A	N/A	N/A
Power Top  Mount (200-1000 (200-1000) (WW), One Station antenna, elliptically or circularly polarized  Sweep test \$6,730.00 \$11,800.00 Please see \$3,540.00 N/A of existing antenna attached quote from DTVPros # S17967	Antenna ATW28H3-	\$296,230.00	\$451,260.95		\$129,411.28	
of existing the attached quote from DTVPros # S17967	Power Top Mount (200-1000 kW), One station antenna, elliptically or circularly	\$289,500.00	\$439,460.95	the attached quote from DTVPros #JEHQ1299-	\$125,871.28	N/A
<b>Sub-total</b> \$485,730.00 \$502,585.95 N/A \$129,411.28 N/A	of existing	\$6,730.00	\$11,800.00	the attached quote from DTVPros #	\$3,540.00	N/A
	Sub-total	\$485,730.00	\$502,585.95	N/A	\$129,411.28	N/A

Total for	\$3,453,752.24	\$3,135,941.52	N/A	\$1,231,466.40	N/A
all systems					
Cyclonic					

# Components

Components		
Actual Information Description	File Name	
UHF - Lower Power Side Mount, One station - 200- 500 kW, horizontally polarized	Information not provided.	
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Component Description:	UHF-High Power Top Mount (200- 1000KW) ATW28H3-ETC1- 36H Top Mounted Elliptically Polarized UHF TRASAR Television Transmitting Antenna
	Amount:	\$62,935.64
	Component Description:	UHF-High Power Top Mount (200- 1000KW)
	Amount:	\$62,935.64
Sweep test of existing antenna	Component Description:	WAQP-210- Primary Antenna -
	Amount:	Sweep Test \$3,540.00
	Component Description:	WAQP-210- Primary Antenna - Sweep Test
	Amount:	\$3,540.00

#### **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	\$59,000.00	\$35,881.62		\$0.00	
Flexible Air Transmission Line - dielectric, 3"	\$59,000.00	\$35,881.62	N/A	N/A	N/A
Primary Transmission Line	\$232,300.00	\$175,507.95		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$232,300.00	\$175,507.95	N/A	N/A	N/A
Sub-total	\$291,300.00	\$211,389.57	N/A	\$0.00	N/A
Total for all systems	\$3,453,752.24	\$3,135,941.52	N/A	\$1,231,466.40	N/A

### Components

Information not provided.

#### **Tower Equipment and Rigging Costs**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$655,568.00	\$480,323.00		\$174,223.99	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$245,755.00	N/A	\$158,573.32	N/A
Tower Helicopter Lift	\$230,568.00	\$230,568.00	Please see the attached PO # S- 17967 from T.C.T of Michigan, Inc.	\$12,450.67	N/A
Tower Inspection - Tower Mapping	\$4,000.00	\$4,000.00	Please see the attached invoice from Thumb Radio Inc #	\$3,200.00	N/A
Sub-total	\$655,568.00	\$480,323.00	N/A	\$174,223.99	N/A
Total for all systems	\$3,453,752.24	\$3,135,941.52	N/A	\$1,231,466.40	N/A

### Components

Actual Information Description	File Name	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Component Description:	Custom Stub Tower Section &
anternas)	Amount:	Installation \$32,590.00
	Component Description:	Revised Analysis and Modification
	Amount:	Drawing \$7,500.00
	Component Description:	Modification Drawings
	Amount:	\$7,500.00
	Component Description:	Drawings Purchased from Pirod
	Amount:	\$8,150.00
	Component Description:	Antenna Installation
	Amount:	\$102,833.32
Tower Helicopter Lift		
	Component Description:	WAQP Existing Primary Tower- Helicopter Lift
	Amount:	\$12,450.67
Tower Inspection - Tower Mapping	Component Description:	Tower Mapping,
	Amount:	Relamp Tower \$3,200.00

#### **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	\$223,080.00	\$190,010.00		\$34,475.40	
Construction management expense	\$12,000.00	\$12,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$35,000.00	N/A	N/A	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,585.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Project management of the transition	\$94,010.00	\$111,675.00	Please see the attached Widelity quote	\$34,475.40	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Sub-total	\$223,080.00	\$190,010.00	N/A	\$34,475.40	N/A
Total for all systems	\$3,453,752.24	\$3,135,941.52	N/A	\$1,231,466.40	N/A

### Components

Components	
Actual Information Description	File Name
Construction management expense	Information not provided.
Comprehensive coverage verification via field study, if needed	Information not provided.
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.
ASR modification (prepare FCC Form 854)	Information not provided.
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Project management of the transition	

**Component Description:** 

Project Management

Amount:

\$3,885.40

**Component Description:** 

Project

Amount:

Management \$1,206.55

**Component Description:** 

Project

Amount:

Management \$3,789.75

**Component Description:** 

Project

Amount:

Management \$1,279.85

**Component Description:** 

Project

Amount:

Management

\$1,120.95

**Component Description:** 

Project

Amount:

Management

\$40.95

**Component Description:** 

**Project** 

Amount:

Management

\$1,583.10

**Component Description:** 

Project

Amount:

Management

\$2,917.45

**Component Description:** 

Project

Amount:

Management

\$1,415.75

**Component Description: Project** Management \$9,975.45 Amount: **Component Description:** Project Management Amount: \$2,266.80 **Component Description: Project** Management **Amount:** \$1,558.20 **Component Description: Project** Management **Amount:** \$3,435.20 Prepare and or review Information not provided. reimbursement form Address transition timing Information not provided. and coordination issues w/ other stations and wireless Perform engineering study Information not provided. for new channel assignment and antenna development Prepare engineering section Information not provided. of FCC Form 2100 (main), Construction Permit Application Prepare engineering section Information not provided. of FCC Form 2100 (main), License to Cover Application

#### **Other Expenses**

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

			Estimated		
	Predetermined	Estimated	Cost		Actual Cost
Description	Cost Estimate	Cost	Justification	Actual Cost	Justification
Other Expenses	\$28,080.00	\$20,265.00		\$0.00	
DTV Medical Facility Notification	\$11,550.00	\$3,750.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
Non-zoning permits	\$1,000.00	\$1,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$7,000.00	\$7,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$2,000.00	\$2,000.00	N/A	N/A	N/A

MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Antenna system unloading	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Sub-total	\$28,080.00	\$20,265.00	N/A	\$0.00	N/A
Total for all systems	\$3,453,752.24	\$3,135,941.52	N/A	\$1,231,466.40	N/A

### Components

Information not provided.

#### **Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$3,453,752.24	\$3,135,941.52	\$1,231,466.40

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.
- 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

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

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

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

08/05/2019

Section Question Response

# Submission of Actual Cost Documentation Statements

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

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

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

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

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

08/05/2019

#### **Attachments**