



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **51984** | Service: **DTV** | Call **WPPX-TV** | Channel: **34 (UHF)** |
ID:
File **0000028672**
Number:
FRN: **0001808468** | Date **06/29**
Submitted: **/2018**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
ION MEDIA PHILADELPHIA LICENSE, INC. Doing Business As: ION MEDIA PHILADELPHIA LICENSE, INC.	Bianca Frye 601 Clearwater Park Road West Palm Beach, FL 33401 United States	+1 (561) 682- 4110	BiancaFrye@ionmedia. com	Corporation

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
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.	Yes
Briefly describe transition plan	Relocate operations from ASR# 1231524 to ASR# 1023152. Install and operate from shared-interim antenna utilizing new transmitter. Build Post-Repack facilities utilizing new side-mount antenna, transmission line, and transmitter.

Transmitters

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

**Primary
Transmitter**

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	Ultimate
	Year	2003
	Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power Capacity	10 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?	No
	Manufacturer	
	Model	THU9-10 EVO
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	15.5 kW
	Justification for New Transmitter	See attached Ultimate and Optimum Transmitter Exhibit.

**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	Electrical Installation for replacement transmitter
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	144.0 square feet
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
RF Interconnect	Interconnect between RF System and transmission line
Removal of Existing Equipment	Removal of existing transmitters and equipment / Site Prep

Antennas

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

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	200.0 kW

Manufacturer	
Model	TFU- 20DSC-R P230
Year	2004

Primary
Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	213.0 kW
	Manufacturer	

Model	TFU-20DSC /VP-R P230
Year	2018
Justification for New Antenna	Current slot antenna cannot be re-channelled

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

**Primary
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?	Yes
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Broadband Slot
	Number of Stations Supported	2
	Number of Panels/Bays	24
	Lower Limit	470.00 MHz
	Upper Limit	698.00 MHz
	Design power capacity in use	95.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	210.0 kW
	Manufacturer	
	Model	TFU-WB-24
	Year	2018

	Justification for New Antenna	Shared-interim antenna needed to complete move to new channel.
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Interim Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	2
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	No
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	Feed Line Size	6 1/8 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	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

Enter a list of RF channel numbers.

RF Channel Number

34

31

32

33

**Interim
Antenna**

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

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

Primary
Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	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 Line Manufacturer and Type	Manufacturer	
	Type	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	1261 feet per run

Primary
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	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	1250 feet per run
	Justification for New Transmission Line	See attached Transmission Line Exhibit.

Primary
Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Sweep existing transmission line	Sweep existing transmission line

Interim **New Transmission Line**
Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Rigid
	Diameter	6 1/8 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	1
	Length	1225 feet per run
	Justification for New Transmission Line	Broadband Interim Transmission Line needed to combine channels into Shared-Interim Broadband Antenna.

Interim **Other Transmission Line Expenses Not Listed**
Transmission Line

Information not provided.

Tower Equipment And Rigging Costs

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

Primary Tower

Add Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	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 Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1023152
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	40° 02' 39.0" N-
	Longitude (NAD83)	075° 14' 25.0" W-
	Overall Structure Height	1116.13 feet
	Support Structure Height	1112.85 feet
	Ground Elevation Above Mean Sea Level (AMSL)	252.29 feet

	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	ABC INC DBA = WPVI-TV
	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
8616	WPVI-TV	DTV
25453	KYW-TV	DTV
12499	WPSG	DTV

Primary Tower

Tower Modification Costs

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

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A

Helicopter Services Required	Are helicopter services required?	No
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**Primary
Tower**

Other Tower Expenses Not Listed
Information not provided.

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?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	Unknown
	Is tower compliant with Rev G?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1231524
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	40° 02' 30.1" N-
	Longitude (NAD83)	075° 14' 10.1" W-
	Overall Structure Height	1254.91 feet
	Support Structure Height	1124.00 feet
	Ground Elevation Above Mean Sea Level (AMSL)	292.98 feet
	Structure Type	GTOWER - Guyed Structure Used for Communication Purposes

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

**FM, AM or TV radio
broadcasters. Facility ID's,
Call Signs and Services of
other broadcast stations with
whom the tower is shared**

Facility ID	Call Sign	Service
28480	WYBE	DTV
74213	WXTU	FM
65190	WRTI	FM
12499	WPSG	DTV
1283	KJWP	DTV
55305	WTVE	DTV
60560	WUVP-DT	DTV
9622	WOGL	FM
12211	WPPZ-FM	FM
7623	WGTW-TV	DTV
63153	WCAU	DTV
28628	WIP-FM	FM
30572	WPHI-FM	FM
74216	WFPA-CD	DTV
72278	WPHA-CD	DTV

**Primary
Tower**

Tower Rigging Costs

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

**Primary
Tower**

Other Tower Expenses Not Listed

Information not provided.

**Outside
Professional Services Costs**

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	No
	Number of Hours	N/A
	Explanation	N/A
Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes
	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	Yes
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Professional Services Costs **Other Professional Services Expenses Not Listed**

If wireless is not provided.

Other Expenses

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

**Other
Expenses**

Other Expenses Not Listed

Name	Description
Obtain building permits from local zoning authorities	The cost of preparation and submission of the needed forms for permits, on behalf of the three broadcasters for jurisdictional permits, required for electrical, building and required tasks assoc with the install of the the equip in the transmitter spaces

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 THU9-10 EVO	\$788,525.00	\$489,759.54		\$430,162.82	
5 Ton system	\$20,250.00	\$19,250.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	\$684,000.00	\$386,234.54	See attached Rohde & Schwarz Transmitter Quotes & Breakdown #01	\$386,234.54	Cost of additional components needed for transmitter operation greater than estimated costs.
Other Electrical Service: Electrical Installation for replacement transmitter	<i>\$25,000.00</i>	\$25,000.00	N/A	\$31,153.28	Estimated cost was based on pre-determined cost estimate. Actual cost for transmitter electrical installation greater than estimated cost.

Other -- Building Addition Size: 144.0	\$9,275.00	\$9,275.00	See attached APCON Quote #01 for 12' x 12' (144 sq ft) building addition.	\$9,275.00	N/A
Removal of Existing Equipment	\$25,000.00	\$25,000.00	N/A	\$3,500.00	N/A
RF Interconnect	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Sub-total	\$788,525.00	\$489,759.54	N/A	\$430,162.82	N/A
Total for all systems	\$3,205,113.00	\$2,174,359.64	N/A	\$996,651.42	N/A

Components

Actual Information	
Description	File Name
5 Ton system	Information not provided.
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	<p>Component Description: 25% "down payment" for Rohde & Schwarz transmitter. Supporting documentation attached. This invoice has been paid.</p> <p>Amount: \$89,525.12</p>

Component Description:

Cots of additional requested installation material or services and Dielectric parts for the antenna line after switch. Supporting documentation attached. This invoice has been paid.

Amount:

\$17,804.04

Component Description:

Cost of expedited heat exchanger solution and installation. Supporting documentation attached. This invoice has been paid.

Amount:

\$10,330.00

Component Description:

75% "remaining balance" payment on Rohde & Schwarz transmitter. Supporting documentation attached.

Amount:

\$268,575.38

Other Electrical Service: Electrical Installation for replacement transmitter	<div> <div>Component Description:</div> <div>Cost of electrical installation of primary transmitter. Supporting documentation attached. This invoice has been paid.</div> <div>Amount:</div> <div>\$31,153.28</div> </div>
Other -- Building Addition Size: 144.0	<div> <div>Component Description:</div> <div>Cost of concrete pads for placement of heat exchangers next to transmitter building. Supporting documentation attached. This invoice has been paid.</div> <div>Amount:</div> <div>\$9,275.00</div> </div>
Removal of Existing Equipment	<div> <div>Component Description:</div> <div>Full cost of repairing, leveling, and filling entryway at base of tower for secure vehicle entrance. Supporting documentation attached.</div> <div>Amount:</div> <div>\$3,500.00</div> </div>
RF Interconnect	Information not provided.

Cost Information

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna TFU-WB-24	\$277,648.00	\$253,858.00		\$171,178.20	
UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 210 kW input, directional,, elliptically or circularly polarized	<i>\$173,018.00</i>	\$173,018.00	See attached Dielectric Quote #700481CMZ.	\$155,716.20	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	See attached Dielectric Quote #700481CMZ.	\$5,760.00	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$63,660.00	See attached Dielectric Quote #800055CMZ.	N/A	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$10,780.00	See attached Dielectric Quote #700481CMZ.	\$9,702.00	N/A

Primary Antenna TFU-20DSC /VP-R P230	\$274,440.00	\$186,622.50		\$0.00	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$16,425.00	See attached Dielectric Quote #45098.	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$10,297.50	See attached Dielectric Quote #45098.	N/A	N/A

UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	\$227,000.00	\$148,500.00	The estimated cost has been re- entered due to a technical error with the LMS form. Per FCC procedure, we have re- entered the original cost estimate that ties to our original submission while the technical issue is resolved.	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	See attached Dielectric Quote #45098.	N/A	N/A
Sub-total	\$552,088.00	\$440,480.50	N/A	\$171,178.20	N/A
Total for all systems	\$3,205,113.00	\$2,174,359.64	N/A	\$996,651.42	N/A

Components

Actual Information
Description

File Name

UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 210 kW input, directional,, elliptically or circularly polarized	<div> <div>Component Description:</div> <div>45% "down payment" for interim antenna. Supporting documentation attached. This invoice has been paid.</div> </div> <div> <div>Amount:</div> <div>\$77,858.10</div> </div>
	<div> <div>Component Description:</div> <div>45% "prior to ship" payment for interim antenna. Supporting documentation attached. This invoice has been paid.</div> </div> <div> <div>Amount:</div> <div>\$77,858.10</div> </div>
Sweep test of existing antenna	<div> <div>Component Description:</div> <div>45% "prior to ship" payment for repack sweep of interim operations. Supporting documentation attached. This invoice has been paid.</div> </div> <div> <div>Amount:</div> <div>\$2,880.00</div> </div> <div> <div>Component Description:</div> <div>45% "down payment" for repack sweep of interim operations. Supporting documentation attached. This invoice has been paid.</div> </div> <div> <div>Amount:</div> <div>\$2,880.00</div> </div>

New combiner, cost per channel (without antenna)	Information not provided.
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	<div> <div> Component Description: </div> <div> 45% "prior to ship" payment for interim elbow complex. Supporting documentation attached. This invoice has been paid. </div> </div> <div> <div> Amount: </div> <div> \$4,851.00 </div> </div> <div> <div> Component Description: </div> <div> 45% "down payment" for interim elbow complex. Supporting documentation attached. This invoice has been paid. </div> </div> <div> <div> Amount: </div> <div> \$4,851.00 </div> </div>
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	Information not provided.
Sweep test of existing antenna	Information not provided.

Cost
Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$284,200.00	\$195,428.80		\$184,792.41	
Rigid Transmission Line - copper, 6 1/8" broadband	\$284,200.00	\$195,428.80	See attached Dielectric Quote #700467CMZ.	\$184,792.41	N/A
Primary Transmission Line	\$258,900.00	\$183,975.80		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$252,500.00	\$177,575.80	See attached Dielectric Quote #45098 (Line Items 4 and 5).	N/A	N/A
Sweep existing transmission line	\$6,400.00	\$6,400.00	N/A	N/A	N/A
Sub-total	\$543,100.00	\$379,404.60	N/A	\$184,792.41	N/A
Total for all systems	\$3,205,113.00	\$2,174,359.64	N/A	\$996,651.42	N/A

Components

Actual Information Description	File Name
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Rigid Transmission Line - copper, 6 1/8" broadband	<div data-bbox="710 168 1356 604"> <p>Component Description: 45% "down payment" for interim transmission line. Detailed invoice breakdown and supporting documentation attached. This invoice has been paid.</p> <p>Amount: \$90,822.96</p> </div> <div data-bbox="710 750 1356 1187"> <p>Component Description: 45% "prior to ship" payment for interim transmission line. Detailed invoice breakdown and supporting documentation attached. This invoice has been paid.</p> <p>Amount: \$93,969.45</p> </div>
Rigid Transmission Line - copper, 6 1/8"	Information not provided.
Sweep existing transmission line	Information not provided.

Cost Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	\$421,000.00	\$92,400.00		\$82,400.00	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$92,400.00	See attached Vertical Technology Services Quote #17455-PA-REV-1 (Line Item C)	\$82,400.00	N/A
Primary Tower TOWER	\$657,800.00	\$542,800.00		\$117,800.00	
Tall Tower (greater than 500')	\$210,500.00	\$117,800.00	See attached Vertical Technology Services Quote #17455-PA-REV-1 (Line Item B)	\$117,800.00	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	N/A	N/A

Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	N/A	N/A
Sub-total	\$1,078,800.00	\$635,200.00	N/A	\$200,200.00	N/A
Total for all systems	\$3,205,113.00	\$2,174,359.64	N/A	\$996,651.42	N/A

Components

Actual Information	
Description	File Name
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Component Description:
	Final progress payment for tower service at ATC Tower. Supporting documentation attached. This invoice has been paid.
	Amount:
	\$52,400.00
	Component Description:
	Progress payment for tower service at ATC Tower. Supporting documentation attached. This invoice has been paid.
	Amount:
	\$30,000.00

Tall Tower (greater than 500')	<div data-bbox="710 174 1377 526"> <p>Component Description: Progress payment for tower service at ABC Joint Venture Tower. Supporting documentation attached. This invoice has been paid.</p> <p>Amount: \$5,000.00</p> </div> <div data-bbox="710 633 1362 945"> <p>Component Description: Final progress payment for tower service at ABC Joint Venture tower. Supporting documentation attached.</p> <p>Amount: \$62,800.00</p> </div> <div data-bbox="710 1052 1377 1404"> <p>Component Description: Progress payment for tower service at ABC Joint Venture tower. Supporting documentation attached. This invoice has been paid.</p> <p>Amount: \$50,000.00</p> </div>
Major tower reinforcement /modifications	Information not provided.
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Information not provided.

Cost Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$144,380.00	\$136,750.00		\$7,617.99	
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	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	\$3,500.00	N/A	N/A	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

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	\$4,742.99	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	\$750.00	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	See AT exhibit for more information.	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
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$125.00	N/A

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$2,000.00	N/A
Sub-total	\$144,380.00	\$136,750.00	N/A	\$7,617.99	N/A
Total for all systems	\$3,205,113.00	\$2,174,359.64	N/A	\$996,651.42	N/A

Components

Actual Information	
Description	File Name
RF Exposure Measurements	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 - Negotiation of lease and other matters for shared locations	Information not provided.
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.

<p>Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application</p>	<table> <tr> <td data-bbox="711 176 1015 208">Component Description:</td><td data-bbox="1150 176 1374 680"> <p>Invoice for WPPX's portion of general repack legal expenses incurred for 42 of the ION repack stations for period 2/1/2017 - 12/15/2017. Payee has corresponded with FCC staff. Hourly supporting documentation and invoice attached.</p> </td></tr> <tr> <td data-bbox="711 696 815 723">Amount:</td><td data-bbox="1150 696 1267 723">\$4,742.99</td></tr> </table>	Component Description:	<p>Invoice for WPPX's portion of general repack legal expenses incurred for 42 of the ION repack stations for period 2/1/2017 - 12/15/2017. Payee has corresponded with FCC staff. Hourly supporting documentation and invoice attached.</p>	Amount:	\$4,742.99
Component Description:	<p>Invoice for WPPX's portion of general repack legal expenses incurred for 42 of the ION repack stations for period 2/1/2017 - 12/15/2017. Payee has corresponded with FCC staff. Hourly supporting documentation and invoice attached.</p>				
Amount:	\$4,742.99				
<p>Prepare request for Special Temporary Authorization</p>	<table> <tr> <td data-bbox="711 835 1015 866">Component Description:</td><td data-bbox="1150 835 1374 1379"> <p>Invoice for station's portion of general repack legal expenses incurred for 42 of the ION repack stations for period 2/1/2017 - 12/15/2017. Payee has corresponded with FCC staff and has provided corrected supporting documentation.</p> </td></tr> <tr> <td data-bbox="711 1395 815 1422">Amount:</td><td data-bbox="1150 1395 1267 1422">\$4,837.97</td></tr> </table>	Component Description:	<p>Invoice for station's portion of general repack legal expenses incurred for 42 of the ION repack stations for period 2/1/2017 - 12/15/2017. Payee has corresponded with FCC staff and has provided corrected supporting documentation.</p>	Amount:	\$4,837.97
Component Description:	<p>Invoice for station's portion of general repack legal expenses incurred for 42 of the ION repack stations for period 2/1/2017 - 12/15/2017. Payee has corresponded with FCC staff and has provided corrected supporting documentation.</p>				
Amount:	\$4,837.97				
<p>Prepare request for Special Temporary Authorization</p>	<table> <tr> <td data-bbox="711 1565 1015 1597">Component Description:</td><td data-bbox="1150 1565 1358 1951"> <p>Cost of RF consultant preparation for special temporary authorization. Hourly supporting documentation attached. This invoice has been paid.</p> </td></tr> <tr> <td data-bbox="711 1966 815 1993">Amount:</td><td data-bbox="1150 1966 1246 1993">\$750.00</td></tr> </table>	Component Description:	<p>Cost of RF consultant preparation for special temporary authorization. Hourly supporting documentation attached. This invoice has been paid.</p>	Amount:	\$750.00
Component Description:	<p>Cost of RF consultant preparation for special temporary authorization. Hourly supporting documentation attached. This invoice has been paid.</p>				
Amount:	\$750.00				

Prepare and or review reimbursement form	Information not provided.								
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.								
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.								
Perform engineering study for new channel assignment and antenna development	<table> <tr> <td>Component Description:</td><td>Cost of RF consultant work for new channel assignment and antenna development. Hourly supporting documentation attached. This invoice has been paid.</td></tr> <tr> <td>Amount:</td><td>\$62.50</td></tr> <tr> <td>Component Description:</td><td>Cost of RF consultant work for new channel assignment and antenna development. Hourly supporting documentation attached. This invoice has been paid.</td></tr> <tr> <td>Amount:</td><td>\$62.50</td></tr> </table>	Component Description:	Cost of RF consultant work for new channel assignment and antenna development. Hourly supporting documentation attached. This invoice has been paid.	Amount:	\$62.50	Component Description:	Cost of RF consultant work for new channel assignment and antenna development. Hourly supporting documentation attached. This invoice has been paid.	Amount:	\$62.50
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Amount:	\$62.50								
Component Description:	Cost of RF consultant work for new channel assignment and antenna development. Hourly supporting documentation attached. This invoice has been paid.								
Amount:	\$62.50								

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

Component Description:

Cost of RF
consultant
preparation of
engineering
section of FCC
Form 2100. Hourly
supporting
documentation
attached. This
invoice has been
paid.

Amount:

\$2,000.00

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	\$98,220.00	\$92,765.00		\$2,700.00	
Obtain building permits from local zoning authorities	<i>\$750.00</i>	\$750.00	See AT exhibit for more information.	N/A	N/A
MVPD Notification of Channel Change	<i>\$2,500.00</i>	\$2,500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	<i>\$0.00</i>	\$0.00	The amount is yet to be determined (TBD) and ION will submit on-air announcement costs when finalized.	N/A	N/A
Equipment Storage	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$15,000.00</i>	\$15,000.00	N/A	N/A	N/A
Non-zoning permits	<i>\$15,000.00</i>	\$15,000.00	N/A	N/A	N/A

Local Zoning	\$25,000.00	\$25,000.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
AM Pattern Disturbance -- Impact study	\$7,890.00	\$7,500.00	As required per the Construction Permit Authorization's Waivers /Special Conditions, a proof of performance study shall be conducted to establish that the AM array (WNWR) has not been adversely affected.	\$2,700.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$6,500.00	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
Sub-total	\$98,220.00	\$92,765.00	N/A	\$2,700.00	N/A
Total for all systems	\$3,205,113.00	\$2,174,359.64	N/A	\$996,651.42	N/A

Components

Actual Information	
Description	File Name
Obtain building permits from local zoning authorities	Information not provided.

MVPD Notification of Channel Change	Information not provided.
Develop and air announcement of upcoming channel change	Information not provided.
Equipment Storage	Information not provided.
Equipment Delivery and Handling Charges	Information not provided.
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.
Non-zoning permits	Information not provided.
Local Zoning	Information not provided.
FCC Filing Fees - Special Temporary Authorization request	Information not provided.
AM Pattern Disturbance -- Impact study	<div> <div> Component Description: </div> <div> Cost of RF consultant AM Pattern Disturbance - Impact Study. Hourly supporting documentation attached. This invoice has been paid. </div> </div> <div> Amount: </div> <div> \$2,700.00 </div>
DTV Medical Facility Notification	Information not provided.
FCC Filing Fees - Form 2100 license to cover application	Information not provided.

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$3,205,113.00	\$2,174,359.64	\$996,651.42

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 	

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

<p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Mario Vasquez <i>Vice President - Finance, Operations</i></p> <p>06/29/2018</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		<ol style="list-style-type: none"> 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. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 	

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

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Mario Vasquez <i>Vice President - Finance, Operations</i></p> <p>06/29/2018</p>

Attachments