



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **69619** | Service: **DTV** | Call **KBCW** | Channel: **28 (UHF)** |  
ID: | Sign: |  
File **0000027831**  
Number:  
FRN: **0003742632** | Date **11/30**  
Submitted: **/2017**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>SAN FRANCISCO TELEVISION STATION KBCW INC</b>	Edwin L Nass 1725 DESALES ST NW SUITE 501 WASHINGTON, DC 20036 United States	+1 (202) 457- 4505	ELNASS@CBS. COM	Corporation

## Reimbursement Contact Information

### Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

## Preparer Contact Information

### Preparer Contact Name and Information

Applicant	Address	Phone	Email
<b>Edwin L Nass , Nass .</b> <i>Director of Spectrum Management</i> <i>CBS</i>	Edwin L Nass 1725 DeSales Street NW Suite 501 Washington, DC 20036 United States	+1 (202) 457- 4602	elnass@cbs. com

**Broadcaster  
Information  
and  
Transition  
Plan**

Question		Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.		Yes
Briefly describe transition plan		Facility located at Sutro Tower has a main elliptically polarized ant and a broadband aux ant. Main antenna replacement requires replacment of structural steel. Post-transition transmitter will be pretuned to the post transition channel

**Transmitters**

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

**Primary  
Transmitter**

**Existing Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	Sigma CD
	Year	2002
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	60 kW

**Primary  
Transmitter**

**New Transmitter Costs**

Section	Question	Response
<b>New Transmitter</b>	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-100
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	62.7 kW
	Justification for New Transmitter	GatesAir will not retune IOT transmitters (see Exhibit 1), IOT transmitter (see Exhibit 2) is more expensive, and proposed transmitter is less expensive (see Exhibit 3).

**Primary  
Transmitter**

**Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes

	Power	300 kVA
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	0.0 square feet
<b>Channel 14 Costs</b>	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

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

**Antennas**

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

**Auxiliary  
Antenna****Existing Antenna Information**

Section	Question	Response
Existing Antenna Description	Type of change	Retune Existing
	Antenna Use	Auxiliary (Backup)
	Description of Use	Alternate /Backup
	Ownership	Leased
	Owner	Sutro Tower, Inc.
	Site	N/A
	Is the existing antenna shared with another station or stations?	Yes
	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 Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	5
	Number of Panels	40
	Design power capacity in use	80.0 %

Lower Limit	470.00 MHz
Upper Limit	698.00 MHz
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	500.0 kW
Manufacturer	Dielectric
Model	TUA-C4SP-12/40U-1-S
Year	2007

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

Facility ID	Call Sign
58912	KCSM-TV
35500	KQED
43095	KMTP-TV
51429	KFSF-DT
71586	KCNS

**Auxiliary Antenna**

**Adjustment to Existing Antenna**

Section	Question	Response
<b>Sweep Test of Existing Antenna</b>	Do you need a sweep test of existing antenna?	Yes

**Auxiliary Antenna**

**Other Antenna Costs**

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	5

	Frequencies of channels supported	RF channel
	Frequency	N/A

Enter a list of RF channel numbers.

RF Channel Number
34
28
30
32

**Auxiliary  
Antenna**

**Other Antenna Cost Not Listed**

Information not provided.



## 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?	Yes
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Bottom
	Polarization	Elliptical
	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) .....	1000.0 kW

Manufacturer	
Model	TFU-19JSC /VP-R C150SP
Year	2009

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?	No
	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	Bottom
	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) .....	714.0 kW
	Manufacturer	

Model	TFU-19JSC /VP-R C150 SP
Year	2019
Justification for New Antenna	Current antenna is single-channel, and cannot be retuned to new frequency.

## Primary Antenna

### Other Antenna Costs

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

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

**Other Antenna Cost Not Listed**  
Information not provided.

**Transmission Line**

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

**Auxiliary Transmission Line****Existing Transmission Line**

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Auxiliary (Backup)
	Description of Use	When Main Isn't Available
	Ownership	Leased
	Owner	Sutro Tower, Inc.
	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
	Type	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	745 feet per run

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

Facility ID	Call Sign
58912	KCSM-TV
35500	KQED
43095	KMTP-TV
71586	KCNS

**Auxiliary  
Transmission Line**

**Other Transmission Line Expenses Not Listed**

Name	Description
<b>Assd. Transmission Line</b>	Various transmission lines and hardware to restore non-repacked stations after tower reinforcement.

**Primary**  
**Transmission Line**

**Existing Transmission Line**

Section	Question	Response
<b>Existing Transmission Line Description</b>	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
<b>Existing Transmission Line Manufacturer and Type</b>	Manufacturer	
	Type	Waveguide
	Diameter	N/A
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1085 feet per run



**Primary**  
**Transmission Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1085 feet per run
	Justification for New Transmission Line	Reduce structural stress on tower and Stack B to reduce structural reinforcement needs. (See Exhibit 5.)

**Primary**  
**Transmission Line**

**Other Transmission Line Expenses Not Listed**

Name	Description
<b>RF Accessories</b>	Coaxial Switch, Switch Controller, Test Load. (See Exhibit 3, Item D)

**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	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	Candelabra
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1001289
Coordinates (NAD83 ( North American Datum of 1983))	Latitude (NAD83)	37° 45' 19.0" N-
	Longitude (NAD83)	122° 27' 10.0" W-
	Overall Structure Height	976.69 feet
	Support Structure Height	779.85 feet
	Ground Elevation Above Mean Sea Level (AMSL)	833.98 feet

	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	SUTRO TOWER INC
	Date Constructed	03/27/1998

**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
25452	KPIX-TV	DTV
35500	KQED	DTV
35703	KTVU	DTV
34470	KGO-TV	DTV
51429	KFSF-DT	DTV
43095	KMTP-TV	DTV
54770	KFOG	FM
71586	KCNS	DTV
58912	KCSM-TV	DTV
6380	KOIT	FM
59964	KISQ	FM
65526	KRON-TV	DTV
65484	KOSF	FM
70032	KSOL	FM

**Primary  
Tower**

**Tower Modification Costs**

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for tower with candelabra
Tower Reinforcements	Please select whether tower reinforcements are needed:	Serious 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 Mapping	Tower mapping for preparation of documentation necessary for tower load study.

**Outside  
Professional Services Costs**

Section	Question	Response
<b>Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	250
	Explanation	Company lacks sufficient internal resources.
<b>Outside RF consulting Engineering Services</b>	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	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
<b>Attorney and Other Outside Consulting Services</b>	Prepare and file Form FCC Construction Permit Application	No
	For Auxiliary Facility	N/A
	For Main Facility	N/A
	Prepare and file Form FCC License to Cover Application	No

	For Auxiliary Facility	N/A
	For Main Facility	N/A
	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	NEPA Section 106 environmental review	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	No
	Prepare or Review FCC Form 399 for Reimbursement	No
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
<b>RF Field Engineering Services</b>	Comprehensive coverage verification via field study	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**

Services not provided.

## Other Expenses

Section	Question	Response
<b>AM Pattern Disturbance</b>	Is an Impact Study needed?	No
	Is Remediation needed?	No
<b>Facility Expenses</b>	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
<b>Permit and Filing Costs</b>	Local Zoning	Yes
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	No
<b>Other Miscellaneous Expenses</b>	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	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
Alternate Site Studies	Pre, Post and Alternate Site Studies
Architectural Plans	Architectural plans, building mapping, update plans.
Fork Lift Rental	Utilized to deliver equipment from storage, remove equipment from transmitter room.
Legal Fees	Legal Fees
Public Relations	Required as part of zoning effort.
Site Survey	Determine actual site conditions and determine the materials and components required for system installation integration of the site with the transmitter equipment. See Exhibit 12.
KFOG Interim Antenna	Temporarily Relocate KFOG(FM) Antenna.
VSWR Monitoring	VSWR Monitoring and antenna lockout system.



## Cost Information

### Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Transmitter ULXTE-100</b>	<b>\$2,023,434.82</b>	<b>\$2,150,233.64</b>		<b>\$0.00</b>	
UHF - Liquid Cooled Solid State Transmitter 62.7 kW	<b>\$1,862,428.82</b>	\$1,862,428.82	Existing transmitter cannot be re-tuned (Exhibit 1), proposed transmitter (Exhibit 3, items A, B, and E) costs less than non-upgraded IOT transmitter (Exhibit 2.) 62.7 kW power level is consistent with Widelity Costs for similar power levels.	N/A	N/A
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$165,000.00	See Exhibit 4.	N/A	N/A
Transformer 3 phase /480v - 300 KVA	\$36,800.00	\$12,998.82	Please see Exhibit 3, Item D.	N/A	N/A

Other -- Building Addition Size: 0.0	<b>\$109,806.00</b>	\$109,806.00	Abatement, Flooring, Demo, Paint, Fire Stop, Seismic (Please See Exhibit 4.)	N/A	N/A
<b>Sub-total</b>	\$2,023,434.82	\$2,150,233.64	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$5,141,189.46	\$5,904,607.28	N/A	\$129,987.34	N/A

### Components

Information not provided.

Cost  
Information

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna TFU-19JSC /VP-R C150 SP	\$264,240.00	\$269,770.00		\$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	\$22,000.00	N/A	N/A	N/A

UHF - High Power, Side Mount, basic slot antenna, 714 kW input, directional,, elliptically or circularly polarized	<b>\$216,800.00</b>	\$216,800.00	This high-power, side-mount antenna has the same model number as the licensed KBCW(TV) antenna and is thus a direct post-transition channel substitute. See Exhibit 6, line 1.	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$12,240.00	Please See Exhibit 9, Line 4.	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$13,730.00	This is the quoted amount. Please see Exhibit 6, line 2.	N/A	N/A
<b>Auxiliary Antenna TUA-C4SP-12/40U-1-S</b>	<b>\$96,190.00</b>	<b>\$65,240.00</b>		<b>\$0.00</b>	
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

New combiner, cost per channel (without antenna)	\$84,200.00	\$48,000.00	Please see Exhibit 7 Page 58. Combiner used by 4 stations; cost shared among 2 repacking stations.	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$12,240.00	N/A	N/A	N/A
UHF – Broadband Panel, Side Mount Auxiliary /Interim, 500 horizontally polarized	<b>\$0.00</b>	\$0.00	The existing antenna is being re-tuned.	N/A	N/A
<b>Sub-total</b>	\$360,430.00	\$335,010.00	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$5,141,189.46	\$5,904,607.28	N/A	\$129,987.34	N/A

## Components

Information not provided.

Cost  
Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	\$435,253.64	\$698,030.64		\$0.00	
Rigid Transmission Line - copper, 8 3 /16"	\$376,495.00	\$639,272.00	Irregular tower shape requires many elbows and hangers. See Exhibit 6, line 3.	N/A	N/A
RF Accessories	<i>\$58,758.64</i>	\$58,758.64	Coaxial Switch, Switch Controller, Test Load. (See Exhibit 3, Item D)	N/A	N/A
Auxiliary Transmission Line	\$46,233.00	\$46,233.00		\$0.00	

Assd. Transmission Line	<b>\$46,233.00</b>	\$46,233.00	Repack to lower frequencies generally requires larger antennas with higher windloading. Structural reinforcement displaces lines of non- repacked stations. This cost reflects those costs. See Exhibit 7, page 47,	N/A	N/A
<b>Sub-total</b>	\$481,486.64	\$744,263.64	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$5,141,189.46	\$5,904,607.28	N/A	\$129,987.34	N/A

## Components

Information not provided.

**Cost  
Information**

**Tower Equipment and Rigging Costs**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Tower TOWER</b>	<b>\$1,506,877.00</b>	<b>\$1,826,016.00</b>		<b>\$3,902.17</b>	
Serious tower reinforcement /modifications	\$1,052,000.00	\$896,300.00	Please see Exhibit 10, Engineering and Shop Drawings, Steel Fabrication, Rigging Plan Review, and Project Management and Insurance and Exhibit 23 Remove old Waveguide Ladder. All estimates were divided equally between KRON, KGO, and KBCW.	N/A	N/A
Tower Mapping	<i>\$13,877.00</i>	\$13,877.00	Required to provide accurate input data to structural analysis. See Exhibit 9.	\$113.67	N/A



Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$770,839.00	Sutro Tower is not a typical structure. Includes removal and installation of transmission lines, switches, core drilling and core filling. Please see Exhibits 9, 10, and 11 for rigging estimates.	N/A	N/A
Structural engineering tower load study for a documented tower with candelabra	\$20,000.00	\$145,000.00	Sutro Tower is not a typical structure. (See Exhibit 8.)	\$3,788.50	N/A
<b>Sub-total</b>	\$1,506,877.00	\$1,826,016.00	N/A	\$3,902.17	N/A
<b>Total for all systems</b>	\$5,141,189.46	\$5,904,607.28	N/A	\$129,987.34	N/A

## Components

Actual Information	
Description	File Name
Serious tower reinforcement /modifications	Information not provided.
Tower Mapping	<p><b>Component Description:</b> See Exhibit 24, Line 5</p> <p><b>Amount:</b> \$113.67</p>

Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Information not provided.
Structural engineering tower load study for a documented tower with candelabra	<div> <div> <b>Component Description:</b> </div> <div>See Exhibit 24 Line 58.</div> </div> <div> <div> <b>Amount:</b> </div> <div>\$3,788.50</div> </div>

## Cost Information

### Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Outside Professional Services</b>	<b>\$163,160.00</b>	<b>\$243,833.00</b>		<b>\$9,206.46</b>	
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$3,890.83	N/A
RF Exposure Measurements	\$21,050.00	\$3,333.00	Please see Exhibit 14.	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$75,000.00	Please see Exhibit 14	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,580.00	\$1,500.00	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

Project management of the transition	\$39,500.00	\$148,000.00	Company lacks sufficient internal resources. 250 hours at \$150 per hour plus time estimated in Exhibit 13.	\$5,315.63	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
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,000.00	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
<b>Sub-total</b>	\$163,160.00	\$243,833.00	N/A	\$9,206.46	N/A
<b>Total for all systems</b>	\$5,141,189.46	\$5,904,607.28	N/A	\$129,987.34	N/A

## Components

**Actual Information**  
**Description**

**File Name**

Perform engineering study for new channel assignment and antenna development	<b>Component Description:</b> See Exhibit 24 Line 3. <b>Amount:</b> \$3,890.83
RF Exposure Measurements	Information not provided.
Comprehensive coverage verification via field study, if needed	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Project management of the transition	<b>Component Description:</b> See Exhibit 24, Line 128 <b>Amount:</b> \$5,315.63
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.

## Cost Information

### Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Other Expenses</b>	<b>\$605,801.00</b>	<b>\$605,251.00</b>		<b>\$116,878.71</b>	
Public Relations	<i>\$19,108.00</i>	\$19,108.00	Public relations required for zoning hearings, neighbors, and government officials. See Exhibit 18.	\$237.50	N/A
Architectural Plans	<i>\$25,554.00</i>	\$25,554.00	Architectural Plans, Building Mapping, Update Plans. See Exhibit 16.	N/A	N/A
Alternate Site Studies	<i>\$98,664.00</i>	\$98,664.00	Pre, post and alternate site studies.	\$93,511.10	N/A
Local Zoning	<i>\$183,333.00</i>	\$183,333.00	Please see Exhibit 13.	\$23,130.11	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$8,333.00</i>	\$8,333.00	Please see exhibit 15.	N/A	N/A

Equipment Delivery and Handling Charges	<b>\$32,000.00</b>	\$32,000.00	Please see Exhibit 15 and Exhibit 3.	N/A	N/A
Equipment Storage	<b>\$20,833.00</b>	\$20,833.00	Please see Exhibit 15.	N/A	N/A
MVPD Notification of Channel Change	<b>\$1,000.00</b>	\$1,000.00	N/A	N/A	N/A
Fork Lift Rental	<b>\$25,636.00</b>	\$25,636.00	Required to move equipment from storage to transmitter and combiner room, throughout site. See Exhibit 17.	N/A	N/A
KFOG Interim Antenna	<b>\$63,037.00</b>	\$63,037.00	Repack requires KFOG's antenna to be deactivated. Sutro attorney (see Exhibit 20) says repacking stations must pay pro rata costs (see last item of Exhibit 9 as well as Exhibits 21 and 22 - all divided by one-third).	N/A	N/A

VSWR Monitoring	<b>\$96,125.00</b>	\$96,125.00	VSWR Monitoring of antennas, transmission line, and combiner. Helps assure equipment won't be damaged by excessive transmitter power during fault conditions. See Exhibit 19.	N/A	N/A
Legal Fees	<b>\$8,333.00</b>	\$8,333.00	Legal fees. See Exhibit 13.	\$0.00	N/A
Site Survey	<b>\$12,295.00</b>	\$12,295.00	Determine actual site conditions and determine the materials and components required for system installation /integration of the customers site with the transmitter equipment. See Exhibit 12.	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
<b>Sub-total</b>	<b>\$605,801.00</b>	<b>\$605,251.00</b>	N/A	<b>\$116,878.71</b>	N/A



<b>Total for all systems</b>	\$5,141,189.46	\$5,904,607.28	N/A	\$129,987.34	N/A
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## Components

<b>Actual Information</b>	
<b>Description</b>	<b>File Name</b>
Public Relations	<p><b>Component Description:</b> See Exhibit 24 Line 57</p> <p><b>Amount:</b> \$237.50</p>
Architectural Plans	Information not provided.
Alternate Site Studies	<p><b>Component Description:</b> See Exhibit 24 Lines 1, 2, &amp; 4 which total \$93,511.11. Subtracted a one-cent compounded rounding error.</p> <p><b>Amount:</b> \$93,511.10</p>
Local Zoning	<p><b>Component Description:</b> See Exhibit 24 Lines 56 and 139.</p> <p><b>Amount:</b> \$23,130.11</p>
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.
Equipment Delivery and Handling Charges	Information not provided.
Equipment Storage	Information not provided.
MVPD Notification of Channel Change	Information not provided.
Fork Lift Rental	Information not provided.
KFOG Interim Antenna	Information not provided.

VSWR Monitoring	Information not provided.
Legal Fees	Information not provided.
Site Survey	Information not provided.
DTV Medical Facility Notification	Information not provided.

**Cost  
Information**

**Grand Total**

	<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>	<b>Actual Cost</b>
<b>Total for all systems</b>	\$5,141,189.46	\$5,904,607.28	\$129,987.34

**Reimbursement Status**

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

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

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

<p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Andrew J. Siegel</b> <i>Assistant Secretary</i></p> <p>11/30/2017</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> </ol>	

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



<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Andrew J. Siegel</b>  <i>Assistant Secretary</i></p> <p>11/30/2017</p>

## Attachments