Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: **35703** | Service: **DTV** | Call Sign: **KTVU** | Channel: **31 (UHF)**

File Number: **0000027693**

FRN: **0005795067** | Date Submitted: **02/07/2019**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
FOX TELEVISION STATIONS, LLC	Joseph M. Di Scipio 400 N. CAPITOL STREET, NW SUITE 890 WASHINGTON, DC 20001 United States	+1 (202) 824-6522	JDISCIPIO@21CF.COM	Limited Liability Company

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
Dennis Wallace *Managing Partner* *Meintel, Sgrignoli & Wallace, LLC*	Dennis Wallace 1282 Smallwood Drive Suite 372 Waldorf, MD 20603 United States	+1 (202) 251-7589	Dennis.Wallace@mswdtv.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	KTVU will continue to use the existing master UHF Main and Upper Aux antennas at Sutro Tower. New Combiners for both antennas are required. Main TX will be retuned. Aux transmitter replaced. Sutro tower modifications are required.

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	Retune Existing
	Use	Primary (Main)
	Ownership	Owned
	Owner	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	Harris
	Model	PWR60D2

	Year	2009
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power capacity	60 kW

Primary Transmitter

Retuning Transmitter Costs

Section	Question	Response
New IOT Tubes	Number of Tubes (including accessories) needed	2
New Mask Filter	Power	60 kW
	Other Power	N/A
New Exciter	Is a new exciter needed?	No

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 - new mask filter and various interlocks.

HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
GatesAir Retuning of Transmitter	GatesAir Quote to Retune Existing Transmitter to new channel

Auxiliary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Aux Transmitter
	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	DHD60P2
	Year	2009
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	14 kW

Auxiliary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	ULXTE-30
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	14 kW
	Justification for New Transmitter	Existing Diamond Aux transmitter is obsolete and no longer supported by its manufacturer. Replacement required.

Auxiliary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	Yes
	Size	3 inches
	Length	200.0 feet

	Other Electrical Service	Yes
	Description	Aux Transmitter Electrical Installation
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	50 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	Yes
	Size	1000.0 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

Auxiliary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Asbestos Abatement	Abatement of asbestos from transmitter room
Remote Control Wiring	Wire up existing remote control to new transmitter
Transmitter Installation Planning and Installation Drawings	Develop transmitter room layout. Prepare installation drawings
Removal of Existing Equipment	Removal of Existing Equipment
Seismic Engineering and Modifications	Seismic engineering analysis and modifications to comply with SF requirements

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	Retune Existing
	Antenna Use	Primary (Main)
	Description of Use	N/A
	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	Top Mount
	Antenna position in stack	Top
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	3
	Number of Panels	60
	Design power capacity in use	100.0 %

Lower Limit	500.00 MHz
Upper Limit	656.00 MHz
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	775.0 kW
Manufacturer	Dielectric
Model	TUM-C5SP-14/60H-2-T-R
Year	2009

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

Facility ID	Call Sign
25452	KPIX-TV
58912	KCSM-TV

Primary Antenna

Adjustment to Existing Antenna

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

Primary 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	3
	Frequencies of channels supported	RF channel
	Frequency	N/A

Enter a list of RF channel numbers.

RF Channel Number
31
27
29

Primary Antenna

Other Antenna Cost Not Listed

Name	Description
Sutro Tower Antenna and Combiner Monitor System	KTVU allocated costs for Sutro Tower Antenna and Combiner. Power Monitoring System. See Spreadsheet.
Sutro Tower Fees	Sutro Tower Fees associated with Aux Antenna System. See Spreadsheet

Auxiliary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Retune Existing
	Antenna Use	Auxiliary (Backup)
	Description of Use	Upper Aux Antenna Sutro
	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	Top Mount
	Antenna position in stack	Top
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	3
	Number of Panels	40
	Design power capacity in use	100.0 %
	Lower Limit	500.00 MHz
	Upper Limit	656.00 MHz
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	428.0 kW
	Manufacturer	Dielectric
	Model	TUA-C4SP-12/40U-1-S
	Year	2009

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

Facility ID	Call Sign
25452	KPIX-TV
58912	KCSM-TV

Auxiliary Antenna

Adjustment to Existing Antenna

Section	Question	Response

Sweep Test of Existing Antenna	Do you need a sweep test of existing antenna?	Yes

Auxiliary 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	3
	Frequencies of channels supported	RF channel
	Frequency	N/A

Enter a list of RF channel numbers.

RF Channel Number
31
27
29

Auxiliary Antenna

Other Antenna Cost Not Listed

Name	Description
Sutro Tower Fees	Sutro Tower Fees associated with Main Antenna. See Spreadsheet.

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	Utilize Existing
	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	Dielectric
	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	120 feet per run

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
RF Optimization	Optimize line from transmitter room to combiner input

Auxiliary Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Auxiliary (Backup)
	Description of Use	Aux Line to Combiner
	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	Dielectric
	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	120 feet per run

Auxiliary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
RF Optimization	Optimize transmission line from transmitter to combiner input

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	Yes
	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
69619	KBCW	DTV
25452	KPIX-TV	DTV
71586	KCNS	DTV
65526	KRON-TV	DTV
35703	KTVU	DTV
51429	KFSF-DT	DTV
34470	KGO-TV	DTV
35500	KQED	DTV
58912	KCSM-TV	DTV

Other Types of Users

Users
Multi User Site

Primary Tower

Tower Modification Costs

Section	Question	Response

Engineering Study	Please what type of engineering study is required, if any:	No study needed
Tower Reinforcements	Please select whether tower reinforcements are needed:	No 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
Sutro Tower Fees	Tower Mapping and analysis fees. KTVU Allocated costs. See Spreadsheet.
Sutro Tower Feasibility Studies	Fees for Sutro tower to conduct feasibility studies on repack. KTVU Allocated Costs. See Spreadsheet.

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	850
	Explanation	Sutro Tower Project Management Fees. And KTVU Outside Project Manager for internal KTVU Facilities. See Spreadsheet.
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	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	Yes
	Quantity	2
	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	Yes
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	NEPA Section 106 environmental review	No
	Environmental Assessment	Yes
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	Yes
	Prepare or Review FCC Form 399 for Reimbursement	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	Yes
	Number of Days	20

	Justification	RF Engineering Supervision of KTVU Transmitter and Combiner Installation projects.

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Legal Fees - Local SF	KTVU Allocated share of local legal fees associated with City of SF. See Spreadsheet.
Prepare and File FCC Progress Report	Prepare and file FCC Quarterly Progress Reports See quote from vendor.

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	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	Yes
	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
Sales Tax	Sutro Tower Estimated KTVU allocation of sales tax. See Spreadsheet.

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 PWR60D2	**$1,383,467.00**	**$767,567.00**		**$0.00**	
GatesAir Retuning of Transmitter	***$670,067.00***	$670,067.00	GatesAir Quote to retune existing IOT transmitter. See attached Quote.	$0.00	N/A
Other Electrical Service: Electrical Installation - new mask filter and various interlocks.	***$12,500.00***	$12,500.00	Transmitter Retune Electrical Installation Services new mask filter AC /interlocks /Conduit Changes.	N/A	N/A
60 kW mask filter	$89,400.00	$85,000.00	Catalog	N/A	N/A
2 IOT Tubes	$255,000.00	$0.00	Catalog	N/A	N/A
Two IOT system (60 kW)	$356,500.00	$0.00	Catalog	N/A	N/A
Auxiliary Transmitter ULXTE-30	**$1,406,215.19**	**$1,659,315.19**		**$576,324.60**	
Asbestos Abatement	***$4,000.00***	$4,000.00	Asbestos abatement estimate from Wadleigh for TX Room	N/A	N/A

Remote Control Wiring	***$3,500.00***	$3,500.00	Wire up remote control to new aux transmitter	N/A	N/A
Transmitter Installation Planning and Installation Drawings	***$50,000.00***	$50,000.00	Transmitter Room layout planning and development of installation drawings. Detail Seismic anchors and transmission line attachments. 3-D Scanning of existing room and equipment layout. CAD layout of new equipment in room.	N/A	N/A
Removal of Existing Equipment	***$35,000.00***	$35,000.00	Remove existing equipment - Aux	N/A	N/A
Seismic Engineering and Modifications	***$26,230.00***	$26,230.00	Seismic Engineering Studies and Modifications to TX Room. See Spreadsheet.	N/A	N/A
Other -- Building Addition Size: 1000.0	***$241,190.00***	$241,190.00	Transmitter Room Modification Estimate from Wadleigh - see attached spreadsheet.	N/A	N/A

50 Ton system	$172,500.00	$428,000.00	Wadleigh estimate to replace HVAC system with SF Compliant system, roof modifications, Scaffolding, Ductwork. See Spreadsheets.	N/A	N/A
Other Electrical Service: Aux Transmitter Electrical Installation	***$110,000.00***	$110,000.00	Electrical Installation of new Aux Transmitter at Sutro Tower. Estimate from Wadleigh	N/A	N/A
3" Rigid Conduit and Wiring (Cost per foot)	$10,400.00	$9,800.00	Catalog	N/A	N/A
Transformer 3 phase /480v - 300 KVA	$36,800.00	$35,000.00	Catalog	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 14 kW	***$716,595.19***	$716,595.19	GatesAir revised quote number Q-74250 with tax added.	$576,324.60	N/A
Sub-total	$2,789,682.19	$2,426,882.19	N/A	$576,324.60	N/A
Total for all systems	$5,197,566.69	$4,586,816.69	N/A	$588,752.03	N/A

Components

Actual Information Description	File Name
GatesAir Retuning of Transmitter	Information not provided.

Other Electrical Service: Electrical Installation - new mask filter and various interlocks.	Information not provided.
60 kW mask filter	Information not provided.
2 IOT Tubes	Information not provided.
Two IOT system (60 kW)	Information not provided.
Asbestos Abatement	Information not provided.
Remote Control Wiring	Information not provided.
Transmitter Installation Planning and Installation Drawings	Information not provided.
Removal of Existing Equipment	Information not provided.
Seismic Engineering and Modifications	Information not provided.
Other -- Building Addition Size: 1000.0	Information not provided.
50 Ton system	Information not provided.
Other Electrical Service: Aux Transmitter Electrical Installation	Information not provided.
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
Transformer 3 phase/480v - 300 KVA	Information not provided.

UHF - Liquid Cooled Solid State Transmitter 14 kW	**Component Description:**	New attachment includes a cover letter as requested by receiver. Auxiliary Transmitter ULXTE-30 1/3 payment due before shipment (2nd payment made).
	Amount:	$217,786.60
	Component Description:	Transmitter-Balance due on Shipments to date
	Amount:	$140,751.40
	Component Description:	New attachment amount includes cover letter as requested by the reviewer. Auxiliary Transmitter GatesAir Inc 1/3 down payment due.
	Amount:	$217,786.60

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 TUM-C5SP-14/60H-2-T-R	**$429,515.00**	**$571,525.00**		**$0.00**	
Sutro Tower Antenna and Combiner Monitor System	***$96,125.00***	$96,125.00	Sutro Tower - KTVU allocated cost for antenna /combiner monitoring system. See Spreadsheet.	N/A	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	$5,260.00	$5,000.00	Catalog	N/A	N/A
Combiner output splitting /switching for dual feed lines, if applicable	$126,000.00	$120,000.00	Catalog	N/A	N/A

New combiner, cost per channel (without antenna)	$84,200.00	$233,500.00	Sutro Tower Estimate for KTVU Allocated costs for new Main Antenna combiner System	N/A	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	Catalog	N/A	N/A
UHF - High Power Top Mount Three Station broadband panel antenna elliptically or circularly polarized	***$15,000.00***	$15,000.00	Optimization of existing antenna - estimated allocated costs. Peter Eckman.	N/A	N/A
Sutro Tower Fees	***$82,500.00***	$82,500.00	Sutro Tower Project Fees. See Spreadsheet.	N/A	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	$13,700.00	$13,000.00	Catalog	N/A	N/A
Auxiliary Antenna TUA-C4SP-12/40U-1-S	**$250,890.00**	**$267,400.00**		**$0.00**	
Sutro Tower Fees	***$0.00***	$0.00	N/A	N/A	N/A

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	$5,260.00	$5,000.00	Catalog	N/A	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	$13,700.00	$13,000.00	Catalog	N/A	N/A
Combiner output splitting /switching for dual feed lines, if applicable	$126,000.00	$120,000.00	Catalog	N/A	N/A
New combiner, cost per channel (without antenna)	$84,200.00	$108,000.00	Sutro Tower - KTVU Allocated cost esimate for Aux Antenna Combiner System.	N/A	N/A
UHF - High Power Top Mount Three Station broadband panel antenna horizontally polarized	***$15,000.00***	$15,000.00	Optimization of existing aux antenna for new channels.	N/A	N/A

Sweep test of existing antenna	$6,730.00	$6,400.00	Catalog	N/A	N/A
Sub-total	$680,405.00	$838,925.00	N/A	$0.00	N/A
Total for all systems	$5,197,566.69	$4,586,816.69	N/A	$588,752.03	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	**$18,000.00**	**$18,000.00**		**$0.00**	
RF Optimization	***$18,000.00***	$18,000.00	Optimization of line from transmitter to combiner	N/A	N/A
Auxiliary Transmission Line	**$18,000.00**	**$18,000.00**		**$0.00**	
RF Optimization	***$18,000.00***	$18,000.00	Optimization of transmission line from transmitter to aux combiner input.	N/A	N/A
Sub-total	$36,000.00	$36,000.00	N/A	$0.00	N/A
Total for all systems	$5,197,566.69	$4,586,816.69	N/A	$588,752.03	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
Primary Tower TOWER	**$671,000.00**	**$250,000.00**		**$3,752.29**	
Sutro Tower Fees	***$250,000.00***	$250,000.00	Sutro Tower - KTVU Allocated costs for tower mapping. See Spreadsheet. Revised based on current cost estimates	$3,752.29	1.) subtotal overstated by Invoices 7959, 8009, 8058 and 8063. Revised inv's submitted totaling $166,640.65. Previous submission of invoices totaling $166,652.49 needs to be deleted. 2.) Revised new cost estimate $250,000
Sutro Tower Feasibility Studies	***$0.00***	$0.00	Sutro Tower - KTVU Allocated costs for initial repack feasibility studies for Sutro Tower. See Spreadsheet. Included in the Sutro Tower Fees line.	N/A	N/A

Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$0.00	N/A	N/A	N/A
Sub-total	$671,000.00	$250,000.00	N/A	$3,752.29	N/A
Total for all systems	$5,197,566.69	$4,586,816.69	N/A	$588,752.03	N/A

Components

Actual Information Description	File Name	
Sutro Tower Fees		
	Component Description:	Shared Spectrum repacking Costs-revised invoice date and Osborn Engineering quote for fixed fee portion of invoice along with along with remaining 69 invoices and support per request of reviewer.
	Amount:	$126,115.75
	Component Description:	Shared Spectrum repacking Costs
	Amount:	$19,908.51
	Component Description:	Shared Spectrum repacking Costs
	Amount:	$13,849.68

Component Description:	Shared Spectrum repacking Costs- revised $ amount and supporting invoices per request of reviewer.
Amount:	$22,255.52
Component Description:	Shared Spectrum repacking Costs- revised with supporting invoices (KGA and Cooper White and Cooper) per request of reviewer.
Amount:	$3,339.18
Component Description:	KTVU portion of repack costs- 6th invoice received /paid.
Amount:	$11,029.25
Component Description:	KTVU portion of repack costs- 5th invoice received /paid. Resubmitted per reviewer for correct amt (3,551.50 vs. 3,554.46)
Amount:	$3,551.50

Component Description:	KTVU portion of repack costs- 1st invoice received. Updated per reviewer to include correct amount on the invoice (126,115.75 vs. 126,198.84)
Amount:	$126,115.75
Component Description:	KTVU portion of repack costs- 2nd invoice received. Resubmitted per reviewer to include correct amount (3,339.18 vs 3,477.14).
Amount:	$3,339.18
Component Description:	KTVU portion of repack costs- 3rd invoice received /paid. Resubmitted per reviewer's request to correct $ amt (14,930.20 vs 14,930.25) and include hours and rates per resource of Cooper White and Cooper invoice (see page 30 of attachment)
Amount:	$14,930.20
Component Description:	KTVU portion of repack costs- 4th invoice received /paid.
Amount:	$22,267.36

	Component Description: **Amount:**	KTVU portion of repack costs- 7th invoice received /paid. $3,752.29
	Component Description: **Amount:**	Shared Spectrum repacking Costs- revised $ amount and supporting invoice (Osborn Engineering) per request of reviewer $14,930.20
Sutro Tower Feasibility Studies	Information not provided.	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	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	**$385,809.50**	**$400,944.50**		**$8,675.14**	
Prepare and File FCC Progress Report	***$32,727.50***	$32,727.50	Prepare and file FCC Progress Reports Quarterly. See quote attached.	N/A	N/A
Legal Fees - Local SF	***$22,667.00***	$22,667.00	Sutro Tower - Estimated KTVU Allocated costs - local legal fees. See Spreadsheet.	N/A	N/A
Additional Field Engineering Service, 20 Days	***$31,800.00***	$31,800.00	RF Engineer on site supervision of transmitter, transmission line, and combiner installations. See attached quote.	N/A	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	$10,520.00	$10,000.00	Catalog	N/A	N/A

Attorney Fees - Prepare and File request for Special Temporary Authorization	$7,360.00	$7,000.00	Catalog	N/A	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	$4,210.00	$30,000.00	Legal Fees for Modification of lease with Sutro Tower for new channels, new combiner.	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	$2,365.00	$2,250.00	Catalog	N/A	N/A
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	$4,210.00	$4,000.00	Catalog	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	$5,260.00	$5,000.00	Catalog	N/A	N/A
Prepare request for Special Temporary Authorization	$4,100.00	$3,000.00	Catalog	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	Catalog	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	$1,580.00	$1,500.00	Catalog	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	Catalog	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	$3,155.00	$3,000.00	Catalog	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$7,500.00	SFO Market / Daisy Chain Coordination for Testing and Transition Dates.	N/A	N/A
Prepare and or review reimbursement form	$2,630.00	$2,500.00	Catalog	N/A	N/A

Project management of the transition	$134,300.00	$127,500.00	Outside Project Management of transition of main and aux facilities.	$791.14	N/A
RF Exposure Measurements	$21,050.00	$20,000.00	Catalog	N/A	N/A
Comprehensive coverage verification via field study, if needed	$84,200.00	$80,000.00	Catalog	$7,884.00	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	Catalog	N/A	N/A
Sub-total	$385,809.50	$400,944.50	N/A	$8,675.14	N/A
Total for all systems	$5,197,566.69	$4,586,816.69	N/A	$588,752.03	N/A

Components

Actual Information Description	File Name
Prepare and File FCC Progress Report	Information not provided.
Legal Fees - Local SF	Information not provided.
Additional Field Engineering Service, 20 Days	Information not provided.
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	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.
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover 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), Construction Permit Application	Information not provided.
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Prepare and or review reimbursement form	Information not provided.

Project management of the transition	**Component Description:** **Amount:**	Project Management services thru 4/27/18 $16,715.70
	Component Description: **Amount:**	Project Management services thru 3/30/18 $3,028.43
	Component Description: **Amount:**	Project Management services thru 6/29/18 $661.06
	Component Description: **Amount:**	Project Management services thru 7/27/18 $130.08
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	**Component Description:** **Amount:**	Site Survey $7,884.00
Perform engineering study for new channel assignment and antenna development	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
Other Expenses	**$634,670.00**	**$634,065.00**		**$0.00**	
MVPD Notification of Channel Change	***$5,000.00***	$5,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	***$1,500.00***	$1,500.00	N/A	N/A	N/A
Equipment Storage	***$15,000.00***	$15,000.00	Off Site Storage of KTVU equipment until ready on site.	N/A	N/A
Equipment Delivery and Handling Charges	***$78,469.00***	$78,469.00	Sutro Tower Estimate of KTVU allocated costs for equipment delivery, storage, and handling of combiner. See Spreadsheet.	N/A	N/A

Disposal Costs (for equipment and other waste, net of any salvage value)	***$9,000.00***	$9,000.00	Sutro Tower Estimate of KTVU Allocated costs for equipment removal / Disposal Combiner	N/A	N/A
Non-zoning permits	***$183,333.00***	$183,333.00	Sutro Tower Estimate of KTVU Allocated costs for building Permits. See Spreadsheet.	N/A	N/A
Sales Tax	***$284,178.00***	$284,178.00	Sutro Tower and KTVU Estimate of KTVU Allocated Sales Tax and KTVU sales tax paid on its equipment purchases. See two attached Spreadsheets. Must add both together.	N/A	N/A
Local Zoning	***$45,000.00***	$45,000.00	Sutro Tower - Estimate of KTVU allocated costs for Zoning approvals.	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	$195.00	$190.00	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 - Form 2100 minor change CP application	$1,110.00	$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$11,000.00	N/A	N/A	N/A
Sub-total	$634,670.00	$634,065.00	N/A	$0.00	N/A
Total for all systems	$5,197,566.69	$4,586,816.69	N/A	$588,752.03	N/A

Components

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$5,197,566.69	$4,586,816.69	$588,752.03

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	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 above-named applicant for the Authorization(s) specified above.	**Angelo Servedio** *Vice President Controller* 02/07/2019

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 IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
	1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 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.

	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 above-named applicant for the Authorization(s) specified above.	**Angelo Servedio** *Vice president Controller* 02/07/2019

Attachments