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: **01/31/2019**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|---|---|---|---|---|
| **FOX TELEVISION STATIONS, LLC** | Joseph M. Di Scipio<br>400 N. CAPITOL STREET, NW<br>SUITE 890<br>WASHINGTON, DC 20001<br>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**<br>*Managing Partner*<br>*Meintel, Sgrignoli & Wallace, LLC* | Dennis Wallace<br>1282 Smallwood Drive<br>Suite 372<br>Waldorf, MD 20603<br>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 Fees** | Sutro Tower Fees associated with Aux Antenna System. See Spreadsheet |
| **Sutro Tower Antenna and Combiner Monitor System** | KTVU allocated costs for Sutro Tower Antenna and Combiner. Power Monitoring 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 |
|---|---|---|
| 65526 | KRON-TV | DTV |
| 69619 | KBCW | DTV |
| 34470 | KGO-TV | DTV |
| 25452 | KPIX-TV | DTV |
| 71586 | KCNS | DTV |
| 58912 | KCSM-TV | DTV |
| 51429 | KFSF-DT | DTV |
| 35703 | KTVU | DTV |
| 35500 | KQED | 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 |
| Two IOT system (60 kW) | $356,500.00 | $0.00 | Catalog | N/A | N/A |
| 2 IOT Tubes | $255,000.00 | $0.00 | Catalog | N/A | N/A |
| 60 kW mask filter | $89,400.00 | $85,000.00 | Catalog | N/A | N/A |
| **Auxiliary Transmitter ULXTE-30** | **$1,406,215.19** | **$1,659,315.19** | | **$576,324.60** | |
| Seismic Engineering and Modifications | ***$26,230.00*** | $26,230.00 | Seismic Engineering Studies and Modifications to TX Room. See Spreadsheet. | N/A | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Removal of Existing Equipment | ***$35,000.00*** | $35,000.00 | Remove existing equipment - Aux | 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 |
| Remote Control Wiring | ***$3,500.00*** | $3,500.00 | Wire up remote control to new aux transmitter | N/A | N/A |
| Asbestos Abatement | ***$4,000.00*** | $4,000.00 | Asbestos abatement estimate from Wadleigh for TX Room | 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 |
| 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 |

| | | | | | |
|---|---|---|---|---|---|
| Transformer 3 phase /480v - 300 KVA | $36,800.00 | $35,000.00 | Catalog | N/A | N/A |
| 3" Rigid Conduit and Wiring (Cost per foot) | $10,400.00 | $9,800.00 | Catalog | 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 |
| 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 |
| **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 | $682,429.80 | 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. |
| Two IOT system (60 kW) | Information not provided. |

| | |
|---|---|
| 2 IOT Tubes | Information not provided. |
| 60 kW mask filter | Information not provided. |
| Seismic Engineering and Modifications | Information not provided. |
| Removal of Existing Equipment | Information not provided. |
| Transmitter Installation Planning and Installation Drawings | Information not provided. |
| Remote Control Wiring | Information not provided. |
| Asbestos Abatement | Information not provided. |
| Other -- Building Addition Size: 1000.0 | Information not provided. |

| | | |
|---|---|---|
| UHF - Liquid Cooled Solid State Transmitter 14 kW | **Component Description:**<br><br><br><br><br><br><br><br>**Amount:** | New attachment amount includes cover letter as requested by the reviewer. Auxiliary Transmitter GatesAir Inc 1/3 down payment due.<br>$217,786.60 |
| | **Component Description:**<br><br>**Amount:** | Transmitter-Balance due on Shipments to date<br>$140,751.40 |
| | **Component Description:**<br><br><br><br><br><br><br><br>**Amount:** | New attachment includes a cover letter as requested by receiver. Auxiliary Transmitter ULXTE-30 1/3 payment due before shipment (2nd payment made).<br>$217,786.60 |
| Transformer 3 phase/480v - 300 KVA | Information not provided. | |
| 3" Rigid Conduit and Wiring (Cost per foot) | Information not provided. | |
| Other Electrical Service: Aux Transmitter Electrical Installation | Information not provided. | |
| 50 Ton system | 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 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 |
| Sutro Tower Fees | ***$82,500.00*** | $82,500.00 | Sutro Tower Project Fees. 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 |
| 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 | $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 |
| **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 |
| 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 |
| 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 |
| Combiner output splitting /switching for dual feed lines, if applicable | $126,000.00 | $120,000.00 | 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 |
| **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 | $682,429.80 | 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 | $682,429.80 | 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** | | **$77,685.93** | |
| 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 | $77,685.93 | 1.) subtotal overstated by Invoices 8009 and 8063. Revised inv's just submitted totaling $25,595. Previous submission of invoices totaling $25,606.54 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 | $77,685.93 | N/A |
| **Total for all systems** | $5,197,566.69 | $4,586,816.69 | N/A | $682,429.80 | N/A |

## Components

| Actual Information Description | File Name | |
|---|---|---|
| Sutro Tower Fees | | |
| | **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- 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:** | Shared Spectrum repacking Costs- revised $ amount and supporting invoices per request of reviewer. |
| **Amount:** | $22,255.52 |

| | |
|---|---|
| | **Component Description:** Shared Spectrum repacking Costs<br>**Amount:** $13,849.68<br><br>**Component Description:** Shared Spectrum repacking Costs<br>**Amount:** $19,908.51<br><br>**Component Description:** KTVU portion of repack costs- 5th invoice received /paid. Resubmitted per reviewer for correct amt (3,551.50 vs. 3,554.46)<br>**Amount:** $3,551.50<br><br>**Component Description:** KTVU portion of repack costs- 7th invoice received /paid.<br>**Amount:** $3,752.29<br><br>**Component Description:** KTVU portion of repack costs- 6th invoice received /paid.<br>**Amount:** $11,029.25 |
| 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** | | **$28,419.27** | |
| Comprehensive coverage verification via field study, if needed | $84,200.00 | $80,000.00 | Catalog | $7,884.00 | N/A |
| 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 |
| RF Exposure Measurements | $21,050.00 | $20,000.00 | Catalog | 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 |
| Project management of the transition | $134,300.00 | $127,500.00 | Outside Project Management of transition of main and aux facilities. | $20,535.27 | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Prepare and or review reimbursement form | $2,630.00 | $2,500.00 | 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 |
| 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 | $28,419.27 | N/A |
| **Total for all systems** | $5,197,566.69 | $4,586,816.69 | N/A | $682,429.80 | N/A |

### Components

| Actual Information Description | File Name |
|---|---|
| Comprehensive coverage verification via field study, if needed | **Component Description:** Site Survey<br>**Amount:** $7,884.00 |
| 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. |
| RF Exposure Measurements | 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. |

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|---|---|
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | Information not provided. |
| Project management of the transition | **Component Description:** Project Management services thru 7/27/18<br>**Amount:** $130.08<br><br>**Component Description:** Project Management services thru 6/29/18<br>**Amount:** $661.06<br><br>**Component Description:** Project Management services thru 4/27/18<br>**Amount:** $16,715.70<br><br>**Component Description:** Project Management services thru 3/30/18<br>**Amount:** $3,028.43 |
| Prepare and or review reimbursement form | Information not provided. |
| Address transition timing and coordination issues w/ other stations and wireless | Information not provided. |
| 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** | |
| 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 |
| 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 |
| DTV Medical Facility Notification | $11,550.00 | $11,000.00 | 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 |
| FCC Filing Fees - Form 2100 license to cover application | $335.00 | $325.00 | N/A | N/A | N/A |
| FCC Filing Fees - Special Temporary Authorization request | $195.00 | $190.00 | N/A | N/A | N/A |
| Local Zoning | ***$45,000.00*** | $45,000.00 | Sutro Tower - Estimate of KTVU allocated costs for Zoning approvals. | 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 |

| | | | | | |
|---|---|---|---|---|---|
| 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 |
| **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 | $682,429.80 | 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 | $682,429.80 |

## 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.<br>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.<br>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**<br>*Vice President Controller*<br><br>01/31/2019 |

## 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.<br>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.<br>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.<br>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**<br>*Vice President Controller*<br><br>01/31/2019 |

## Attachments