



(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 **05/08**  
Submitted: **/2019**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant  | Address  | Phone             | Email          | Applicant Type |
|--|--|-------------------|----------------|----------------|
| <b>SAN FRANCISCO TELEVISION STATION KBCW INC</b><br>Doing Business As: SAN FRANCISCO TELEVISION STATION KBCW INC | Daniel G. Ryson<br>1725 DESALES ST NW<br>SUITE 501<br>WASHINGTON,<br>DC 20036<br>United States | +1 (202) 457-4505 | dryson@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>Daniel G Ryson</b><br><i>Associate Director of Spectrum Management</i><br><i>CBS</i> | Daniel G. Ryson<br>1725 DeSales Street NW<br>Suite 501<br>Washington, DC<br>20036<br>United States | +1 (202) 457-4074 | dryson@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 |
|-------------------------------------|---|----------|
| <b>Transmitter Related Expenses</b> | Do you have transmitter related expenses? | Yes      |

**Primary  
Transmitter**

**Existing Transmitter Information**

| <b>Section</b>  | <b>Question</b>  | <b>Response</b>          |
|---|--|--------------------------|
| <b>Existing Transmitter<br/>Description</b>           | Type of change   | Purchase<br>New          |
|   | Use  | Primary<br>(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<br/>Manufacturer and Type</b> | Manufacturer   |                          |
|   | Model  | Sigma CD                 |
|   | Year   | 2002                     |
|   | Type   | Inductive<br>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 |
|---------------------------------|---------------------------------------|----------|
| <b>Antenna Related Expenses</b> | Do you have antenna related expenses? | Yes      |

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

| Section   | Question   | Response              |
|---|--|-----------------------|
| <b>Existing Antenna<br/>Description</b>           | Type of change   | Retune<br>Existing    |
|   | Antenna Use  | Auxiliary<br>(Backup) |
|   | Description of Use   | Alternate<br>/Backup  |
|   | Ownership  | Leased                |
|   | Owner  | Sutro<br>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                   |
| <b>Existing Antenna<br/>Manufacturer and Type</b> | Class  | Full Power            |
|   | Mounting   | Side Mount            |
|   | Antenna position in stack  | Bottom                |
|   | Polarization   | Horizontal            |
|   | Type   | Broadband<br>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)<br>..... | 500.0 kW                |
| Manufacturer                             | Dielectric              |
| Model                                    | TUA-C4SP-<br>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       | KPJK      |
| 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**

| Name                              | Description  |
|-----------------------------------|--|
| <b>Replace Combiner Switches</b>  | Remove and Replace Combiner 6-Inch Coaxial Switches.           |
| <b>Core Drill Holes</b>           | Drill Holes in Concrete for New Transmission Line Pass Through |
| <b>Fill Holes</b>                 | Fill Holes in Concrete After Removing Old Combiner Lines.      |
| <b>Remove Old Combiner Lines</b>  | Remove Old Combiner Transmission Line Interconnects            |
| <b>Install New Combiner Lines</b> | Install New Combiner Transmission Line Interconnects           |
| <b>Remove Old Combiner</b>        | Remove Old Combiner  |
| <b>Install New Combiner</b>       | Install New Aux Combiner                                       |



**Primary  
Antenna**

**Existing Antenna Information**

| Section   | Question   | Response           |
|---|--|--------------------|
| <b>Existing Antenna<br/>Description</b>                         | Type of change   | Purchase<br>New    |
|   | Antenna Use  | Primary<br>(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  |                    |
| <b>Existing Antenna<br/>Manufacturer and Type</b>               | Class  | Full Power         |
|   | Mounting   | Side Mount         |
|   | Antenna position in stack  | Bottom             |
|   | Polarization   | Elliptical         |
|   | Type   | Slotted<br>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)<br>.....                         | 1000.0 kW          |

|              |                              |
|--------------|------------------------------|
| Manufacturer |                              |
| Model        | TFU-19JSC<br>/VP-R<br>C150SP |
| Year         | 2009                         |

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**Primary  
Antenna**

**New Antenna Costs**

| Section                                  | Question   | Response        |
|--|--|-----------------|
| <b>New Antenna Description</b>           | 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             |
|  | <b>New Antenna Manufacturer and Types</b>                            | Class           |
| 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)<br>..... |  | 714.0 kW        |
| Manufacturer                             |  |                 |

|                               |  |
|-------------------------------|--|
| Model                         | TFU-19JSC<br>/VP-R<br>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<br>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 |
|-------------------|--|-----|

**Primary  
Antenna**

**Other Antenna Cost Not Listed**

Information not provided.

**Interim  
Antenna**

**New Antenna Costs**

| Section                                      | Question   | Response               |
|--|--|------------------------|
| <b>New Antenna Description</b>               | Use  | Interim                |
|  | Description of Use   | N/A                    |
|  | Change Type  | Purchase<br>New        |
|  | 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? | No                     |
| <b>New Antenna<br/>Manufacturer and Type</b> | Class  | Full Power             |
|  | Mounting   | Side Mount             |
|  | Antenna position in stack  | Not in Stack           |
|  | Polarization   | Elliptical             |
|  | Type   | Slotted<br>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)                                      | 1000.0 kW              |
|  | Manufacturer   |                        |
|  | Model  | TFU-24WB<br>/VP-R C160 |
| Year   | 2019   |                        |

|                               |  |
|-------------------------------|--|
| Justification for New Antenna | Because existing Auxiliary antenna is much lower and limited to 500 kW ERP, operation would result in extensive coverage loss. |
|-------------------------------|--|

**Interim Antenna**

**Other Antenna Costs**

| Section                         | Question  | Response |
|---------------------------------|---|----------|
| <b>Elbow Complex</b>            | Do you require the separate purchase of the Elbow Complex?  | No       |
|                                 | Broadband or Single Channel?  | N/A      |
|                                 | Feed Line Size  | N/A      |
| <b>Side Mount Brackets</b>      | Do you require the separate purchase of side mount brackets for an antenna?                                 | No       |
| <b>Pattern Scatter Analysis</b> | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No       |
| <b>Sweep Test</b>               | Do you require the sweep testing of transmission line and antenna?  | Yes      |

**Interim Antenna**

**Other Antenna Cost Not Listed**

Information not provided.

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

**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       | KPJK      |
| 35500       | KQED      |
| 43095       | KMTP-TV   |
| 71586       | KCNS      |

**Auxiliary Transmission Line**

**Other Transmission Line Expenses Not Listed**

| Name                    | Description   |
|-------------------------|---|
| Assd. Transmission Line | 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<br>New      |
|   | Use  | Primary<br>(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<br>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)      |
| <b>Prelim TX Line Parts List</b> | Preliminary List of Transmission Line Parts; Reconfiguration of Combiners. |

**Interim  
Transmission  
Line**

**New Transmission Line**

| Section                            | Question                                | Response   |
|------------------------------------|---|--|
| <b>New Transmission Line Costs</b> | Use                                     | Interim  |
|                                    | Description of Use                      | N/A  |
|                                    | Change Type                             | Purchase New   |
|                                    | Type                                    | Rigid  |
|                                    | Diameter                                | 6 1/8 inches   |
|                                    | Segment Length                          | 19 ¾ '   |
|                                    | Other Segment Length                    |  |
|                                    | Number of parallel runs                 | 1  |
|                                    | Length                                  | 100 feet per run   |
|                                    | Justification for New Transmission Line | Required to connect existing waveguide to interim antenna. |

**Interim  
Transmission  
Line**

**Other Transmission Line Expenses Not Listed**

Information not provided.

**Tower Equipment And Rigging Costs**

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

**Primary Tower**

**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     |
| 43095       | KMTP-TV   | DTV     |
| 51429       | KFSF-DT   | DTV     |
| 34470       | KGO-TV    | DTV     |
| 35703       | KTVU      | DTV     |
| 35500       | KQED      | DTV     |
| 58912       | KPJK      | DTV     |
| 65526       | KRON-TV   | DTV     |
| 70032       | KSOL      | FM      |
| 59964       | KISQ      | FM      |
| 6380        | KOIT      | FM      |
| 54770       | KFOG      | FM      |
| 71586       | KCNS      | DTV     |
| 65484       | KOSF      | 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  |
|-----------------------------------|--|
| Remove Waveguide Ladder           | Remove Old Waveguide Ladder from B and C Legs. See Exhibit 23                  |
| Install KQED-FM Ant               | Reinstall KQED-FM Antenna After "B" Stack Replacement.                         |
| Remove ENG Mounts                 | Remove ENG Mounts to Make Room for KFOG Antenna Location                       |
| Install KFOG Aux                  | Install KFOG(FM) Auxiliary Antenna at Level 5, South Leg.                      |
| Tower Mapping                     | Tower mapping for preparation of documentation necessary for tower load study. |
| Remove KQED-FM Ant                | Remove KQED-FM Antenna from "B" Stack that Must Be Replaced.                   |
| Install Interim KBCW Ant and Line | Install KBCW Interim Antenna and Transmission Line.                            |
| Install Primary KBCW Line         | Install Transmission Line to New KBCW Primary Antenna.                         |

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**Demolish Waveguide**

Demolish Existing Waveguide to KBCW  
Antenna.

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**Outside Professional Services Costs**

| <b>Section</b>   | <b>Question</b>  | <b>Response</b>   |
|--|--|---|
| <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 |
| 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**  
Information 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**

| <b>Name</b>                    | <b>Description</b>   |
|--------------------------------|--|
| <b>Alternate Site Studies</b>  | Pre, Post and Alternate Site Studies   |
| <b>Architectural Plans</b>     | Architectural plans, building mapping, update plans.   |
| <b>Fork Lift Rental</b>        | Utilized to deliver equipment from storage, remove equipment from transmitter room.  |
| <b>KFOG Interim Antenna</b>    | Includes Antenna and Antenna Engineering.  |
| <b>Legal Fees</b>              | Legal Fees   |
| <b>Public Relations</b>        | Required as part of zoning effort.   |
| <b>Site Survey</b>             | 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. |
| <b>VSWR Monitoring</b>         | VSWR Monitoring and antenna lockout system.  |
| <b>Sales Tax - Sutro Tower</b> | 9.5% Sales Tax on Sutro Tower Invoices Only.   |

**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>\$2,023,434.77</b>       | <b>\$2,150,233.59</b> |  | <b>\$683,871.14</b> |                           |
| UHF - Liquid Cooled Solid State Transmitter 62.7 kW | <i>\$1,862,428.77</i>       | \$1,862,428.77        | Transmitter cannot be re-tuned (Exhibit 1), proposed transmitter (Exhibit 3, items A, B, and E) costs less than IOT transmitter (Exhibit 2.) Cost is consistent with Widelity Costs for similar power levels. Cost Corrected Feb 2019 (see Exhibit 45) | \$679,131.14        | N/A                       |
| Service entrance 3 phase/800 amp/208 volt           | \$14,400.00                 | \$165,000.00          | See Exhibit 4.   | N/A                 | N/A                       |

|   |                     |                |  |                |     |
|---|---------------------|----------------|--|----------------|-----|
| Other --<br>Building<br>Addition<br>Size: 0.0 | <b>\$109,806.00</b> | \$109,806.00   | Abatement,<br>Flooring,<br>Demo,<br>Paint, Fire<br>Stop,<br>Seismic<br>(Please<br>See Exhibit<br>4.) | N/A            | N/A |
| Transformer<br>3 phase<br>/480v - 300<br>KVA  | \$36,800.00         | \$12,998.82    | Please see<br>Exhibit 3,<br>Item D.  | \$4,740.00     | N/A |
| <b>Sub-total</b>                              | \$2,023,434.77      | \$2,150,233.59 | N/A  | \$683,871.14   | N/A |
| <b>Total for all<br/>systems</b>              | \$6,669,324.04      | \$7,405,361.80 | N/A  | \$1,296,892.09 | N/A |

## Components

| Actual Information                                  |   |
|---|---|
| Description   | File Name   |
| UHF - Liquid Cooled Solid State Transmitter 62.7 kW | <p><b>Component Description:</b> Down Payment for Primary Transmitter. See Exhibit 45.</p> <p><b>Amount:</b> \$679,131.14</p>                       |
| Service entrance 3 phase /800 amp/208 volt          | Information not provided.   |
| Other -- Building Addition Size: 0.0                | Information not provided.   |
| Transformer 3 phase/480v - 300 KVA                  | <p><b>Component Description:</b> Down payment for Primary Transmitter Electrical Items. See Exhibit 45 Item D.</p> <p><b>Amount:</b> \$4,740.00</p> |

**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 |
|---|-----------------------------|---------------------|---|---------------|---------------------------|
| <b>Interim Antenna TFU-24WB /VP-R C160</b>  | <b>\$203,876.00</b>         | <b>\$203,696.00</b> |   | <b>\$0.00</b> |                           |
| UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized | <i>\$197,146.00</i>         | \$197,146.00        | Antenna, elbow complex, brackets and custom mounting brackets. Includes 50-75 ohm matching transformer required for proper operation. | N/A           | N/A                       |
| Sweep test of existing antenna  | \$6,730.00                  | \$6,550.00          | N/A   | N/A           | N/A                       |
| <b>Primary Antenna TFU-19JSC /VP-R C150 SP</b>  | <b>\$264,240.00</b>         | <b>\$269,770.00</b> |   | <b>\$0.00</b> |                           |

|  |                     |              |  |     |     |
|--|---------------------|--------------|--|-----|-----|
| UHF - High Power, Side Mount, basic slot antenna, 714 kW input, directional,, elliptically or circularly polarized | <i>\$216,800.00</i> | \$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 |
| 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 |
| 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 |
| 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>\$149,073.00</b> | <b>\$118,123.00</b> |   | <b>\$0.00</b> |     |
| Install New Combiner   | <i>\$12,240.00</i>  | \$12,240.00         | KBCW pro-rata share (50%) of Lower Aux Combiner, Install New. See Exhibit 9                         | N/A           | N/A |
| Remove Old Combiner  | <i>\$6,120.00</i>   | \$6,120.00          | KBCW pro-rata share (50%) of Lower Aux Combiner, Remove Old. See Exhibit 9                          | N/A           | N/A |
| Install New Combiner Lines   | <i>\$12,240.00</i>  | \$12,240.00         | KBCW pro-rata share (50%) of Lower Aux Combiner, New Transmission Line Interconnects. See Exhibit 9 | N/A           | N/A |

|                           |                          |            |   |     |     |
|---------------------------|--------------------------|------------|---|-----|-----|
| Remove Old Combiner Lines | <b><i>\$3,060.00</i></b> | \$3,060.00 | KBCW pro-rata share (50%) of Lower Aux Combiner, Remove Old Transmission Line Interconnects. See Exhibit 9                        | N/A | N/A |
| Fill Holes                | <b><i>\$3,219.00</i></b> | \$3,219.00 | Fill Concrete Holes in Floor Wall After Removing Old Combiner Transmission Lines. See Exhibit 11 "Combiner Lower Aux 29-30-32-34" | N/A | N/A |
| Core Drill Holes          | <b><i>\$9,884.00</i></b> | \$9,884.00 | Pro Rata Share to Drill Holes in Concrete for New Combiner Lines. See Exhibit 11 "Combiner Lower Aux 28 30 32 34"                 | N/A | N/A |
| Replace Combiner Switches | <b><i>\$6,120.00</i></b> | \$6,120.00 | KBCW pro-rata share (50%) of Lower Aux Combiner, Remove and Replace Coaxial Switches. See Exhibit 9                               | 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     | 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 |
| UHF " Broadband Panel, Side Mount Auxiliary /Interim, 500 horizontally polarized                       | <i>\$0.00</i>  | \$0.00         | The existing antenna is broadband.   | N/A            | N/A |
| Sweep test of existing antenna   | \$6,730.00     | \$12,240.00    | KBCW pro-rata share (50%) of Lower Aux Combiner, RF Testing, Complex. See Exhibit 9                | N/A            | N/A |
| <b>Sub-total</b>   | \$617,189.00   | \$591,589.00   | N/A  | \$0.00         | N/A |
| <b>Total for all systems</b>   | \$6,669,324.04 | \$7,405,361.80 | N/A  | \$1,296,892.09 | 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 |
|--|-----------------------------|---------------------|---|---------------------|---------------------------|
| <b>Interim Transmission Line</b>         | <b>\$20,200.00</b>          | <b>\$50,727.38</b>  |   | <b>\$0.00</b>       |                           |
| Rigid Transmission Line - copper, 6 1/8" | \$20,200.00                 | \$50,727.38         | Transmission line shown on three quotes. Exhibit 37: \$14,488.88 at 3rd Floor; Exhibit 38: \$21,313.50 at Tower Top; Exhibit 40: \$14,925 install Wall Penetrations. Estimated cost is a total of these three. Installation shown separately. | N/A                 | N/A                       |
| <b>Primary Transmission Line</b>         | <b>\$442,086.97</b>         | <b>\$704,863.97</b> |   | <b>\$263,265.48</b> |                           |
| RF Accessories                           | <i>\$58,758.64</i>          | \$58,758.64         | Coaxial Switch, Switch Controller, Test Load. (See Exhibit 3, Item D)   | \$21,426.23         | N/A                       |

|   |                    |                    |  |                |     |
|---|--------------------|--------------------|--|----------------|-----|
| 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.   | \$239,376.15   | N/A |
| Prelim TX Line Parts List                 | <b>\$6,833.33</b>  | \$6,833.33         | See Exhibit 44. Total cost shared among six stations.  | \$2,463.10     | N/A |
| <b>Auxiliary Transmission Line</b>        | <b>\$46,233.00</b> | <b>\$46,233.00</b> |  | <b>\$0.00</b>  |     |
| 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>                          | \$508,519.97       | \$801,824.35       | N/A  | \$263,265.48   | N/A |
| <b>Total for all systems</b>              | \$6,669,324.04     | \$7,405,361.80     | N/A  | \$1,296,892.09 | N/A |

### Components

| Actual Information                       |                           |
|--|---------------------------|
| Description                              | File Name                 |
| Rigid Transmission Line - copper, 6 1/8" | Information not provided. |

|   |   |
|---|---|
| RF Accessories                            | <p><b>Component Description:</b> Primary Transmitter RF Accessories. See Exhibit 45 Item C.</p> <p><b>Amount:</b> \$21,426.23</p> |
| Rigid Transmission Line - copper, 8 3/16" | <p><b>Component Description:</b> See Exhibit 31 Page 13</p> <p><b>Amount:</b> \$239,376.15</p>                                    |
| Prelim TX Line Parts List                 | <p><b>Component Description:</b> See Exhibit 29A Page 8</p> <p><b>Amount:</b> \$2,463.10</p>                                      |
| Assd. Transmission Line                   | Information not provided.   |

**Cost Information**

**Tower Equipment and Rigging Costs**

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

| Description                                | Predetermined Cost Estimate | Estimated Cost        | Estimated Cost Justification   | Actual Cost         | Actual Cost Justification |
|--|-----------------------------|-----------------------|--|---------------------|---------------------------|
| <b>Primary Tower TOWER</b>                 | <b>\$2,529,952.73</b>       | <b>\$2,791,364.29</b> |  | <b>\$141,959.10</b> |                           |
| Remove Waveguide Ladder                    | <i>\$67,476.64</i>          | \$67,476.64           | Remove Old Waveguide Ladder from B and C Legs. See Last Item on Exhibit 23. This is the pro rata share after splitting anticipated cost with KRON-TV and KGO-TV.                                       | \$67,476.64         | asdf                      |
| Serious tower reinforcement /modifications | \$1,052,000.00              | \$1,187,364.02        | Itemized on Exhibit 33 Pg15 Line 59 "B" Stack Removal, Replacement, and Installation (\$599,490 +\$190,490.91 +\$190,490.91) /3 plus Line 59A Level 6 Reinforcement (\$1,072,218.18 + \$169,135.00) /6 | N/A                 | N/A                       |
| Install Primary KBCW Line                  | <i>\$381,000.00</i>         | \$381,000.00          | See Exhibit 42 for Installing Line to KBCW Primary Antenna.  | N/A                 | N/A                       |



|  |                            |              |  |             |     |
|--|----------------------------|--------------|--|-------------|-----|
| Demolish Waveguide   | <b><i>\$210,000.00</i></b> | \$210,000.00 | See Exhibit 23.  | N/A         | N/A |
| Install Interim KBCW Ant and Line  | <b><i>\$162,000.00</i></b> | \$162,000.00 | See Exhibit 39: \$18,000 for 3rd Floor Transmission Line Install; Exhibit 41: \$144,000 for Antenna and Tower Transmission Line Install. | N/A         | N/A |
| Structural engineering tower load study for a documented tower with candelabra | \$20,000.00                | \$247,333.00 | Sutro Tower is not a typical structure. (See Exhibit 8.)   | \$70,747.34 | N/A |
| Remove ENG Mounts  | <b><i>\$28,500.00</i></b>  | \$28,500.00  | Required to accommodate KFOG(FM) antenna relocation. See Exhibit 34. Cost shared with KRON-TV and KGO-TV. (\$85,500/3 = \$28,500.00)     | N/A         | N/A |

|   |                           |              |   |            |     |
|---|---------------------------|--------------|---|------------|-----|
| Install KFOG Aux  | <b><i>\$70,027.58</i></b> | \$70,027.58  | Install KFOG (FM) Aux Antenna to Permit Work on Stack "B" without Exceeding RF Exposure Limits. See Exhibit 33 Pg. 15 Line Item 64. Cost shared with KRON-TV and KGO-TV. \$210,082.73 / 3 = \$70,027.58.        | N/A        | N/A |
| Tower Mapping   | <b><i>\$13,877.00</i></b> | \$13,877.00  | Pro-rata cost required to provide accurate input data to structural analysis. See Exhibit 9, line 1.  | \$3,735.12 | N/A |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00              | \$319,714.54 | Removal and installation of KBCW primary antenna on "B" Stack, plus materials. Please see itemized costs on last page of Exhibit 33, Repack Line 35 (\$118,218.18) plus Line 36 (\$25,460.00 and \$176,036.36). | N/A        | N/A |

|                              |                    |                |   |                |     |
|------------------------------|--------------------|----------------|---|----------------|-----|
| Install KQED-FM Ant          | <b>\$64,665.45</b> | \$64,665.45    | Remove KQED-FM Antenna From "B" Stack that Must Be Replaced. See Exhibit 33 Pg. 15 Line Item 59C. Cost shared with KRON and KGO.<br>(\$176,036.36 + \$17,960.00) / 3 = \$64,665.45. | N/A            | N/A |
| Remove KQED-FM Ant           | <b>\$39,406.06</b> | \$39,406.06    | Remove KQED-FM Antenna From "B" Stack that Must Be Replaced. See Exhibit 33 Pg. 15 Line Item 59B. Cost shared with KRON and KGO.<br>\$118,218.18 / 3 = \$39,406.06.                 | N/A            | N/A |
| <b>Sub-total</b>             | \$2,529,952.73     | \$2,791,364.29 | N/A   | \$141,959.10   | N/A |
| <b>Total for all systems</b> | \$6,669,324.04     | \$7,405,361.80 | N/A   | \$1,296,892.09 | N/A |

### Components

| Actual Information Description | File Name |
|--------------------------------|-----------|
|--------------------------------|-----------|

|  |  |
|--|--|
| Remove Waveguide Ladder                    | <p><b>Component Description:</b> See Exhibit 30A<br/>Page 10</p> <p><b>Amount:</b> \$26,308.33</p> <p><b>Component Description:</b> See Exhibit 31<br/>Page 13</p> <p><b>Amount:</b> \$3,324.16</p> <p><b>Component Description:</b> See Exhibit 23 for<br/>quote and Exhibit<br/>27 Page 8.</p> <p><b>Amount:</b> \$18,323.33</p> <p><b>Component Description:</b> See Exhibit 28<br/>Page 8</p> <p><b>Amount:</b> \$5,986.66</p> <p><b>Component Description:</b> See Exhibit 29A<br/>Page 8</p> <p><b>Amount:</b> \$13,534.16</p> |
| Serious tower reinforcement /modifications | Information not provided.  |
| Install Primary KBCW Line                  | Information not provided.  |
| Demolish Waveguide                         | Information not provided.  |
| Install Interim KBCW Ant and Line          | Information not provided.  |

|  |  |
|--|--|
| Structural engineering tower load study for a documented tower with candelabra | <p><b>Component Description:</b> See Exhibit 30A Page 10. This revision adds Rowan Williams Davies &amp; Irwin proposal per 4/3 /2019 RFI.</p> <p><b>Amount:</b> \$16,439.50</p> |
|  | <p><b>Component Description:</b> See Exhibit 27 - Page 8</p> <p><b>Amount:</b> \$1,124.35</p>  |
|  | <p><b>Component Description:</b> See Exhibit 31 Page 13</p> <p><b>Amount:</b> \$33,020.77</p>  |
|  | <p><b>Component Description:</b> See Exhibit 29A Page 8</p> <p><b>Amount:</b> \$15,037.22</p>  |
|  | <p><b>Component Description:</b> See Exhibit 24 Line 58.</p> <p><b>Amount:</b> \$3,788.50</p>  |
|  | <p><b>Component Description:</b> See Exhibit 28 Page 8</p> <p><b>Amount:</b> \$1,337.00</p>  |
| Remove ENG Mounts  | Information not provided.  |
| Install KFOG Aux   | Information not provided.  |

|   |   |
|---|---|
| Tower Mapping   | <p><b>Component Description:</b> See Attachment 30A Page 8.</p> <p><b>Amount:</b> \$152.41</p> <p><b>Component Description:</b> See Exhibit 27 Page 8</p> <p><b>Amount:</b> \$118.82</p> <p><b>Component Description:</b> Pro rata share of tower mapping. See Exhibit 29A page 8.</p> <p><b>Amount:</b> \$3,081.56</p> <p><b>Component Description:</b> See Exhibit 28 Page 8.</p> <p><b>Amount:</b> \$268.66</p> <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.   |
| Install KQED-FM Ant   | Information not provided.   |
| Remove KQED-FM Ant  | 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 |
|--|-----------------------------|---------------------|------------------------------|--------------------|---------------------------|
| <b>Outside Professional Services</b>   | <b>\$163,160.00</b>         | <b>\$243,833.00</b> |                              | <b>\$15,865.85</b> |                           |
| 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                       |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application                                    | \$1,580.00                  | \$1,500.00          | N/A                          | N/A                | N/A                       |

|   |              |              |   |             |     |
|---|--------------|--------------|---|-------------|-----|
| RF Consulting Engineer Fees-<br>Aux Antenna:<br>Prepare engineering section of FCC Form 2100, Construction Permit Application | \$2,105.00   | \$2,000.00   | N/A   | \$1,775.00  | 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 |
| Perform engineering study for new channel assignment and antenna development  | \$7,360.00   | \$7,000.00   | N/A   | \$5,479.16  | 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. | \$8,611.69  | N/A |
| <b>Sub-total</b>  | \$163,160.00 | \$243,833.00 | N/A   | \$15,865.85 | N/A |



|                              |                |                |     |                |     |
|------------------------------|----------------|----------------|-----|----------------|-----|
| <b>Total for all systems</b> | \$6,669,324.04 | \$7,405,361.80 | N/A | \$1,296,892.09 | N/A |
|------------------------------|----------------|----------------|-----|----------------|-----|

## Components

| Actual Information  |   |
|---|---|
| Description   | File Name   |
| RF Exposure Measurements  | Information not provided.   |
| Comprehensive coverage verification via field study, if needed  | Information not provided.   |
| 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 | <p><b>Component Description:</b> Prepare Engineering Section of FCC Form 2100 Construction Permit Application.</p> <p><b>Amount:</b> \$1,775.00</p> |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application                                    | Information not provided.   |

|   |  |
|---|--|
| <p>Perform engineering study for new channel assignment and antenna development</p>     | <p><b>Component Description:</b> Calculation of necessary height and ERP for non-repack station KFOG-FM.</p> <p><b>Amount:</b> \$275.83</p> <p><b>Component Description:</b> See Exhibit 24 Line 3.</p> <p><b>Amount:</b> \$3,890.83</p> <p><b>Component Description:</b> Engineering Study for New Channel Assignment.</p> <p><b>Amount:</b> \$1,312.50</p> |
| <p>Address transition timing and coordination issues w/ other stations and wireless</p> | <p>Information not provided.</p>   |

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Project management of the transition

**Component Description:** See Exhibit 30A  
Page 10

**Amount:** \$125.00

**Component Description:** See Exhibit 31  
Page 13

**Amount:** \$146.87

**Component Description:** Sutro Project Management. See Exhibit 27 page 8.

**Amount:** \$738.22

**Component Description:** See Exhibit 28  
Page 8

**Amount:** \$1,396.39

**Component Description:** See Exhibit 29A  
Page 8

**Amount:** \$889.58

**Component Description:** See Exhibit 24, Line 129. For work performed, dates, hours, and rate, please see Exhibit 25. The total shown was divided by the six repacking stations.

**Amount:** \$5,315.63

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**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>\$827,067.57</b>         | <b>\$826,517.57</b> |   | <b>\$191,930.52</b> |                           |
| Architectural Plans     | <i>\$51,369.00</i>          | \$51,369.00         | Pro rata Share of Architectural Plans, Building Mapping, Update Plans. See Exhibit 32. Total includes reimbursables but not Additional Service Request 001. | \$31,223.78         | N/A                       |
| Sales Tax - Sutro Tower | <i>\$142,159.00</i>         | \$142,159.00        | 9.5% San Francisco Sales Tax - on Sutro Tower, Inc. materials only. See Exhibit 31.   | \$20,346.97         | N/A                       |

|                 |                            |              |   |            |     |
|-----------------|----------------------------|--------------|---|------------|-----|
| VSWR Monitoring | <b><i>\$183,558.57</i></b> | \$183,558.57 | VSWR Monitoring of antennas, transmission line, and combiner. Helps assure equipment won't be damaged by excessive transmitter power during fault conditions. See Exhibit 35. Total Cost of \$1,101,351.42 is shared among six repack stations. | N/A        | N/A |
| Site Survey     | <b><i>\$9,147.00</i></b>   | \$9,147.00   | 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 46.   | \$9,147.00 | N/A |

|   |                           |             |  |             |     |
|---|---------------------------|-------------|--|-------------|-----|
| Public Relations                        | <b><i>\$19,108.00</i></b> | \$19,108.00 | Public relations required for zoning hearings, neighbors, and government officials. See Exhibit 18.        | \$1,741.49  | N/A |
| Legal Fees                              | <b><i>\$22,667.00</i></b> | \$22,667.00 | Legal fees. See Exhibit 13.  | \$0.00      | N/A |
| KFOG Interim Antenna                    | <b><i>\$17,710.00</i></b> | \$17,710.00 | KFOG(FM) Interim Antenna, pro rata share. Does not include shipping or installation.                       | N/A         | N/A |
| Fork Lift Rental                        | <b><i>\$25,636.00</i></b> | \$25,636.00 | Required to move equipment from storage to transmitter and combiner room, throughout site. See Exhibit 17. | N/A         | N/A |
| Alternate Site Studies                  | <b><i>\$98,664.00</i></b> | \$98,664.00 | Pre, post and alternate site studies.  | \$93,511.10 | N/A |
| MVPD Notification of Channel Change     | <b><i>\$1,000.00</i></b>  | \$1,000.00  | N/A  | N/A         | N/A |
| Equipment Storage                       | <b><i>\$20,833.00</i></b> | \$20,833.00 | Please see Exhibit 15.   | N/A         | N/A |
| Equipment Delivery and Handling Charges | <b><i>\$32,000.00</i></b> | \$32,000.00 | Please see Exhibit 15 and Exhibit 3.   | N/A         | 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 |
| DTV Medical Facility Notification  | \$11,550.00         | \$11,000.00    | N/A                    | N/A            | N/A |
| Local Zoning   | <i>\$183,333.00</i> | \$183,333.00   | Please see Exhibit 13. | \$35,960.18    | N/A |
| <b>Sub-total</b>   | \$827,067.57        | \$826,517.57   | N/A                    | \$191,930.52   | N/A |
| <b>Total for all systems</b>   | \$6,669,324.04      | \$7,405,361.80 | N/A                    | \$1,296,892.09 | N/A |

## Components

### Actual Information

| Description | File Name |
|-------------|-----------|
|-------------|-----------|

|                         |  |
|-------------------------|--|
| Architectural Plans     | <p><b>Component Description:</b> See Exhibit 30A<br/>Page 10.<br/>(Corrected \$2<br/>Discrepancy in<br/>amount May 8,<br/>2019)</p> <p><b>Amount:</b> \$2,255.97</p> <p><b>Component Description:</b> See Exhibit 28<br/>page 8</p> <p><b>Amount:</b> \$10,460.43</p> <p><b>Component Description:</b> See Exhibit 29A<br/>Page 8.</p> <p><b>Amount:</b> \$8,439.89</p> <p><b>Component Description:</b> See Exhibit 31<br/>Page 13.</p> <p><b>Amount:</b> \$10,067.49</p> |
| Sales Tax - Sutro Tower | <p><b>Component Description:</b> See Exhibit 31<br/>Page 13</p> <p><b>Amount:</b> \$20,346.97</p>  |
| VSWR Monitoring         | Information not provided.  |
| Site Survey             | <p><b>Component Description:</b> Site Survey.<br/>Please see<br/>Exhibits 47 and 48.</p> <p><b>Amount:</b> \$9,147.00</p>  |



|                                     |   |
|-------------------------------------|---|
| Public Relations                    | <p><b>Component Description:</b> See Exhibit 27 - Page 8</p> <p><b>Amount:</b> \$62.50</p> <p><b>Component Description:</b> See Exhibit 31 Page 13</p> <p><b>Amount:</b> \$516.49</p> <p><b>Component Description:</b> See Exhibit 29A Page 8</p> <p><b>Amount:</b> \$712.50</p> <p><b>Component Description:</b> See Exhibit 24 Line 57</p> <p><b>Amount:</b> \$237.50</p> <p><b>Component Description:</b> See Exhibit 28 Page 8</p> <p><b>Amount:</b> \$212.50</p> |
| Legal Fees                          | Information not provided.   |
| KFOG Interim Antenna                | Information not provided.   |
| Fork Lift Rental                    | 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>   |
| MVPD Notification of Channel Change | Information not provided.   |
| Equipment Storage                   | Information not provided.   |

|  |  |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
|--|--|-------------------------------|----------------------------|----------------|----------|-------------------------------|----------------------------|----------------|----------|-------------------------------|----------------------------|----------------|----------|-------------------------------|---------------------------|----------------|----------|-------------------------------|-------------------------------------|----------------|-------------|-------------------------------|--------------------------|----------------|------------|-------------------------------|---------------------------|----------------|------------|
| Equipment Delivery and Handling Charges                                  | Information not provided.  |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| Disposal Costs (for equipment and other waste, net of any salvage value) | Information not provided.  |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| DTV Medical Facility Notification  | Information not provided.  |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| Local Zoning   | <table> <tr> <td><b>Component Description:</b></td> <td>See Exhibit 30A<br/>Page 10</td> </tr> <tr> <td><b>Amount:</b></td> <td>\$283.49</td> </tr> <tr> <td><b>Component Description:</b></td> <td>See Exhibit 30A<br/>Page 10</td> </tr> <tr> <td><b>Amount:</b></td> <td>\$705.37</td> </tr> <tr> <td><b>Component Description:</b></td> <td>See Exhibit 31<br/>Page 13.</td> </tr> <tr> <td><b>Amount:</b></td> <td>\$100.54</td> </tr> <tr> <td><b>Component Description:</b></td> <td>See Exhibit 31<br/>Page 13</td> </tr> <tr> <td><b>Amount:</b></td> <td>\$197.83</td> </tr> <tr> <td><b>Component Description:</b></td> <td>See Exhibit 24<br/>Lines 56 and 139.</td> </tr> <tr> <td><b>Amount:</b></td> <td>\$23,130.11</td> </tr> <tr> <td><b>Component Description:</b></td> <td>See Exhibit 28<br/>Page 8</td> </tr> <tr> <td><b>Amount:</b></td> <td>\$2,054.29</td> </tr> <tr> <td><b>Component Description:</b></td> <td>See Exhibit 29A<br/>Page 8</td> </tr> <tr> <td><b>Amount:</b></td> <td>\$4,666.93</td> </tr> </table> | <b>Component Description:</b> | See Exhibit 30A<br>Page 10 | <b>Amount:</b> | \$283.49 | <b>Component Description:</b> | See Exhibit 30A<br>Page 10 | <b>Amount:</b> | \$705.37 | <b>Component Description:</b> | See Exhibit 31<br>Page 13. | <b>Amount:</b> | \$100.54 | <b>Component Description:</b> | See Exhibit 31<br>Page 13 | <b>Amount:</b> | \$197.83 | <b>Component Description:</b> | See Exhibit 24<br>Lines 56 and 139. | <b>Amount:</b> | \$23,130.11 | <b>Component Description:</b> | See Exhibit 28<br>Page 8 | <b>Amount:</b> | \$2,054.29 | <b>Component Description:</b> | See Exhibit 29A<br>Page 8 | <b>Amount:</b> | \$4,666.93 |
| <b>Component Description:</b>  | See Exhibit 30A<br>Page 10   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Amount:</b>   | \$283.49   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Component Description:</b>  | See Exhibit 30A<br>Page 10   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Amount:</b>   | \$705.37   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Component Description:</b>  | See Exhibit 31<br>Page 13.   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Amount:</b>   | \$100.54   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Component Description:</b>  | See Exhibit 31<br>Page 13  |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Amount:</b>   | \$197.83   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Component Description:</b>  | See Exhibit 24<br>Lines 56 and 139.  |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Amount:</b>   | \$23,130.11  |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Component Description:</b>  | See Exhibit 28<br>Page 8   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Amount:</b>   | \$2,054.29   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Component Description:</b>  | See Exhibit 29A<br>Page 8  |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |
| <b>Amount:</b>   | \$4,666.93   |                               |                            |                |          |                               |                            |                |          |                               |                            |                |          |                               |                           |                |          |                               |                                     |                |             |                               |                          |                |            |                               |                           |                |            |

**Component Description:** See Exhibit 27  
Page 8  
**Amount:** \$2,281.73

**Component Description:** See Exhibit 29A  
Page 8  
**Amount:** \$2,001.96

**Component Description:** See Exhibit 28  
Page 8  
**Amount:** \$537.93

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**Cost Information** **Grand Total**

|                              | <b>Predetermined Cost Estimate</b> | <b>Estimated Cost</b> | <b>Actual Cost</b> |
|------------------------------|------------------------------------|-----------------------|--------------------|
| <b>Total for all systems</b> | \$6,669,324.04                     | \$7,405,361.80        | \$1,296,892.09     |

**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 |
|---------------|---|---|----------|
|               | <p><b>Submission of Estimated Expenses Statements</b></p> | <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.

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.

**Andrew J Siegel**  
*Assistant Secretary*

05/08/2019

| Certification | Section   | Question   | Response |
|---------------|---|--|----------|
|               | <b>Submission of Actual Cost Documentation Statements</b> | <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.

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.

**Andrew J Siegel**  
*Assistant Secretary*

05/08/2019

## Attachments