

(REFERENCE COPY - Not for submission)

## FCC Form 399: Reimbursement Request

Facility 25456 Service: DTV Call WBZ-TV Channel: 20 (UHF)

ID: Sign:

0000027825

Number:

File

FRN: **0021079769** Date **04/02** 

Submitted: /2020

## Applicant Information

#### **Applicant Name, Type, and Contact Information**

| Applicant  | Address  | Phone                | Email              | Applicant<br>Type               |
|--|--|----------------------|--------------------|---------------------------------|
| CBS TELEVISION LICENSES LLC Doing Business As: CBS TELEVISION LICENSES LLC | Daniel G. Ryson 1725 DeSales St. NW Suite 501 Washington, DC 20036 United States | +1 (202)<br>457-4505 | dryson@cbs.<br>com | Limited<br>Liability<br>Company |

## Reimbursement Contact Name and Information Reimbursement Contact Information

| Applicant      | Address | Phone | Email |
|----------------|---------|-------|-------|
| [Confidential] |         |       |       |

#### Preparer Contact Information

#### **Preparer Contact Name and Information**

| Applicant              | Address   | Phone             | Email          |
|------------------------|---|-------------------|----------------|
| Daniel G. Ryson<br>CBS | Daniel G. Ryson<br>1725 DeSales Street NW<br>Suite 501<br>Washington, DC 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   | American Tower will build an interim site in Needham, MA, including a broadband antenna and transmitter building to be used while building the permanent site in Needham Heights, MA |

#### **Transmitters**

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

## Auxiliary Transmitter

#### **Add Transmitter Information**

| Section                          | Question   | Response                       |
|----------------------------------|--|--------------------------------|
| Existing Transmitter Description | Type of change   | Purchase<br>New                |
|                                  | Use  | Auxiliary<br>(Backup)          |
|                                  | Description of Use   | When Main<br>TX<br>Unavailable |
|                                  | 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   |                                |
| Manufacturer and Type            | Model  | Diamond                        |
|                                  | Year   | 2008                           |
|                                  | Туре   | 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<br>(Backup)  |
|                 | Change Type                               | Purchase<br>New  |
|                 | Is this a request for upgraded equipment? | No   |
|                 | Manufacturer                              |  |
|                 | Model                                     | ULXTE-24   |
|                 | Transmitter Type                          | Solid State  |
|                 | Solid State Cooling                       | Air Cooled   |
|                 | Solid State Power capacity                | 14.4 kW  |
|                 | Justification for New Transmitter         | Manufacturer Cannot Retune Existing Transmitter (see Exhibit 1). |

## 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                                 | 150 kVA  |
|                    | Rigid Conduit and Wiring              | No       |
|                    | Size                                  | N/A      |
|                    | Length                                | N/A      |
|                    | Other Electrical Service              | No       |
|                    | Description                           | N/A      |

| HVAC Service  | Does the replacement transmitter require HVAC Service?                                       | No  |
|---|--|-----|
|   | Туре   | 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 |

## Auxiliary

**Other Transmitter Cost Not Listed** 

Transmitter Information not provided.

## Primary Transmitter

## **Existing Transmitter Information**

| Section                          | Question   | Response                 |
|----------------------------------|--|--------------------------|
| Existing Transmitter Description | 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                      |
| Existing Transmitter             | Manufacturer   |                          |
| Manufacturer and Type            | Model  | Sigma                    |
|                                  | Year   | 1999                     |
|                                  | Туре   | Inductive<br>Output Tube |
|                                  | IOT Power Type   | Two                      |
|                                  | Power Capacity   | 46 kW                    |

## Primary Transmitter

#### **New Transmitter Costs**

| Section         | Question                                  | Response  |
|-----------------|---|---|
| New Transmitter | Use                                       | Primary<br>(Main)   |
|                 | Change Type                               | Purchase<br>New   |
|                 | Is this a request for upgraded equipment? | Yes   |
|                 | Manufacturer                              |   |
|                 | Model                                     | ULXTE-72  |
|                 | Transmitter Type                          | Solid State   |
|                 | Solid State Cooling                       | Liquid<br>Cooled  |
|                 | Solid State Power capacity                | 47.2 kW   |
|                 | Justification for New Transmitter         | GatesAir won't retune (see Exhibit 1). Non- upgraded IOT transmitter is more expensive (see Exhibit 2). Proposed transmitter is less expensive (See Exhibit 3). |

## 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  | Transformer and surge suppressor. See Exhibit 3 Item C. |
| HVAC Service  | Does the replacement transmitter require HVAC Service?                                       | No  |
|   | Туре   | 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

**Transmitter** Information not provided.

#### Interim Transmitter

#### **New Transmitter Costs**

| Section         | Question                          | Response  |
|-----------------|-----------------------------------|---|
| New Transmitter | Use                               | Interim   |
|                 | Description of Use                | N/A   |
|                 | Change Type                       | Purchase  |
|                 | Manufacturer                      |   |
|                 | Model                             | ULXTE-72  |
|                 | Transmitter Type                  | Solid State   |
|                 | Solid State Cooling               | Liquid<br>Cooled  |
|                 | Solid State Power capacity        | 47.2 kW   |
|                 | Justification for New Transmitter | Required to maintain WBZ-TV operations from Interim site while main antenna is rebuilt. See also Exhibit 4. |

#### Interim Transmitter

#### **Other Transmitter Costs**

| Section            | Question                              | Response   |
|--------------------|---------------------------------------|------------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | Yes        |
|                    | Switchgear (industrial 800 amp)       | Yes        |
|                    | Transformer (480V)                    | Yes        |
|                    | Power                                 | 500 kVA    |
|                    | Rigid Conduit and Wiring              | Yes        |
|                    | Size                                  | 2 inches   |
|                    | Length                                | 200.0 feet |

|   | Other Electrical Service   | Yes   |
|---|--|---|
|   | Description  | Various Electrical Service from attached GatesAir Estimate (see Exhibit 3). |
| HVAC Service  | Does the replacement transmitter require HVAC Service?                                       | Yes   |
|   | Туре   | Cooling<br>Only   |
|   | Size   | 20 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   | 1500.0<br>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   |
| Inside RF System  | Is an additional interior RF system required to support this interim transmitter?            | No  |

#### Interim Transmitter

#### **Other Transmitter Cost Not Listed**

| • | Name                    | Description   |
|---|-------------------------|---|
|   | 100 Feet 4-Inch Conduit | 100 Feet 4-Inch Conduit                               |
|   | Core Drill Eight Holes  | Core Drill Eight Holes at Interim Transmitter<br>Site |

| TX Room Electrical  | Various Electrical work. See proposal in Exhibit 22   |
|---------------------|---|
| Ice Shield          | For HVAC Equipment  |
| New Sub Panels      | Four (4) new sub panels at approximately 200 amps each.   |
| Emergency Generator | Primary site has an emergency generator. This cost replicates backup power at the interim site. |

#### **Antennas**

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

#### **Existing Antenna Information**

| Section               | Question   | Response                         |
|-----------------------|--|----------------------------------|
| Existing Antenna      | Type of change   | Lease New                        |
| Description           | Antenna Use  | Primary<br>(Main)                |
|                       | Description of Use   | N/A                              |
|                       | Ownership  | Leased                           |
|                       | Owner  | American<br>Tower<br>Corporation |
|                       | Site   | N/A                              |
|                       | Is the existing antenna shared with another station or stations? | Yes                              |
|                       | Is the existing antenna directional?                             | No                               |
|                       | Is antenna in operating condition?                               | Yes                              |
|                       | Is antenna located on or in close proximity to an antenna farm?  | No                               |
| Existing Antenna      | Class  | Full Power                       |
| Manufacturer and Type | Mounting   | Top Mount                        |
|                       | Antenna position in stack  | Тор                              |
|                       | Polarization   | Horizontal                       |
|                       | Туре   | Broadband<br>Panel               |
|                       | Number of Stations Supported                                     | 4                                |
|                       | Number of Panels   | 99                               |
|                       | Design power capacity in use                                     | 87.0 %                           |
|                       | Lower Limit  | 470.00 MHz                       |
|                       | Upper Limit  | 698.00 MHz                       |
|                       | Other Antenna Type   | N/A                              |
|                       | ERP: (Effective Radiated Power)                                  | 825.0 kW                         |

| Manufacturer |                           |
|--------------|---------------------------|
| Model        | TAD-<br>24UDA-5<br>/60-MR |
| Year         | 1999                      |

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

| Facility ID | Call Sign |
|-------------|-----------|
| 65684       | WCVB-TV   |
| 72098       | WGBX-TV   |
| 73982       | WSBK-TV   |

#### **New Antenna Costs**

| Section                | Question   | Response                         |
|------------------------|--|----------------------------------|
| New Antenna            | Use  | Primary (Main)                   |
| Description            | Description of Use   | N/A                              |
|                        | Change Type  | Lease New                        |
|                        | Is this a request for upgraded equipment?                            | Yes                              |
|                        | Ownership  | Leased                           |
|                        | Owner  | American<br>Tower<br>Corporation |
|                        | Is antenna shared?   | Yes                              |
|                        | Is antenna directional?  | No                               |
|                        | Will antenna be located on or in close proximity to an antenna farm? | No                               |
| New Antenna            | Class  | Full Power                       |
| Manufacturer and Types | Mounting   | Top Mount                        |
|                        | Antenna position in stack  | Not in Stack                     |
|                        | Polarization   | Elliptical                       |
|                        | Туре   | Broadband<br>Panel               |
|                        | Number of Stations Supported   | 4                                |
|                        | Number of Panels/Bays  | 70                               |
|                        | Lower Limit  | 470.00 MHz                       |
|                        | Upper Limit  | 608.00 MHz                       |
|                        | Design power capacity in use   | 99.0 %                           |
|                        | Other Antenna Type   | N/A                              |
|                        | ERP: (Effective Radiated Power)                                      | 740.0 kW                         |
|                        | Manufacturer   |                                  |
|                        | Model  | PEP70E                           |

| Justification for New Antenna | Top Mount Broadband antenna required to accommodate the new repack frequencies. This antenna will be a four- sided assembly mast. In use power capacity is unknown. Pre- transition antenna has 120 panels. See Exhibit |
|-------------------------------|---|

#### **Other Antenna Costs**

| Section                        | Question  | Response                  |
|--------------------------------|---|---------------------------|
| Combiner for Shared<br>Antenna | Do you need a Combiner for a Shared Antenna?                          | Yes                       |
|                                | Туре  | New                       |
|                                | Number of channels supported  | 4                         |
|                                | Frequencies of channels supported                                     | Upper and lower frequency |
|                                | Frequency   | 470.0 MHz<br>- 608.0 MHz  |
|                                | Do you need a combiner output splitter /switcher for dual feed lines? | No                        |
| Elbow Complex                  | Do you require the separate purchase of the Elbow Complex?            | Yes                       |
|                                | Broadband or Single Channel?  | Broadband                 |
|                                |   |                           |

|                          | Feed Line Size  | 8 3/16 inches inches |
|--------------------------|---|----------------------|
| Side Mount Brackets      | Do you require the separate purchase of side mount brackets for a high power antenna?                       |                      |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No                   |
| Sweep Test               | Do you require the sweep testing of transmission line and antenna?  | Yes                  |

#### **Other Antenna Cost Not Listed**

| Name             | Description  |
|------------------|--|
| Install Combiner | Installation of combiner; Single chain of 5 high power constant impedance waveguide modules, and/or dual chains of 5 directional filter modules per Dielectric layout. required for broadband antenna system. See Exhibit 5. |

#### Interim Antenna

#### **New Antenna Costs**

| Section                 | Question   | Response                         |
|-------------------------|--|----------------------------------|
| New Antenna Description | Use  | Interim                          |
|                         | Description of Use   | N/A                              |
|                         | Change Type  | Lease New                        |
|                         | Ownership  | Leased                           |
|                         | Owner  | American<br>Tower<br>Corporation |
|                         | Is antenna shared?   | Yes                              |
|                         | Is antenna directional?  | Yes                              |
|                         | Will antenna be located on or in close proximity to an antenna farm? | No                               |
| New Antenna             | Class  | Full Power                       |
| Manufacturer and Type   | Mounting   | Top Mount                        |
|                         | Antenna position in stack  | Bottom                           |
|                         | Polarization   | Elliptical                       |
|                         | Туре   | Broadband<br>Panel               |
|                         | Number of Stations Supported   | 5                                |
|                         | Number of Panels/Bays  | 56                               |
|                         | Lower Limit  | 470.00 MHz                       |
|                         | Upper Limit  | 608.00 MHz                       |
|                         | Design power capacity in use   | 99.0 %                           |
|                         | Other Antenna Type   | N/A                              |
|                         | ERP: (Effective Radiated Power)                                      | 740.0 kW                         |
|                         | Manufacturer   |                                  |
|                         | Model  | TUM-AP-<br>O4-14/56H-<br>2-T     |

| Year                          | 2018  |
|-------------------------------|---|
| Justification for New Antenna | Required for shared use by five stations at interim site. See Exhibit 4 for interim site justification. |

#### Interim Antenna

#### **Other Antenna Costs**

| Section                        | Question  | Response                  |
|--------------------------------|---|---------------------------|
| Combiner for Shared<br>Antenna | Do you need a Combiner for a Shared Antenna?  | Yes                       |
|                                | Туре  | New                       |
|                                | Number of channels supported  | 5                         |
|                                | Frequencies of channels supported   | Upper and lower frequency |
|                                | Frequency   | 470.0 MHz<br>- 608.0 MHz  |
|                                | Do you need a combiner output splitter /switcher for dual feed lines?                                       | No                        |
| Elbow Complex                  | Do you require the separate purchase of the Elbow Complex?  | Yes                       |
|                                | Broadband or Single Channel?  | В                         |
|                                | Feed Line Size  | 8 3/16 inches             |
| Side Mount Brackets            | Do you require the separate purchase of side mount brackets for an antenna?                                 | No                        |
| Pattern Scatter Analysis       | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No                        |
| Sweep Test                     | Do you require the sweep testing of transmission line and antenna?  | Yes                       |

#### Interim Antenna

#### **Other Antenna Cost Not Listed**

| Name                  | Description   |
|-----------------------|---|
| Combiner Installation | Installation of combiner; Single chain of 5 high power constant impedance waveguide modules, and/or dual chains of 5 directional filter modules per Dielectric layout. required for broadband antenna system. See Exhibit 16. |

| Transmission Seffien               | 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<br>Existing              |
|  | Use  | Primary<br>(Main)                |
|  | Description of Use   | N/A                              |
|  | Ownership  | Leased                           |
|  | Owner  | American<br>Tower<br>Corporation |
|  | 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                       |
|  | Туре   | Rigid                            |
|  | Diameter   | 8 3/16 inches                    |
|  | Other Diameter   | N/A                              |
|  | Segment Length   | Broadband                        |
|  | Other Segment Length   | N/A                              |
|  | Number of parallel runs  | 1                                |
|  | Length   | 1440 feet<br>per run             |

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

| Facility ID | Call Sign |
|-------------|-----------|
| 72098       | WGBX-TV   |
| 65684       | WCVB-TV   |
| 73982       | WSBK-TV   |

## Primary

#### Other Transmission Line Expenses Not Listed

| Transmission | Description        |   |
|--------------|--------------------|---|
|              | Nitrogen Generator | Nitrogen Generator Upgrade. See Exhibit 15, Line 1-B-1. |

#### Interim Transmission

#### **New Transmission Line**

| New Transmission Line |   |   |  |
|-----------------------|---|---|--|
| on Line<br>Section    | Question                                | Response  |  |
| New Transmission Line | Use                                     | Interim   |  |
| Costs                 | Description of Use                      | N/A   |  |
|                       | Change Type                             | Lease New   |  |
|                       | Туре                                    | Rigid   |  |
|                       | Diameter                                | 8 3/16 inches   |  |
|                       | Segment Length                          | Broadband   |  |
|                       | Other Segment Length                    |   |  |
|                       | Number of parallel runs                 | 2   |  |
|                       | Length                                  | 1250 feet per<br>run  |  |
|                       | Justification for New Transmission Line | Two (2) 8-3 /16" Broadband rigid transmission lines, six (6) elbows (3 each line) and |  |

a nitrogen generator for pressurization. Required for Interim antenna. See Exhibit 16.

## Other Transmission Line Expenses Not Listed

| Transmission | Name Description   |   |
|--------------|--------------------|---|
|              | Nitrogen Generator | Nitrogen Generator Upgrade. See Exhibit 16, Line 1-B-1. |

#### Tower Equipment And Rigging Costs

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

## Auxiliary Tower

#### **Add Tower**

| Section                        | Question  | Response              |
|--------------------------------|---|-----------------------|
| Existing Tower                 | Type of change  | Modify Existing       |
| Description                    | Tower Use   | Auxiliary<br>(Backup) |
|                                | Description of Use                                      | Interim Use           |
|                                | Ownership   | Leased                |
|                                | Is this tower consider Complex?                         | Candelabra            |
|                                | Is this tower currently shared with any other stations? | Yes                   |
|                                | One or more FM, AM or TV radio broadcaster(s)           | Yes                   |
|                                | Others Types of Users                                   | No                    |
|                                | Is tower documented for structural analysis?            | Unknown               |
|                                | Is tower compliant with Rev G?                          | Unknown               |
| Existing Tower                 | Do you have a tower registration number?                | Yes                   |
| Structure Registration         | ASR Number  | 1004233               |
| Coordinates (NAD83 (           | Latitude (NAD83)  | 42° 18' 10.7" N-      |
| North American Datum of 1983)) | Longitude (NAD83)                                       | 071° 13' 04.9"<br>W-  |
|                                | Overall Structure Height                                | 1200.77 feet          |
|                                | Support Structure Height                                | 1101.04 feet          |
|                                | Ground Elevation Above Mean Sea Level (AMSL)            | 150.92 feet           |
|                                | Structure Type  | GTOWER -<br>Guyed     |

|                  | Structure Used<br>for<br>Communication<br>Purposes |
|------------------|--|
| Tower Owner      | American<br>Towers, LLC                            |
| Date Constructed | 04/19/2005   |

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 |
|-------------|-----------|---------|
| 73238       | WLVI      | DTV     |
| 9639        | WODS      | FM      |
| 23439       | WBOS      | FM      |
| 6463        | WFXT      | DTV     |
| 26897       | WWBX      | FM      |
| 1901        | WBZ-FM    | FM      |

#### Auxiliary Tower

#### **Tower Modification Costs**

| Section              | Question   | Response                          |
|----------------------|--|-----------------------------------|
| Engineering Study    | Please what type of engineering study is required, if any: | Study needed for documented tower |
| Tower Reinforcements | Please select whether tower reinforcements are needed:     | Minor<br>Reinforcements<br>needed |

#### Auxiliary Tower

#### **Tower Rigging Costs**

| Section             | Question      | Response   |
|---------------------|---------------|------------|
| Tower Rigging Costs | Complex Tower | Candelabra |

| <b>Helicopter Services</b> |
|----------------------------|
| Required                   |

Are helicopter services required?

No

## Auxiliary Tower

## Other Tower Expenses Not Listed

| Name                    | Description  |
|-------------------------|--|
| Interim Tower Rent      | Interim Tower Rent. See Exhibit 6.   |
| Tower Permit Packages   | Tower and ground equipment drawing package. Required for local approvals. See Exhibit 6.   |
| Construction Management | Nine hours on Modification project<br>management and fifteen hours for RF<br>installation project management for a total<br>of twenty days. See Exhibit 6. |

## 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?                          | Unknown  |
| Existing Tower                 | Do you have a tower registration number?                | Yes  |
| Structure Registration         | ASR Number  | 1003433  |
| Coordinates (NAD83 (           | Latitude (NAD83)  | 42° 18' 37.0" N-   |
| North American Datum of 1983)) | Longitude (NAD83)                                       | 071° 14' 12.0"<br>W-                                     |
|                                | Overall Structure Height                                | 1296.24 feet   |
|                                | Support Structure Height                                | 1192.24 feet   |
|                                | Ground Elevation Above Mean Sea Level (AMSL)            | 152.89 feet  |
|                                | Structure Type  | GTOWER - Guyed Structure Used for Communication Purposes |
|                                | Tower Owner   | American<br>Tower, LLC                                   |
|                                | Date Constructed  | 01/01/1957   |

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

| Facility ID | Call Sign | Service |
|-------------|-----------|---------|
| 68241       | WBUR-FM   | FM      |
| 72098       | WGBX-TV   | DTV     |
| 73982       | WSBK-TV   | DTV     |
| 72099       | WGBH-TV   | DTV     |
| 18783       | WYDN      | DTV     |
| 10542       | WKLB-FM   | FM      |
| 65684       | WCVB-TV   | DTV     |
|             |           |         |

#### Primary Tower

#### **Tower Modification Costs**

| Section              | Question   | Response                          |
|----------------------|--|-----------------------------------|
| Engineering Study    | Please what type of engineering study is required, if any: | Study needed for documented tower |
| Tower Reinforcements | Please select whether tower reinforcements are needed:     | Minor<br>Reinforcements<br>needed |

#### Primary Tower

## **Tower Rigging Costs**

| Section                         | Question                          | Response   |
|---------------------------------|-----------------------------------|------------|
| Tower Rigging Costs             | Complex Tower                     | Candelabra |
| Helicopter Services<br>Required | Are helicopter services required? | No         |

## Primary Tower

## Other Tower Expenses Not Listed

| Name                     | Description  |
|--------------------------|--|
| Tower Project Management | (44) hours on Modification project management and RF installation project management.                |
| Tower Permit Packages    | The generation of a construction drawing package for one (1) broadcasters /customers. See Exhibit 5. |

#### Outside Professional

| Section  | Question   | Response                            |
|--|--|-------------------------------------|
| Services Costs<br>Outside Project<br>Management Services | Do you require outside project management services?                          | Yes                                 |
|  | Number of Hours  | 250                                 |
|  | Explanation  | Company lacks sufficient resources. |
| Outside RF consulting<br>Engineering Services            | Perform engineering study for new channel assignment and antenna development | Yes                                 |
|  | Prepare engineering section of Form FCC Construction Permit Application      | Yes                                 |
|  | For Auxiliary Facility   | No                                  |
|  | For Main Facility  | Yes                                 |
|  | Prepare engineering section of Form FCC License to Cover Application         | Yes                                 |
|  | For Auxiliary Facility   | No                                  |
|  | For Main Facility  | Yes                                 |
|  | Prepare request for Special Temporary Authority                              | Yes                                 |
|  | Quantity   | 1                                   |
|  | Do you have Distributed Transmission System engineering services?            | N/A                                 |
|  | Critical Facility  | N/A                                 |
|  | Terrain-Shielded Facility  | N/A                                 |
| Attorney and Other Outside Consulting                    | Prepare and file Form FCC Construction Permit Application                    | No                                  |
| Services   | 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                                 | Yes |
|                                  | Prepare or Review FCC Form 399 for Reimbursement   | No  |
|                                  | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| RF Field Engineering<br>Services | Comprehensive coverage verification via field study  | No  |
|                                  | RF exposure measurements   | No  |
|                                  | Additional Field Engineering Service   | No  |
|                                  | Number of Days   | N/A |
|                                  | Justification  | N/A |

#### Outside Professional

## Other Professional Services Expenses Not Listed

| I Services Costs | Description   |
|------------------|---|
| LocalPermits     | Prepare and submit forms for necessary electrical, building and other permits.                        |
| RF System Test   | Testing of the combiners to ensure one frequency is tuned for optimal patterns. See Exhibits 5 and 6. |

# 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<br>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   | No       |
|                                 | Non-zoning permits   | Yes      |
|                                 | BLM or NFS Coordination  | No       |
|                                 | FCC Construction Permit Minor Change   | No       |
|                                 | FCC License to Cover Application   | No       |
|                                 | FCC Special Temporary Authority Application  | Yes      |
| Other Miscellaneous<br>Expenses | Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?        | No       |
|                                 | Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs? | Yes      |
|                                 | Does this relocation require Equipment Storage?  | No       |
|                                 | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?     | No       |
|                                 | Does this relocation require MVPD  Notification of a Channel Change?   | Yes      |

# Other Expenses

## Other Expenses Not Listed

| Name                            | Description  |
|---------------------------------|--|
| Site Security                   | Site security for installation and storage of Transmission line and materials for 30 days X 12 hours. These materials are a high risk of theft due to the material makeup such as copper, brass and aluminum. (See Exhibit 3.)         |
| Disconnect Transmitters         | Labor and expenses for disconnect and removal of existing transmitters. See Exhibit 3 Item F and Exhibit 9 Item F.   |
| Asbestos and Lead Paint Testing | Asbestos testing, removal and abatement for walls which could contain lead paint and /or the flooring may contain asbestos, because of the age of the facility and the era when the original construction took place. (See Exhibit 3.) |
| Building Partition              | This cost is to provide permitting for building partition and electrical service installation in the shared space. This install is to provide security for broadcasters and sufficient power for transmitters. See Exhibit 3.          |
| Ice Shield for HVAC             | Ice protection for HVAC compressor units near tower in areas prone to ice and snow. See Exhibit 3.   |
| Public Hearing                  | Public hearing to alter height of primary tower by changing top antenna. See Exhibit 2.  |
| Site Coordination Meeting       | Site coordination meetings with all broadcasters, contractors and vendors involved with the site deliveries and construction. This cost is for travel and logistics expenses accrued. See Exhibits 2 and 3.                            |

# **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<br>Cost | Estimated Cost<br>Justification  | Actual Cost    | Actual Cos<br>Justification |
|------------------------------------|-----------------------------|-------------------|--|----------------|-----------------------------|
| Interim<br>Transmitter<br>ULXTE-72 | \$1,841,852.82              | \$1,564,014.62    |  | \$1,444,918.33 |                             |
| Emergency<br>Generator             | \$111,802.00                | \$111,802.00      | Interim Tower Generator. See Exhibit 33 for lease. Includes \$100,000 connection fee and \$1,686 rent for an assumed 7 months. | \$100,000.00   | N/A                         |
| New Sub<br>Panels                  | \$10,000.00                 | \$10,000.00       | Provide proper voltage and current for each additional transmitter, house power, HVAC, and ancillary equipment. See Exhibit 6. | \$7,500.00     | N/A                         |
| Ice Shield                         | \$4,000.00                  | \$4,000.00        | Required to protect outdoor HVAC units.  | \$3,000.00     | N/A                         |
| TX Room<br>Electrical              | \$95,772.00                 | \$95,772.00       | Transmitter Room Electrical Work - Various. See proposal attached as Exhibit 39 (\$92,802) plus Exhibit 32 (\$2,970.00).       | \$95,772.00    | N/A                         |
| Core Drill<br>Eight Holes          | \$2,360.00                  | \$2,360.00        | Core drill eight holes at interim transmitter site. Please see   | \$2,360.00     | N/A                         |

|   |             |             | Exhibit 40 for quotation.  |             |     |
|---|-------------|-------------|--|-------------|-----|
| 100 Feet 4-Inch Conduit                                   | \$1,920.00  | \$1,920.00  | 100' L/F of 4" conduit and larger conductor. Brings in an additional 500 KVA for new transmitters, HVAC, Air handlers and house power. The existing power supply is is inadequate for the new repack equipment. See Exhibit 6. | \$1,440.00  | N/A |
| Other<br>Building<br>Addition<br>Size: 1500.0             | \$1,800.00  | \$1,800.00  | This cost is to provide permitting for building partition and electrical service installation in the shared space. This install is to provide security for broadcasters and sufficient power for transmitters. See Exhibit 6.  | \$1,350.00  | N/A |
| Other<br>HVAC<br>Service<br>Type: C<br>Size:20<br>(Other) | \$22,000.00 | \$22,000.00 | 20 ton HVAC split units to maintain operational temperatures.  This is to supplement existing HVAC. Calculation for the HVAC size is calculated using the power of the three   | \$16,500.00 | N/A |

|   |             |            | transmitters at 30% efficiency. See Exhibit 6.   |            |     |
|---|-------------|------------|--|------------|-----|
| 2" Rigid<br>Conduit and<br>Wiring<br>(Cost per<br>foot) | \$5,200.00  | \$1,000.00 | This cost includes 200 L/F of 2" conduit and conductor to supply HVAC, Air handlers and House power.  The existing power supply is inadequate for the additional power demands of the new repack equipment. See Exhibit 6. | \$750.00   | N/A |
| Transformer<br>3 phase<br>/480v - 500<br>KVA            | \$48,400.00 | \$9,200.00 | Install additional 500 KVA transformer for new tenant space to operate transmitter, heat exchangers and other equipment on the new repack frequency into the broadband antenna. See Exhibit 6.                             | \$6,900.00 | N/A |
| Service<br>entrance 3<br>phase/800<br>amp/208<br>volt   | \$14,400.00 | \$2,740.00 | Install 3 phase, 800 amp, 480 VAC in existing common area of the building being changed to a shared space for one transmitter which currently does not support the required power capacity. See Exhibit 6.                 | \$2,055.00 | N/A |

| UHF -<br>Liquid<br>Cooled<br>Solid State<br>Transmitter<br>35 - 50 kW                                 | \$1,473,000.00 | \$1,281,161.80 | Please see Exhibit 8, Items A, B, D, and E plus Heat Exchanger Unistrut Frame, Exhibit 20.   | \$1,188,847.51 | N/A |
|---|----------------|----------------|--|----------------|-----|
| Other Electrical Service: Various Electrical Service from attached GatesAir Estimate (see Exhibit 3). | \$12,998.82    | \$12,998.82    | Transformer and surge suppressor required to support interim transmitter. See Exhibit 8, Item D.   | \$12,998.82    | N/A |
| Switchgear - industrial 800 amp   | \$38,200.00    | \$7,260.00     | New Switchgear required accommodate the repack equipment and new 500 KVA transformer. The existing service does not have sufficient capacity to support transmitters. See Exhibit 6. | \$5,445.00     | N/A |
| Primary<br>Transmitter<br>ULXTE-72  | \$1,485,998.82 | \$1,312,554.72 |  | \$1,295,661.27 |     |
| Other Electrical Service: Transformer and surge suppressor. See Exhibit 3 Item C.                     | \$12,998.82    | \$12,998.82    | Transformer and surge suppressor. Required for proper operation of transmitter. See Exhibit 3, Item D.   | \$12,998.82    | N/A |
| UHF -<br>Liquid<br>Cooled   | \$1,473,000.00 | \$1,299,555.90 | See Exhibit 3,<br>Items A, B, C,<br>and E  | \$1,282,662.45 | N/A |

| 3 phase /480v - 150 KVA  UHF - Air Cooled Solid State Transmitter 14.4 kW  \$520,784.94  \$520,784.94  \$520,784.94  Proposed transmitter is a like-for-like replacement of existing transmitter. An estimate is provided as Exhibit 9. Category D (Electrical) is listed separately.  Sub-total  \$3,874,186.58  \$3,421,654.28  N/A  \$3,201,598.46  N/A   |                                      |                |                |  |                |     |
|--|--------------------------------------|----------------|----------------|--|----------------|-----|
| 3 phase /480v - 150 KVA  UHF - Air Cooled Solid State Transmitter 14.4 kW  Sub-total  \$3,874,186.58  \$3,421,654.28  N/A  Proposed transmitter is a like-for-like replacement of existing transmitter. An estimate is provided as Exhibit 9. Category D (Electrical) is listed separately.  | Transmitter                          | \$546,334.94   | \$545,084.94   |  | \$461,018.86   |     |
| Cooled Solid State Transmitter Transmitter 14.4 kW  Transmitter 14.4 kW  Transmitter  14.4 kW  Transmitter  T | 3 phase<br>/480v - 150               | \$25,550.00    | \$24,300.00    | N/A  | \$2,503.03     | N/A |
| <b>Total for all</b> \$7,728,312.48 \$4,459,605.25 N/A \$3,633,494.33 N/A  | Cooled<br>Solid State<br>Transmitter | \$520,784.94   | \$520,784.94   | transmitter is a like-for-like replacement of existing transmitter. An estimate is provided as Exhibit 9. Category D (Electrical) is | \$458,515.83   | N/A |
|  | Sub-total                            | \$3,874,186.58 | \$3,421,654.28 | N/A  | \$3,201,598.46 | N/A |
|  |                                      | \$7,728,312.48 | \$4,459,605.25 | N/A  | \$3,633,494.33 | N/A |

### Components

| _                              |                        |                    |
|--------------------------------|------------------------|--------------------|
| Actual Information Description | File Name              |                    |
| Emergency Generator            |                        |                    |
|                                | Component Description: | Generator          |
|                                |                        | Connection Fee.    |
|                                |                        | Please see Exhibit |
|                                |                        | 33 for lease.      |
|                                | Amount:                | \$100,000.00       |
| New Sub Panels                 |                        |                    |
|                                |                        |                    |

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Electrical Sub Panels, Exhibit 6, 3-C-6.

**Amount:** \$5,000.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Electrical Sub Panels, Exhibit 6, 3-C-6.

**Amount:** \$2,500.00

Ice Shield

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Ice Shield, Exhibit 6, 3-C-6.

**Amount:** \$2,000.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Ice Shield, Exhibit 6, 3-C-6. \$14,400.00

**Amount:** \$1,000.00

TX Room Electrical **Progress Payment Component Description:** Requisition 2 for WBZ Interim Transmitter Electrical. Form 399 won't take an ampersand in company name. Amount: \$39,600.00 **Component Description: Progress Payment** Requisition 3 for WBZ Interim Transmitter Electrical. Form 399 won't take an ampersand in company name. Amount: \$10,334.10 **Component Description:** Various Electrical Work, Requisition #1. Note: Form 399 will not accept a vendor name with an ampersand. Amount: \$42,867.90 **Component Description:** Interim Site Electrical Work. Form 399 won't accept ampersand in company name. Amount: \$2,970.00 Core Drill Eight Holes **Component Description:** Core drill eight holes. Please see Exhibit 40 for quote. Amount: \$2,360.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 4-inch conduit, Exhibit 6,

3-C-1.

**Amount:** \$480.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 4-inch conduit, Exhibit 6,

3-C-1.

**Amount:** \$960.00

Other -- Building Addition

Size: 1500.0

**Component Description:** Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Building Addition, Exhibit 6,

3-C-3.

**Amount:** \$900.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Building Addition, Exhibit 6,

3-C-3.

**Amount:** \$450.00

Other -- HVAC Service Type: C Size:20 (Other)

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 20-Ton HVAC, Exhibit 6,

3-C-2.

**Amount:** \$11,000.00

**Component Description:** Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 20-Ton HVAC, Exhibit 6,

3-C-2.

**Amount:** \$5,500.00

2" Rigid Conduit and Wiring (Cost per foot)

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 2-inch conduit, Exhibit 6,

3-C-1.

**Amount:** \$250.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 2-inch conduit, Exhibit 6,

3-C-1.

**Amount:** \$500.00

| Transformer 3 phase/480v - |
|----------------------------|
| 500 KVA                    |
|                            |

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 500 KVA Transformer, Exhibit 6, 3-C-1.

**Amount:** \$2,300.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 500 KVA Transformer, Exhibit 6, 3-C-1.

**Amount:** \$4,600.00

Service entrance 3 phase /800 amp/208 volt

**Component Description:** Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Service Entrance, Exhibit 6, 3-C-1.

**Amount:** \$1,370.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Service Entrance, Exhibit 6, 3-C-1.

**Amount:** \$685.00

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW

Component Description: Interim

Transmitter Down

Payment

**Amount:** \$435,088.75

Component Description: Interim

Transmitter

Progress Payment.

**Amount:** \$430,755.41

Component Description: Invoice is for

Interim

Transmitter (See Exhibit 8 Items A, B, C, and D plus Exhibit 21). This dollar amount is total invoice amount minus 100% of Electrical - Exhibit 8 Item D, shown in a

category. **Amount:** \$323,003.35

Other Electrical Service: Various Electrical Service from attached GatesAir Estimate (see Exhibit 3).

**Component Description:** 

Invoice is for Interim

different cost

Transmitter (See

Exhibit 8 Items A, B, C, and D plus Exhibit 21). This dollar amount is for Electrical -Exhibit 8 Item D. The remainder is shown in the transmitter cost

category.

**Amount:** \$12,998.82

Switchgear - industrial 800

amp Invoice is 50% **Component Description:** Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of 800A Switchgear, Exhibit 6, 3-C-1. \$3,630.00 Amount: **Component Description:** Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of 800A Switchgear, Exhibit 6, 3-C-1. Amount: \$1,815.00 Other Electrical Service: Transformer and surge **Component Description:** Invoice is for suppressor. See Exhibit 3 Primary Item C. Transmitter Final Payment Before Shipment. This electrical component is listed separately from the rest of the transmitter. Amount: \$12,998.82 UHF - Liquid Cooled Solid

State Transmitter 35 - 50 kW

**Component Description:** Primary

Amount:

Transmitter Down

**Payment** \$449,676.77 Component Description: Transmitter

Installation, Proof, and misc parts. See Exhibit 28 (\$92,314.35 plus \$929.18). Freight shown separately.

**Amount:** \$93,243.53

Component Description: Please see Exhibit

31.

**Amount:** \$313,338.41

Component Description: Primary

Transmitter Final
Payment Before
Shipment.
Includes all but
Electrical (Item D)
which is listed

separately.

**Amount:** \$426,403.74

Transformer 3 phase/480v - 150 KVA

Component Description: Invoice is split

among three cost categories. See Exhibit 24.

Corrected typo in dollar amount March 21, 2019.

**Amount:** \$1,408.79

Component Description: Invoice is for

transmitter, mask

filter, RF

accessories, and electrical. This cost is just electrical. See Exhibit 25.

**Amount:** \$1,094.24

UHF - Air Cooled Solid State Transmitter 14.4 kW

Component Description: Auxiliary

Transmitter Down

Payment

**Amount:** \$175,003.77

Component Description: Invoice for

transmitter, mask

filter, RF

accessories, and electrical shown separately. See

Exhibit 25.

**Amount:** \$119,512.45

Component Description: Invoice for

transmitter,

electrical, and old

transmitter removal is split among three cost

categories. See Exhibit 24.

**Amount:** \$163,999.61

# **Cost Information**

#### **Antennas**

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

| Description  | Predetermined<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification  | Actual Cost  | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|---|--------------|------------------------------|
| Interim<br>Antenna<br>TUM-AP-<br>O4-14/56H-<br>2-T   | \$196,667.00                   | \$231,787.00      |   | \$125,567.00 |                              |
| Combiner<br>Installation   | \$10,000.00                    | \$10,000.00       | Installation of dual chain combiner. See Exhibit 16 Line 3-C-2 for this cost estimate.  | \$5,250.00   | N/A                          |
| Sweep test of existing antenna   | \$6,730.00                     | \$3,000.00        | See Exhibit 6.  | \$2,250.00   | N/A                          |
| UHF - High<br>Power Top<br>Mount Five<br>Station<br>broadband<br>panel<br>antenna<br>elliptically<br>or<br>circularly<br>polarized | \$76,787.00                    | \$76,787.00       | New Dielectric 14 bay, 56 elements total, 1 assembly mast. See Exhibit 16.  | \$62,417.00  | N/A                          |
| New combiner, cost per channel (without antenna)   | \$84,200.00                    | \$135,400.00      | Dual chains of mask filter /combiner modules per Dielectric layout. Includes input power dividers and output switching to allow | \$50,250.00  | N/A                          |

|   |                |              | transmitter alignment /testing not otherwise available. Eliminates need for mask filter. See Exhibit 16 Line 3-C- 1.                      |             |     |
|---|----------------|--------------|---|-------------|-----|
| Elbow<br>complex,<br>broadband,<br>at antenna<br>input, per 8<br>3/16.<br>feedline (if<br>needed) | \$18,950.00    | \$6,600.00   | Two (2) Elbow complex for the input of the new Broadband antenna. See Exhibit 16.   | \$5,400.00  | N/A |
| Primary<br>Antenna<br>PEP70E  | \$1,211,130.00 | \$266,362.50 |   | \$57,220.62 |     |
| Install<br>Combiner   | \$11,250.00    | \$11,250.00  | Installation cost of the new combiner. Required to replace existing combiner and support required multi- station antenna. See Exhibit 15. | \$2,187.50  | N/A |
| New<br>combiner,<br>cost per<br>channel<br>(without<br>antenna)                                   | \$84,200.00    | \$91,500.00  | Constant impedance waveguide modules, and /or dual chains of 4 directional filter modules per Dielectric layout.                          | \$18,750.00 | N/A |

mask filter. See Exhibit 15.

| Sweep test of existing   | \$6,730.00     | \$5,000.00     | N/A   | \$1,250.00     | N/A  |
|--|----------------|----------------|---|----------------|------|
| antenna  |                | . ,            | IVA   | ψ1,230.00      | IN/A |
| UHF - High<br>Power Top<br>Mount<br>(200-1000<br>kW), Four<br>Station<br>broadband<br>panel<br>antenna,<br>elliptically<br>or<br>circularly<br>polarized | \$1,090,000.00 | \$148,612.50   | RFS PEP70E Top Mount Broadband antenna, required to accommodate the new repack frequencies. See Exhibit 35. | \$32,783.12    | N/A  |
| Elbow<br>complex,<br>broadband,<br>at antenna<br>input, per 8<br>3/16.<br>feedline (if<br>needed)  | \$18,950.00    | \$10,000.00    | Elbow complex for top mount antenna being used for repacked stations. See Exhibit 15.                       | \$2,250.00     | N/A  |
| Sub-total  | \$1,407,797.00 | \$498,149.50   | N/A   | \$182,787.62   | N/A  |
| Total for<br>all<br>systems  | \$7,728,312.48 | \$4,459,605.25 | N/A   | \$3,633,494.33 | N/A  |

### Components

| <b>Actual Information</b> |           |
|---------------------------|-----------|
| Description               | File Name |
| Combiner Installation     |           |

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Combiner Installation, Exhibit 6, 3-C-2.

Amount: \$3,500.00

**Component Description:** 

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Combiner Installation, Exhibit 6, 3-C-2.

Invoice is 25%

**Amount:** \$1,750.00

Sweep test of existing antenna

**Component Description:** Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Sweep Line/Antenna, Exhibit 6, 3-C-1.

**Amount:** \$750.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Sweep Line/Antenna, Exhibit 6, 3-C-1.

**Amount:** \$1,500.00

UHF - High Power Top Mount Five Station **Component Description:** broadband panel antenna elliptically or circularly polarized **Amount: Component Description: Amount:** New combiner, cost per channel (without antenna) **Component Description:** Amount:

**Component Description:** 

Amount:

Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Antenna, Exhibit 6, 3-B. \$41,611.50 Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Antenna, Exhibit 6, 3-B. \$20,805.50 Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Interim Combiner, Exhibit 6, 3-C-1. \$16,750.00 Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Interim

Combiner, Exhibit

6, 3-C-1

\$33,500.00

Elbow complex, broadband,

|  | Component Description:          | Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Elbow Complex, Exhibit 6, 3-C-2.                      |
|--|---------------------------------|---|
|  | Amount:                         | \$1,800.00  |
|  | Component Description:  Amount: | Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Elbow Complex, Exhibit 6, 3-C-2. \$3,600.00           |
| Install Combiner                                 |                                 |   |
| TOTAL COMMINE                                    | Component Description:  Amount: | Invoice is for Milestone 1 Payment at Primary site. This cost is for the primary combiner 25% down payment minus costs for E-Pol. Please see Exhibit 35. \$2,187.50 |
| New combiner, cost per channel (without antenna) |                                 |   |

Component Description: Invoice is for

Milestone 1
Payment at
Primary site. This
cost is for the

primary combiner

25% down

payment. Please see Exhibit 35.

**Amount:** \$18,750.00

Sweep test of existing antenna

Component Description: Invoice is for

Milestone 1
Payment at
Primary site. This
cost is for the
primary antenna
system sweep test

25% down payment minus costs for E-Pol. Please see Exhibit

35.

**Amount:** \$1,250.00

UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized

Component Description: Invoice is for

Milestone 1
Payment at
Primary site. This
cost is for the
primary antenna
25% down
payment minus
costs for E-Pol.
Please see Exhibit

35.

**Amount:** \$32,783.12

Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)

Component Description: Invoice is for

Milestone 1 Payment at

Primary site. This cost is for the primary antenna elbow complex 25% down payment minus

costs for E-Pol.
Please see Exhibit

35.

**Amount:** \$2,250.00

## **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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification   | Actual Cost | Actual Cos<br>Justificatio |
|--|--------------------------------|-------------------|--|-------------|----------------------------|
| Interim<br>Transmission<br>Line                      | \$1,000,500.00                 | \$99,672.57       |  | \$54,351.22 |                            |
| Nitrogen<br>Generator                                | \$3,000.00                     | \$3,000.00        | Nitrogen<br>Generator<br>Upgrade.<br>See Exhibit<br>16, Line 1-B-<br>1.  | N/A         | N/A                        |
| Rigid Transmission Line - copper, 8 3 /16" broadband | \$997,500.00                   | \$96,672.57       | Material cost for two (2) 83 /16" Broadband rigid transmission lines, six (6) elbows (3 each line) and a nitrogen generator. Cost shared with other stations. See Exhibit 16 (\$84,900.00). Also see Exhibit 37 (11,772.57). | \$54,351.22 | N/A                        |
| Primary<br>Transmission<br>Line                      | \$3,000.00                     | \$3,000.00        |  | \$0.00      |                            |
| Nitrogen<br>Generator                                | \$3,000.00                     | \$3,000.00        | Nitrogen<br>Generator<br>Upgrade.<br>See Exhibit<br>15, Line 1-B-<br>1.  | N/A         | N/A                        |

| Sub-total             | \$1,003,500.00 | \$102,672.57   | N/A | \$54,351.22    | N/A |
|-----------------------|----------------|----------------|-----|----------------|-----|
| Total for all systems | \$7,728,312.48 | \$4,459,605.25 | N/A | \$3,633,494.33 | N/A |

### Components

| Actual Information Description                         | File Name                       |   |
|--|---------------------------------|---|
| Nitrogen Generator                                     | Information not provided.       |   |
| Rigid Transmission Line -<br>copper, 8 3/16" broadband | Component Description:          | Additional transmission lines within transmitter room. Installation and freight invoiced separately.  |
|  | Amount:                         | \$6,069.72  |
|  | Component Description:  Amount: | Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Interim Transmission Line, Exhibit 6, 3-A. \$16,094.00  |
|  | Component Description:  Amount: | Invoice is 50%  Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Interim Transmission Line, Exhibit 6, 3-A. \$32,187.50 |
| Nitrogen Generator                                     | 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<br>Cost | Cost<br>Justification   | Actual Cost | Actual Cos<br>Justification |
|--|-----------------------------|-------------------|---|-------------|-----------------------------|
| Primary<br>Tower<br>GTOWER   | \$606,250.00                | \$122,660.00      |   | \$62,126.25 |                             |
| Tower<br>Project<br>Management   | \$5,250.00                  | \$5,250.00        | (44) hours on tower modification project management and RF installation project management. See Exhibit 15.   | \$2,250.00  | N/A                         |
| Minor tower reinforcement /modifications   | \$158,000.00                | \$25,000.00       | It is expected that the additional loads imposed on the tower by the new appurtenances required for the repack project will cause the tower to fail. The structural failure is expected to be in the minor category. See Exhibit 5. | \$7,500.00  | N/A                         |
| Structural<br>engineering<br>tower load<br>study for well<br>documented<br>tower | \$12,600.00                 | \$8,760.00        | Structural<br>tower mapping<br>to ensure the<br>proper<br>structural<br>information is<br>relayed to  | \$3,326.25  | N/A                         |

| engineering     |
|-----------------|
| for proposed    |
| repack          |
| equipment.      |
| Rigorous        |
| Structural      |
| analysis to     |
| access the      |
| structural      |
| capacity and    |
| modifications   |
| needed. See     |
| Exhibit 15 3-A- |
| 1.              |
|                 |

|  |              |              | 1.                                 |             |     |
|--|--------------|--------------|------------------------------------|-------------|-----|
| Complex<br>Tower                         | \$421,000.00 | \$74,250.00  | This tower has stacked             | \$42,000.00 | N/A |
| (includes, for                           |              |              | antennas and                       |             |     |
| example,                                 |              |              | is classified as                   |             |     |
| those with                               |              |              | a complex                          |             |     |
| candelabras                              |              |              | structure. The                     |             |     |
| and/or                                   |              |              | cost includes                      |             |     |
| stacked                                  |              |              | the installation                   |             |     |
| antennas)                                |              |              | of the new                         |             |     |
|  |              |              | antenna,                           |             |     |
|  |              |              | refurbishing of                    |             |     |
|  |              |              | two (2)                            |             |     |
|  |              |              | transmission                       |             |     |
|  |              |              | Lines, any                         |             |     |
|  |              |              | required                           |             |     |
|  |              |              | transmission                       |             |     |
|  |              |              | brackets. See                      |             |     |
|  |              |              | Exhibit 15.                        |             |     |
| Tower                                    | \$9,400.00   | \$9,400.00   | Construction                       | \$7,050.00  | N/A |
| Permit                                   |              |              | drawing                            |             |     |
| Packages                                 |              |              | packages for                       |             |     |
|  |              |              | tower and                          |             |     |
|  |              |              | ground                             |             |     |
|  |              |              | construction.                      |             |     |
|  |              |              | Required for                       |             |     |
|  |              |              | local permits.                     |             |     |
|  |              |              | See Exhibit 5.                     |             |     |
| Auxiliary<br>Tower<br>GTOWER             | \$661,600.00 | \$147,780.00 |                                    | \$71,071.88 |     |
| Minor tower reinforcement /modifications | \$158,000.00 | \$17,500.00  | It is expected that the additional | \$6,250.00  | N/A |

loads imposed

| on the tower   |
|----------------|
| by new repack  |
| equipment will |
| cause the      |
| tower to fail. |
| Minor          |
| reinforcement  |
| is necessary.  |
| See Exhibit    |
| 16.            |
|                |

|                |              |             | See Exhibit      |             |     |
|----------------|--------------|-------------|------------------|-------------|-----|
|                |              |             | 16.              |             |     |
| Structural     | \$12,600.00  | \$4,380.00  | Mapping and      | \$2,771.88  | N/A |
| engineering    |              |             | Rigorous         |             |     |
| tower load     |              |             | Structural       |             |     |
| study for well |              |             | analysis to      |             |     |
| documented     |              |             | access the       |             |     |
| tower          |              |             | structural       |             |     |
|                |              |             | capacity and     |             |     |
|                |              |             | modifications    |             |     |
|                |              |             | needed to        |             |     |
|                |              |             | accommodate      |             |     |
|                |              |             | the repacked     |             |     |
|                |              |             | equipment.       |             |     |
|                |              |             | See Exhibit      |             |     |
|                |              |             | 16.              |             |     |
| Complex        | \$421,000.00 | \$55,900.00 | This             | \$15,125.00 | N/A |
| Tower          | ,            | . ,         | candelabra is    | . ,         |     |
| (includes, for |              |             | classified as    |             |     |
| example,       |              |             | complex          |             |     |
| those with     |              |             | structure. The   |             |     |
| candelabras    |              |             | cost includes    |             |     |
| and/or         |              |             | the installation |             |     |
| stacked        |              |             | of the new       |             |     |
| antennas)      |              |             | antenna, two     |             |     |
| •              |              |             | transmission     |             |     |
|                |              |             | lines and        |             |     |
|                |              |             | tower brackets   |             |     |
|                |              |             | for additional   |             |     |
|                |              |             | transmission     |             |     |
|                |              |             | lines. See       |             |     |
|                |              |             | Exhibit 16.      |             |     |
| Construction   | \$3,000.00   | \$3,000.00  | (9) hours on     | \$1,375.00  | N/A |
| Management     |              |             | Modification     |             |     |
| J              |              |             | project          |             |     |
|                |              |             | management       |             |     |
|                |              |             | and (15) hours   |             |     |
|                |              |             | for RF           |             |     |
|                |              |             | installation     |             |     |
|                |              |             |                  |             |     |

project

|                             |                |                | management<br>for a total of<br>twenty (20)<br>days. See<br>Exhibit 6.   |                |     |
|-----------------------------|----------------|----------------|--|----------------|-----|
| Tower<br>Permit<br>Packages | \$9,400.00     | \$9,400.00     | Prepare tower, building, and ground drawings for local permits and approvals. Required to support required modifications needed for repack. See Exhibit 6. | \$2,350.00     | N/A |
| Interim<br>Tower Rent       | \$57,600.00    | \$57,600.00    | Interim Tower Rent - For Market Repack Period. See Exhibit 6, 1-B-   | \$43,200.00    | N/A |
| Sub-total                   | \$1,267,850.00 | \$270,440.00   | N/A  | \$133,198.13   | N/A |
| Total for all systems       | \$7,728,312.48 | \$4,459,605.25 | N/A  | \$3,633,494.33 | N/A |

### Components

| <b>Actual Information</b> |           |
|---------------------------|-----------|
| Description               | File Name |

Tower Project Management

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is

50% of Construction Project

Management, Exhibit 6, 3-D-1.

**Amount:** \$1,500.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is

25% of

Construction

Project

Management, Exhibit 6, 3-D-1.

**Amount:** \$750.00

Minor tower reinforcement /modifications

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower Reinforcement, Exhibit 6, 3-A-2.

**Amount:** \$5,000.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower Reinforcement, Exhibit 6, 3-A-2.

**Amount:** \$2,500.00

Structural engineering tower load study for well documented tower

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower Mapping PLUS Tower Structural Engineering. See Exhibit 6, 3-A-1 (25% of \$2480 plus \$1,955).

**Amount:** \$1,108.75

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower Mapping PLUS Tower Structural Engineering. See Exhibit 6, 3-A-1 (50% of \$2480 plus

\$1,955). \$2,217,50

**Amount:** \$2,217.50

Complex Tower (includes, for example, those with candelabras and/or stacked antennas)

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.

**Amount:** \$14,000.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of pro-rata Tower Rigging, Exhibit 6, 3-C-1.

**Amount:** \$28,000.00

**Tower Permit Packages** 

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower and Building Permits, Exhibit 6, 3-D-1.

**Amount:** \$4,700.00

**Component Description:** Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower and Building Permits, Exhibit 6, 3-D-1.

**Amount:** \$2,350.00

| /modifications  | Component Description: | WBZ-TV pro rata cost for tower reinforcement. Please see Exhibit             |
|---|------------------------|--|
|   | Amount:                | 35.<br>\$6,250.00  |
| Structural engineering tower load study for well documented tower                     | Component Description: | Tower mapping<br>(\$1,550) and<br>structural                                 |
|   | Amount:                | (\$1,221.88). Please<br>see Exhibit 35.<br>\$2,771.88                        |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | Component Description: | Pro rata cost for rigging a complex tower. Please see Exhibit 35.            |
|   | Amount:                | \$15,125.00  |
| Construction Management   | Component Description: | Pro rata cost for construction project management. Please see Exhibit 35.    |
|   | Amount:                | \$1,375.00   |
| Tower Permit Packages   |                        |  |
|   | Component Description: | Pro rata cost for tower and building permit drawings. Please see Exhibit 35. |
|   | Amount:                | \$2,350.00   |
| Interim Tower Rent  |                        |  |

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower

Rent, Exhibit 6, 1-B-

1.

**Amount:** \$28,800.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower

Rent, Exhibit 6, 1-B-

1.

**Amount:** \$14,400.00

## **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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|------------------------------------|-------------|------------------------------|
| Outside<br>Professional<br>Services  | \$69,985.00                    | \$69,000.00       |                                    | \$23,980.00 |                              |
| Attorney Fees - Negotiation of lease and other matters for shared locations          | \$4,210.00                     | \$4,000.00        | N/A                                | N/A         | N/A                          |
| Prepare<br>request for<br>Special<br>Temporary<br>Authorization                      | \$2,050.00                     | \$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                          |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00                     | \$3,000.00        | N/A                                | \$3,000.00  | N/A                          |
| Perform<br>engineering<br>study for<br>new channel<br>assignment                     | \$7,360.00                     | \$7,000.00        | N/A                                | \$5,125.00  | N/A                          |

| Address<br>transition<br>timing and<br>coordination<br>issues w/<br>other<br>stations and<br>wireless | \$2,630.00     | \$5,000.00     | Transition timing is necessary at two sites. See quotes provided as Exhibits 5 and 6.  | \$2,375.00     | N/A |
|---|----------------|----------------|--|----------------|-----|
| Project<br>management<br>of the<br>transition   | \$39,500.00    | \$37,500.00    | Company lacks internal resources.  | \$9,480.00     | N/A |
| RF System<br>Test   | \$8,000.00     | \$8,000.00     | Testing of the combiner to ensure one frequency is tuned for optimal patterns.  See Exhibits 5 and 6.  | \$3,437.50     | N/A |
| LocalPermits  | \$1,500.00     | \$1,500.00     | Prepare and submit applications for electrical, building and other required permits required for installation of repack equipment. See Exhibits 5 and 6. | \$562.50       | N/A |
| Sub-total   | \$69,985.00    | \$69,000.00    | N/A  | \$23,980.00    | N/A |
| Total for all systems   | \$7,728,312.48 | \$4,459,605.25 | N/A  | \$3,633,494.33 | N/A |

### Components

| Actual Information Description   | File Name                       |   |
|--|---------------------------------|---|
| Attorney Fees - Negotiation of lease and other matters for shared locations                | Information not provided.       |   |
| Prepare request for Special<br>Temporary Authorization                                     | Information not provided.       |   |
| Prepare engineering<br>section of FCC Form 2100<br>(main), License to Cover<br>Application | Information not provided.       |   |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application       | Component Description:  Amount: | Coordinate "work around" to solve concerns regarding Canadian coordination.   |
|  | Component Description:  Amount: | Preliminary Engineering and CP Application, Engineering Section. \$2,450.00   |
| Perform engineering study for new channel assignment and antenna development               | Component Description:  Amount: | Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Engineering Antenna Development, Exhibit 6, 1-A-2. \$2,500.00 |

Component Description: Engineering -

Antenna
Development.
Please see Exhibit

35.

**Amount:** \$1,375.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is

25% of

Engineering Antenna Development, Exhibit 6, 1-A-2.

**Amount:** \$1,250.00

Address transition timing and coordination issues w/ other stations and wireless

**Component Description:** Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Address Transition Timing, Exhibit 6, 1-A-1.

**Amount:** \$1,250.00

Component Description: Pro rata fee for

addressing transition timing. Please see Exhibit

35.

**Amount:** \$500.00

**Component Description:** Invoice is 25%

> Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Address Transition Timing, Exhibit 6, 1-A-1.

\$625.00 **Amount:** 

Project management of the transition

**Component Description: American Tower** 

> outside project management. Please see Exhibit

35.

Amount: \$2,370.00

**Component Description:** Invoice is 50%

> Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Outside

**Project** 

Management, Exhibit 6, 1-A-1.

Amount: \$4,740.00

**Component Description:** Invoice is 25%

> Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Outside

**Project** 

Management, Exhibit 6, 1-A-1.

**Amount:** \$2,370.00

RF System Test

Component Description: Prepare coverage

maps of new facilities. Please see Exhibit 36.

**Amount:** \$187.50

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of RF System Test, Exhibit 6, 1-

B-1.

**Amount:** \$625.00

Component Description: Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of RF System Test, Exhibit 6, 1-

B-1.

**Amount:** \$1,250.00

Component Description: Pro rata charge for

RF System test.
Please see Exhibit

35.

**Amount:** \$1,375.00

LocalPermits

**Component Description:** Invoice is 50%

Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Building Permits, Exhibit 6,

1-A-3.

**Amount:** \$375.00

Component Description: Invoice is 25%

Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Building Permits, Exhibit 6,

1-A-3.

**Amount:** \$187.50

## **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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification  | Actual Cost | Actual Cost<br>Justification |
|---------------------------------|--------------------------------|-------------------|---|-------------|------------------------------|
| Other<br>Expenses               | \$104,993.90                   | \$97,688.90       |   | \$37,578.90 |                              |
| Site<br>Coordination<br>Meeting | \$2,000.00                     | \$2,000.00        | Site coordination meeting with other broadcasters, contractors, vendors, and tower landlord. See Exhibit 15.                      | \$440.00    | N/A                          |
| Public<br>Hearing               | \$440.00                       | \$440.00          | Public<br>hearing cost<br>(See Exhibit<br>6.)   | \$410.00    | N/A                          |
| Ice Shield<br>for HVAC          | \$4,000.00                     | \$4,000.00        | Ice protection for HVAC compressor split units placed in close proximity of tower in areas prone to ice and snow. (See Exhibit 6) | N/A         | N/A                          |
| Building<br>Partition           | \$1,800.00                     | \$1,800.00        | This cost is to provide permitting for building partition and electrical service installation in the shared space. This           | N/A         | N/A                          |

|                                       |             |             | install is to provide security for broadcasters and sufficient power for transmitters. (See Exhibit 6.)   |            |     |
|---------------------------------------|-------------|-------------|---|------------|-----|
| Asbestos<br>and Lead<br>Paint Testing | \$1,800.00  | \$1,800.00  | Asbestos testing, removal and abatement for walls which could contain lead paint and/or the flooring may contain asbestos, because of the age of the facility and the era when the original construction took place. (See Exhibit 6.) | \$1,350.00 | N/A |
| Disconnect<br>Transmitters            | \$37,908.90 | \$37,908.90 | Disconnect and Remove to Staging Area the WBZ-TV Main and Auxiliary Transmitters. See Exhibit 3 Item F and Exhibit 9 Item F.  | \$4,811.10 | N/A |
| Site Security                         | \$3,600.00  | \$3,600.00  | Site security for installation and storage of Transmission  | \$2,700.00 | N/A |

|   |                |                | line and materials for 30 days X 12 hours. These materials are a high risk of theft due to the material makeup such as copper, brass and aluminum. (See Exhibit 6.) |                |     |
|---|----------------|----------------|---|----------------|-----|
| MVPD<br>Notification<br>of Channel<br>Change              | \$1,000.00     | \$1,000.00     | N/A   | N/A            | N/A |
| Equipment Delivery and Handling Charges                   | \$39,200.00    | \$39,200.00    | Delivery of<br>three<br>transmitter<br>and tower<br>equipment<br>required for<br>repack. See<br>Exhibits 3, 8,<br>9, and 15.  | \$23,430.30    | N/A |
| Non-zoning permits  | \$1,500.00     | \$1,500.00     | Per estimates. See Exhibits 5 and 6.  | \$187.50       | N/A |
| FCC Filing Fees - Special Temporary Authorization request | \$195.00       | \$190.00       | N/A   | N/A            | N/A |
| DTV Medical<br>Facility<br>Notification                   | \$11,550.00    | \$4,250.00     | See Exhibit 7. (Note: Corrected cost typo March 21, 2019)   | \$4,250.00     | N/A |
| Sub-total   | \$104,993.90   | \$97,688.90    | N/A   | \$37,578.90    | N/A |
| Total for all   | \$7,728,312.48 | \$4,459,605.25 | N/A   | \$3,633,494.33 | N/A |

#### Components

| Actual Information        | File Name                 |   |
|---------------------------|---------------------------|---|
| Description               | File Name                 |   |
| Site Coordination Meeting | Component Description:    | Site coordination<br>meetings. Please<br>see Exhibit 35.  |
|                           | Amount:                   | \$440.00  |
| Public Hearing            |                           |   |
| g                         | Component Description:    | Public hearing costs. Please see Exhibit 35.  |
|                           | Amount:                   | \$110.00  |
|                           |                           |   |
|                           | Component Description:    | Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Public Hearing, Exhibit 6, 1-B-1. |
|                           | Amount:                   | \$100.00  |
|                           | Component Description:    | Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Public Hearing, Exhibit 6, 1-B-1. |
|                           | Amount:                   | \$200.00  |
| Ice Shield for HVAC       | Information not provided. |   |
| Building Partition        | Information not provided. |   |
|                           |                           |   |

| Asbestos and Lead Paint |                                 |   |
|-------------------------|---------------------------------|---|
| Testing                 | Component Description:          | Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Asbestos and Lead Paint Testing, Exhibit 6, 1-B-1.          |
|                         | Amount:                         | \$450.00  |
|                         | Component Description:  Amount: | Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Asbestos and Lead Paint Testing, Exhibit 6, 1-B-1. \$900.00 |
|                         | Amount.                         | ψ900.00   |
| Disconnect Transmitters | Component Description:          | Invoice is split<br>among three cost<br>categories. See<br>Exhibit 24.  |
|                         | Amount:                         | \$4,811.10  |
| Site Security           |                                 |   |
|                         | Component Description:          | Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Site Security, Exhibit 6, 1-B-1.                            |
|                         | Amount:                         | \$900.00  |

|   | Component Description:  Amount: | Invoice is 50%  Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Site Security, Exhibit 6, 1-B-1. \$1,800.00    |
|---|---------------------------------|---|
| MVPD Notification of Channel Change     | Information not provided.       |   |
| Equipment Delivery and Handling Charges | Component Description: Amount:  | WBZ-TV Main<br>Transmitter<br>Freight.<br>\$19,805.30   |
|   | Component Description:  Amount: | Equipment<br>delivery and<br>handling. Please<br>see Exhibit 35.<br>\$1,375.00  |
|   | Component Description:          | Invoice is 25% Down Payment for \$115,297.75 ATC total estimated cost. (See Exhibit 6). This amount is 25% of Tower equipment and delivery, Exhibit 6, 1-A-4. |
|   | Amount:                         | \$750.00  |

|   | Component Description:    | Invoice is 50% Down Payment for \$230,591.50 ATC total estimated cost. (See Exhibit 6). This amount is 50% of Tower equipment and delivery, Exhibit 6, 1-A-4. |
|---|---------------------------|---|
|   | Amount:                   | \$1,500.00  |
| Non-zoning permits  |                           |   |
|   | Component Description:    | Pro rata cost for building permits. Please see Exhibit 35.  |
|   | Amount:                   | \$187.50  |
| FCC Filing Fees - Special Femporary Authorization request | Information not provided. |   |
| OTV Medical Facility  Notification                        |                           |   |
| vouncation  | Component Description:    | Health Care  Notification. See quote in Exhibit 7.  |
|   | Amount:                   | \$4,250.00  |

## Cost Information

#### **Grand Total**

|                       | Predetermined<br>Cost Estimate | Estimated Cost | Actual Cost    |
|-----------------------|--------------------------------|----------------|----------------|
| Total for all systems | \$7,728,312.48                 | \$4,459,605.25 | \$3,633,494.33 |

| Reimbursem | enrestiatus  | Response |
|------------|--|----------|
|            | The facility has ceased operating on its pre-<br>auction channel.  | Yes      |
|            | 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       |

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.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the

signal of a broadcaster that changes channels (MVPD).

- 5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Andrew J Siegel Assistant Secretary

04/02/2020

Section Question Response

# Submission of Actual Cost Documentation Statements

WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).

- 1. The Authorized
  Person signing
  below certifies and
  represents that he
  /she is authorized to
  submit this TV
  Broadcaster
  Relocation Fund
  Reimbursement
  Form on behalf of
  the above-named
  entity.
- 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 4. The above-named entity acknowledges the submission of the information herein

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

must be promptly refunded to the Commission.

9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Andrew J Siegel Assistant Secretary

04/02/2020

#### **Attachments**