



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **6900** | Service: **DTV** | Call **WUPA** | Channel: **36 (UHF)**  
ID: | Sign:  
File **0000027041**  
Number:  
FRN: **0003474871** | Date **11/09**  
Submitted: **/2018**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant  | Address  | Phone             | Email          | Applicant Type |
|--|--|-------------------|----------------|----------------|
| <b>ATLANTA TELEVISION STATION WUPA INC.</b><br>Doing Business As: ATLANTA TELEVISION STATION WUPA INC. | Daniel G. Ryson<br>1725 DeSales St. NW<br>Suite 501<br>Washington, DC 20036<br>United States | +1 (202) 457-4505 | dryson@cbs.com | Corporation    |

## Reimbursement Contact Information

### Reimbursement Contact Name and Information

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

## Preparer Contact Information

### Preparer Contact Name and Information

| Applicant  | Address   | Phone             | Email          |
|--|---|-------------------|----------------|
| <b>Daniel G. Nass , Ryson</b><br>.<br><i>CBS</i> | Daniel G. Ryson<br>1725 DeSales St. NW<br>Suite 501<br>Washington, DC<br>20036<br>United States | +1 (202) 457-4074 | dryson@cbs.com |

**Broadcaster Information and Transition Plan**

| Question   | Response   |
|--|--|
| Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information. | Yes  |
| Briefly describe transition plan   | ATS will install new broadband ant at interim site. Facility will move to interim site. Current main site ant and tx line will be removed. ATS will install new broadband ant at main site. Facility will move from interim site to main site. |

**Transmitters**

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

**Auxiliary Transmitter**

**Add Transmitter Information**

| Section   | Question   | Response           |
|---|--|--------------------|
| <b>Existing Transmitter Description</b>           | Type of change   | Retune Existing    |
|   | Use  | Auxiliary (Backup) |
|   | Ownership  | Owned              |
|   | Owner  | N/A                |
|   | Is this transmitter currently shared with another station? | No                 |
|   | Is this transmitter currently in operating condition?      | Yes                |
| <b>Existing Transmitter Manufacturer and Type</b> | Manufacturer   | Rhode and Schwarz  |

|                            |             |
|----------------------------|-------------|
| Model                      | NV8303      |
| Year                       | 2001        |
| Type                       | Solid State |
| Solid State Cooling        | Air Cooled  |
| Solid State Power capacity | 1.5 kW      |

**Auxiliary Transmitter**

**Retuning Transmitter Costs**

| Section                | Question                                       | Response |
|------------------------|--|----------|
| <b>New IOT Tubes</b>   | Number of Tubes (including accessories) needed | N/A      |
| <b>New Mask Filter</b> | Power  | 1.5 kW   |
|                        | Other Power                                    | N/A      |
| <b>New Exciter</b>     | Is a new exciter needed?                       | No       |

**Auxiliary Transmitter**

**Other Transmitter Costs**

| Section                   | Question   | Response |
|---------------------------|--|----------|
| <b>Electrical Service</b> | 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                               | No       |
|                           | Description  | N/A      |
| <b>HVAC Service</b>       | Does the replacement transmitter require HVAC Service? | No       |

|  |   |     |
|--|---|-----|
|  | Type  | N/A |
|  | Size  | N/A |
|  | Other Size  | N/A |
| <b>Transmitter Building Addition/Modification or Leasehold Improvement</b> | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No  |
|  | Size  | N/A |
| <b>Channel 14 Costs</b>  | Is an RF Consulting Engineer needed?  | N/A |
|  | Is a channel 14 Mask Filer needed?  | N/A |
|  | Is additional field engineering time needed?  | N/A |
|  | Number of Days  | N/A |

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

**Primary  
Transmitter**

**Existing Transmitter Information**

| <b>Section</b>  | <b>Question</b>  | <b>Response</b>          |
|---|--|--------------------------|
| <b>Existing Transmitter<br/>Description</b>           | Type of change   | Purchase<br>New          |
|   | Use  | Primary<br>(Main)        |
|   | Description of Use   | N/A                      |
|   | Ownership  | Owned                    |
|   | Owner  | N/A                      |
|   | Site   | N/A                      |
|   | Is this transmitter currently shared with another station? | No                       |
|   | Is this transmitter currently in operating condition?      | Yes                      |
| <b>Existing Transmitter<br/>Manufacturer and Type</b> | Manufacturer   |                          |
|   | Model  | Sigma                    |
|   | Year   | 2001                     |
|   | Type   | Inductive<br>Output Tube |
|   | IOT Power Type   | Three                    |
|   | Power Capacity   | 63 kW                    |

**Primary  
Transmitter**

**New Transmitter Costs**

| Section                | Question                                  | Response   |
|------------------------|---|--|
| <b>New Transmitter</b> | Use                                       | Primary (Main)   |
|                        | Change Type                               | Purchase New   |
|                        | Is this a request for upgraded equipment? | Yes  |
|                        | Manufacturer                              |  |
|                        | Model                                     | ULXTE-100  |
|                        | Transmitter Type                          | Solid State  |
|                        | Solid State Cooling                       | Liquid Cooled  |
|                        | Solid State Power capacity                | 62.9 kW  |
|                        | Justification for New Transmitter         | Cannot re-tune current IOT transmitter. Replacement IOT transmitter will exceed cost of replacement solid state. |

**Primary  
Transmitter**

**Other Transmitter Costs**

| Section                   | Question                              | Response |
|---------------------------|---------------------------------------|----------|
| <b>Electrical Service</b> | Service Entrance (3 phases 800A 208V) | No       |
|                           | Switchgear (industrial 800 amp)       | No       |
|                           | Transformer (480V)                    | Yes      |
|                           | Power                                 | 500 kVA  |
|                           | Rigid Conduit and Wiring              | Yes      |
|                           | Size                                  | 4 inches |
|                           |                                       |          |

|  |   |   |
|--|---|---|
|  | Length  | 300.0 feet  |
|  | Other Electrical Service  | Yes   |
|  | Description   | Electrical work. Includes labor and materials not already listed. |
| <b>HVAC Service</b>  | Does the replacement transmitter require HVAC Service?  | No  |
|  | Type  | N/A   |
|  | Size  | N/A   |
|  | Other Size  | N/A   |
| <b>Transmitter Building Addition/Modification or Leasehold Improvement</b> | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No  |
|  | Size  | N/A   |
| <b>Channel 14 Costs</b>  | Is an RF Consulting Engineer needed?  | N/A   |
|  | Is a channel 14 Mask Filer needed?  | N/A   |
|  | Is additional field engineering time needed?  | N/A   |
|  | Number of Days  | N/A   |

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

**Interim  
Transmitter**

**New Transmitter Costs**

| Section                       | Question                          | Response  |
|-------------------------------|-----------------------------------|---|
| <p><b>New Transmitter</b></p> | Use                               | Interim   |
|                               | Description of Use                | N/A   |
|                               | Change Type                       | Purchase  |
|                               | Manufacturer                      |   |
|                               | Model                             | ULXTE-72  |
|                               | Transmitter Type                  | Solid State   |
|                               | Solid State Cooling               | Liquid Cooled   |
|                               | Solid State Power capacity        | 35.4 kW   |
|                               | Justification for New Transmitter | <p>Facility must move to interim site for an expended period of time. Revised gains and losses at interim site required an increase in transmitter size to ULXTE-72 (35.4 kW @ Ch. 43) to replicate licensed WUPA coverage. See May 2018 Statement.</p> |



**Interim  
Transmitter**

**Other Transmitter Costs**

| Section  | Question  | Response  |
|--|---|---|
| <b>Electrical Service</b>  | Service Entrance (3 phases 800A 208V)   | No  |
|  | Switchgear (industrial 800 amp)   | Yes   |
|  | Transformer (480V)  | No  |
|  | Power   | N/A   |
|  | Rigid Conduit and Wiring  | Yes   |
|  | Size  | 4 inches  |
|  | Length  | 400.0 feet  |
|  | Other Electrical Service  | Yes   |
|  | Description   | Electrical work including labor and materials not listed elsewhere. See Exhibit 7 |
| <b>HVAC Service</b>  | Does the replacement transmitter require HVAC Service?  | No  |
|  | Type  | N/A   |
|  | Size  | N/A   |
|  | Other Size  | N/A   |
| <b>Transmitter Building Addition/Modification or Leasehold Improvement</b> | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No  |
|  | Size  | N/A   |
| <b>Channel 14 Costs</b>  | Is an RF Consulting Engineer needed?  | N/A   |
|  | Is a channel 14 Mask Filer needed?  | N/A   |
|  | Is additional field engineering time needed?  | N/A   |
|  | Number of Days  | N/A   |

|                         |   |    |
|-------------------------|---|----|
| <b>Inside RF System</b> | Is an additional interior RF system required to support this interim transmitter? | No |
|-------------------------|---|----|

**Interim  
Transmitter**

**Other Transmitter Cost Not Listed**

| <b>Name</b>                | <b>Description</b>   |
|----------------------------|--|
| <b>Transmitter Control</b> | Remote Control and Monitoring of Interim Transmitter and site. |

**Antennas**

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

**Primary  
Antenna**

**Existing Antenna Information**

| Section                                       | Question   | Response        |
|---|--|-----------------|
| <b>Existing Antenna Description</b>           | Type of change   | Lease New       |
|   | Antenna Use  | Primary (Main)  |
|   | Description of Use   | N/A             |
|   | Ownership  | Owned           |
|   | Owner  | N/A             |
|   | Site   | N/A             |
|   | Is the existing antenna shared with another station or stations? | No              |
|   | Is the existing antenna directional?                             | No              |
|   | Is antenna in operating condition?                               | Yes             |
|   | Is antenna located on or in close proximity to an antenna farm?  | No              |
| <b>Existing Antenna Manufacturer and Type</b> | Class  | Full Power      |
|   | Mounting   | Top Mount       |
|   | Antenna position in stack  | Top             |
|   | Polarization   | Horizontal      |
|   | Type   | Slotted Coaxial |
|   | Number of Stations Supported                                     | N/A             |
|   | Number of Panels   | N/A             |
|   | Design power capacity in use                                     | N/A             |
|   | Lower Limit  | N/A             |
|   | Upper Limit  | N/A             |
|   | Other Antenna Type   | N/A             |
|   | ERP: (Effective Radiated Power)                                  | 1000.0 kW       |
| Manufacturer                                  |  |                 |

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|       |             |
|-------|-------------|
| Model | TFU-32GTH-R |
| Year  | 2002        |

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**Primary  
Antenna**

**New Antenna Costs**

| Section                                   | Question   | Response        |
|---|--|-----------------|
| <b>New Antenna Description</b>            | Use  | Primary (Main)  |
|   | Description of Use   | N/A             |
|   | Change Type  | Lease New       |
|   | Is this a request for upgraded equipment?                            | Yes             |
|   | Ownership  | Leased          |
|   | Owner  | American Tower  |
|   | Is antenna shared?   | Yes             |
|   | Is antenna directional?  | No              |
|   | Will antenna be located on or in close proximity to an antenna farm? | No              |
| <b>New Antenna Manufacturer and Types</b> | Class  | Full Power      |
|   | Mounting   | Top Mount       |
|   | Antenna position in stack  | Top             |
|   | Polarization   | Elliptical      |
|   | Type   | Broadband Panel |
|   | Number of Stations Supported   | 4               |
|   | Number of Panels/Bays  | 99              |
|   | Lower Limit  | 470.00 MHz      |
|   | Upper Limit  | 608.00 MHz      |
|   | Design power capacity in use   | 50.0 %          |
|   | Other Antenna Type   | N/A             |
|   | ERP: (Effective Radiated Power)<br>.....                             | 1000.0 kW       |
|   | Manufacturer   |                 |

|                               |                                 |
|-------------------------------|---------------------------------|
| Model                         | 14 bay, 4 around,, 56 ele total |
| Year                          | 2018                            |
| Justification for New Antenna | Channel Change                  |

**Primary Antenna**

**Other Antenna Costs**

| Section                            | Question  | Response                  |
|------------------------------------|---|---------------------------|
| <b>Combiner for Shared Antenna</b> | Do you need a Combiner for a Shared Antenna?  | Yes                       |
|                                    | Type  | New                       |
|                                    | Number of channels supported  | 4                         |
|                                    | Frequencies of channels supported   | Upper and lower frequency |
|                                    | Frequency   | 470.0 MHz - 608.0 MHz     |
|                                    | Do you need a combiner output splitter /switcher for dual feed lines?                                       | No                        |
| <b>Elbow Complex</b>               | Do you require the separate purchase of the Elbow Complex?  | Yes                       |
|                                    | Broadband or Single Channel?  | Broadband                 |
|                                    | Feed Line Size  | 8 3/16 inches inches      |
| <b>Side Mount Brackets</b>         | Do you require the separate purchase of side mount brackets for a high power antenna?                       | No                        |
| <b>Pattern Scatter Analysis</b>    | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No                        |
| <b>Sweep Test</b>                  | Do you require the sweep testing of transmission line and antenna?  | Yes                       |

**Primary  
Antenna**

**Other Antenna Cost Not Listed**

| Name                             | Description              |
|----------------------------------|--------------------------|
| Dielectric Combiner Installation | installation of combiner |



**Interim  
Antenna**

**New Antenna Costs**

| Section                                  | Question   | Response         |
|--|--|------------------|
| <b>New Antenna Description</b>           | Use  | Interim          |
|  | Description of Use   | N/A              |
|  | Change Type  | Lease New        |
|  | Ownership  | Leased           |
|  | Owner  | American Tower   |
|  | Is antenna shared?   | Yes              |
|  | Is antenna directional?  | No               |
|  | Will antenna be located on or in close proximity to an antenna farm? | No               |
| <b>New Antenna Manufacturer and Type</b> | Class  | Full Power       |
|  | Mounting   | Top Mount        |
|  | Antenna position in stack  | Top              |
|  | Polarization   | Elliptical       |
|  | Type   | Broadband Panel  |
|  | Number of Stations Supported   | 5                |
|  | Number of Panels/Bays  | 12               |
|  | Lower Limit  | 470.00 MHz       |
|  | Upper Limit  | 608.00 MHz       |
|  | Design power capacity in use   | 50.0 %           |
|  | Other Antenna Type   | N/A              |
|  | ERP: (Effective Radiated Power)                                      | 100.0 kW         |
|  | Manufacturer   |                  |
|  | Model  | PEPL48D-C170-2-6 |
| Year                                     | 2018   |                  |

|                               |                                 |
|-------------------------------|---------------------------------|
| Justification for New Antenna | Needed for transition logistics |
|-------------------------------|---------------------------------|

**Interim Antenna**

**Other Antenna Costs**

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

**Interim Antenna**

**Other Antenna Cost Not Listed**

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

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**Combiner Installation**

Installation of interim site combiner.

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**Transmission  
Line**

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

**Primary  
Transmission  
Line**

**Existing Transmission Line**

| Section   | Question   | Response          |
|---|--|-------------------|
| <b>Existing Transmission Line Description</b>           | Type of change   | Lease New         |
|   | Use  | Primary (Main)    |
|   | Description of Use   | N/A               |
|   | Ownership  | Owned             |
|   | Owner  | N/A               |
|   | Site   | N/A               |
|   | Is the existing transmission line shared with another station or stations? | Yes               |
|   | Is Transmission Line in operating condition?                               | Yes               |
| <b>Existing Transmission Line Manufacturer and Type</b> | Manufacturer   |                   |
|   | Type   | Rigid             |
|   | Diameter   | 8 3/16 inches     |
|   | Other Diameter   | N/A               |
|   | Segment Length   | Broadband         |
|   | Other Segment Length   | N/A               |
|   | Number of parallel runs  | 2                 |
|   | Length   | 1275 feet per run |

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

| Facility ID | Call Sign |
|-------------|-----------|
| 23960       | WSB-TV    |
| 48813       | WUVG-DT   |
| 64033       | WPCH-TV   |

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72120

WGCL-TV

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**Primary  
Transmission  
Line**

**New Transmission Line**

| Section                                 | Question   | Response          |
|---|--|-------------------|
| <b>New Transmission Line Costs</b>      | Use  | Primary (Main)    |
|   | Description of Use                               | N/A               |
|   | Change Type                                      | Lease New         |
|   | Is this a request for upgraded equipment?        | No                |
|   | Type   | Rigid             |
|   | Diameter   | 8 3/16 inches     |
|   | Other Diameter                                   | N/A               |
|   | Segment Length                                   | 20 inches         |
|   | Other Segment Length                             | N/A               |
|   | Number of parallel runs                          | 2                 |
|   | Length   | 1275 feet per run |
| Justification for New Transmission Line | Line to be re-furbished and connectors replaced. |                   |

**Primary  
Transmission  
Line**

**Other Transmission Line Expenses Not Listed**

| Name                             | Description                                  |
|----------------------------------|--|
| <b>Gas Blocks</b>                | gas blocks                                   |
| <b>Interconnect tx line main</b> | 50' of 7-3/16" for connect to combiner.      |
| <b>TX line reducers</b>          | (2) 7-3/16" to 6-1/8" reducers               |
| <b>Interconnect tx line aux</b>  | 150' of 6-1/8" line for connect to combiner. |

**Interim  
Transmission  
Line**

**New Transmission Line**

| Section                            | Question                                | Response                 |
|------------------------------------|---|--------------------------|
| <b>New Transmission Line Costs</b> | Use                                     | Interim                  |
|                                    | Description of Use                      | N/A                      |
|                                    | Change Type                             | Lease New                |
|                                    | Type                                    | Rigid                    |
|                                    | Diameter                                | 8 3/16 inches            |
|                                    | Segment Length                          | Broadband                |
|                                    | Other Segment Length                    |                          |
|                                    | Number of parallel runs                 | 1                        |
|                                    | Length                                  | 1225 feet per run        |
|                                    | Justification for New Transmission Line | For interim site antenna |

**Interim  
Transmission  
Line**

**Other Transmission Line Expenses Not Listed**

Information not provided.



**Tower Equipment And Rigging Costs**

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

**Auxiliary Tower**

**Add Tower**

| Section   | Question  | Response           |
|---|---|--------------------|
| <b>Existing Tower Description</b>                         | Type of change  | Modify Existing    |
|   | Tower Use   | Auxiliary (Backup) |
|   | Description of Use                                      | Interim Tower      |
|   | 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?                          | Yes                |
| <b>Existing Tower Structure Registration</b>              | Do you have a tower registration number?                | Yes                |
|   | ASR Number  | 1206253            |
| <b>Coordinates (NAD83 (North American Datum of 1983))</b> | Latitude (NAD83)  | 33° 44' 40.9" N-   |
|   | Longitude (NAD83)                                       | 084° 21' 35.7" W-  |
|   | Overall Structure Height                                | 1080.04 feet       |
|   | Support Structure Height                                | 956.03 feet        |
|   | Ground Elevation Above Mean Sea Level (AMSL)            | 969.15 feet        |

|                  |   |
|------------------|---|
| Structure Type   | GTOWER -<br>Guyed<br>Structure Used<br>for<br>Communication<br>Purposes |
| Tower Owner      | American<br>Towers, LLC   |
| Date Constructed | 05/14/2002  |

**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 |
|-------------|-----------|---------|
| 48813       | WUVG-DT   | DTV     |
| 23959       | WRAS      | FM      |
| 68058       | WHSB-TV   | DTV     |
| 168094      | WYGA-CD   | DTV     |
| 64033       | WPCH-TV   | DTV     |
| 55108       | WIRE-CD   | DTV     |

**Auxiliary  
Tower**

**Tower Modification Costs**

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

**Auxiliary  
Tower**

**Tower Rigging Costs**

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

**Auxiliary  
Tower**

**Other Tower Expenses Not Listed**

| Name                         | Description   |
|------------------------------|---|
| <b>Interim Tower Mapping</b> | Structural tower mapping to ensure the proper structural information is relayed to engineering for the rigorous structural assessment for the proposed repack equipment.      |
| <b>Interim Tower Rent</b>    | Flat Rate Rental for Interim Use of the ATC Chester Avenue tower. Required while Primary Tower without disruption of the WUPA on-air signal. See Attachment 7A Section 1-B-1. |

**Primary Tower**

**Existing Tower**

| Section   | Question  | Response   |
|---|---|--|
| <b>Existing Tower Description</b>                         | 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?            | Unknown  |
|   | Is tower compliant with Rev G?                          | Unknown  |
| <b>Existing Tower Structure Registration</b>              | Do you have a tower registration number?                | Yes  |
|   | ASR Number  | 1223132  |
| <b>Coordinates (NAD83 (North American Datum of 1983))</b> | Latitude (NAD83)  | 33° 48' 26.4" N-   |
|   | Longitude (NAD83)                                       | 084° 20' 21.5" W-  |
|   | Overall Structure Height                                | 1182.07 feet   |
|   | Support Structure Height                                | 1056.09 feet   |
|   | Ground Elevation Above Mean Sea Level (AMSL)            | 867.12 feet  |
|   | Structure Type  | GTOWER - Guyed Structure Used for Communication Purposes |
|   | Tower Owner   | American Tower, LLC                                      |
|   | Date Constructed  | 03/27/2002   |

**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 |
|-------------|-----------|---------|
| 11275       | WWPW      | FM      |
| 13805       | WZGC      | FM      |
| 11675       | WCLK      | FM      |
| 22819       | WATL      | DTV     |
| 68058       | WHSB-TV   | DTV     |
| 23960       | WSB-TV    | DTV     |
| 64033       | WPCH-TV   | DTV     |
| 29735       | WUBL      | FM      |
| 54585       | WRFG      | FM      |
| 39735       | WSTT      | AM      |
| 73345       | WWWQ      | FM      |
| 73161       | WKHX-FM   | FM      |
| 72120       | WGCL-TV   | DTV     |
| 48813       | WUUG-DT   | DTV     |

**Primary  
Tower**

**Tower Modification Costs**

| Section                     | Question   | Response                               |
|-----------------------------|--|--|
| <b>Engineering Study</b>    | Please what type of engineering study is required, if any: | Study needed for tower with candelabra |
| <b>Tower Reinforcements</b> | Please select whether tower reinforcements are needed:     | Major Reinforcements needed            |

**Primary  
Tower**

**Tower Rigging Costs**

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

**Primary  
Tower**

**Other Tower Expenses Not Listed**

| <b>Name</b>                          | <b>Description</b>   |
|--------------------------------------|--|
| <b>Primary Tower Mapping</b>         | Structural tower mapping to ensure the proper structural information is relayed to engineering for the rigorous structural assessment for the proposed repack equipment. See Attachment 6A.                  |
| <b>Tower Construction Management</b> | (80) hours on Modification project management and RF installation project management for a total of twenty (30) days. See Attachment 6A Section 3-D-1.   |
| <b>Site Security</b>                 | Site security for installation and storage of Transmission line and materials for 9 days X 12 hours. These materials are a high risk of theft due to the material makeup such as copper, brass and aluminum. |

**Outside Professional Services Costs**

| <b>Section</b>  | <b>Question</b>  | <b>Response</b>   |
|---|--|---|
| <b>Outside Project Management Services</b>            | Do you require outside project management services?                          | Yes   |
|   | Number of Hours  | 250   |
|   | Explanation  | Station does not have adequate staff to handle this internally. |
| <b>Outside RF consulting Engineering Services</b>     | Perform engineering study for new channel assignment and antenna development | Yes   |
|   | Prepare engineering section of Form FCC Construction Permit Application      | Yes   |
|   | For Auxiliary Facility   | 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                              | No  |
|   | Quantity   | N/A   |
|   | Do you have Distributed Transmission System engineering services?            | N/A   |
|   | Critical Facility  | N/A   |
|   | Terrain-Shielded Facility  | N/A   |
| <b>Attorney and Other Outside Consulting Services</b> | Prepare and file Form FCC Construction Permit Application                    | No  |
|   | For Auxiliary Facility   | N/A   |
|   | For Main Facility  | N/A   |

|                                      |  |     |
|--------------------------------------|--|-----|
|                                      | Prepare and file Form FCC License to Cover Application                                     | No  |
|                                      | For Auxiliary Facility   | N/A |
|                                      | For Main Facility  | N/A |
|                                      | Prepare request for Special Temporary Authority  | No  |
|                                      | Quantity   | N/A |
|                                      | NEPA Section 106 environmental review  | No  |
|                                      | Environmental Assessment   | No  |
|                                      | ASR Modification   | No  |
|                                      | FAA Consultation (including preparation of FAA Form 7460)                                  | No  |
|                                      | Negotiation of Lease and other Matter for Shared Locations                                 | No  |
|                                      | Prepare or Review FCC Form 399 for Reimbursement   | No  |
|                                      | Address transition timing and coordination issues w/ other stations and wireless providers | No  |
| <b>RF Field Engineering Services</b> | Comprehensive coverage verification via field study  | No  |
|                                      | RF exposure measurements   | Yes |
|                                      | Additional Field Engineering Service   | No  |
|                                      | Number of Days   | N/A |
|                                      | Justification  | N/A |

**Other Professional Services Expenses Not Listed**

**Outside Professional Services Costs**

| Name            | Description  |
|-----------------|--|
| RF System Tests | RF system testing of the primary and interim combiners to ensure all frequencies are tuned for optimal performance. See Attachments 6 and 7 section 1-B-1. |



**Other Expenses**

| Section                             | Question   | Response |
|-------------------------------------|--|----------|
| <b>AM Pattern Disturbance</b>       | Is an Impact Study needed?   | No       |
|                                     | Is Remediation needed?   | No       |
| <b>Facility Expenses</b>            | Name   | N/A      |
|                                     | Other Distributed Transmission System Expenses Not listed  | N/A      |
|                                     | Name   | N/A      |
|                                     | Is Notification of a Medical Facility required as a result of DTV broadcasting?                                      | Yes      |
| <b>Permit and Filing Costs</b>      | Local Zoning   | 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  | No       |
| <b>Other Miscellaneous Expenses</b> | Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?        | Yes      |
|                                     | Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs? | Yes      |
|                                     | Does this relocation require Equipment Storage?  | No       |
|                                     | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?     | Yes      |
|                                     | Does this relocation require MVPD Notification of a Channel Change?  | Yes      |

**Other  
Expenses**

**Other Expenses Not Listed**

| <b>Name</b>                             | <b>Description</b>   |
|---|--|
| <b>ATC Proj Mgmt</b>                    | Tower construction project management by ATC. Site coordinations.  |
| <b>Interim site tx internal tx line</b> | Install / modify feed line to combiner and test.   |
| <b>Main tx internal tx line</b>         | Install / modify feed line to combiner and test.   |
| <b>Site Coordination Meetings</b>       | Site coordination meetings with all broadcasters, contractors and vendors involved with the site project. See Attachments 6 and 7 section 1-B-1.                               |
| <b>Address Transition Timing</b>        | Coordination and transition planning with all parties onsite and management of the timelines and schedules occurring during the repack. See Attachments 6 and 7 section 1-A-1. |

**Cost Information**

**Transmitters**

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

| Description   | Predetermined Cost Estimate | Estimated Cost        | Estimated Cost Justification   | Actual Cost         | Actual Cost Justification  |
|---|-----------------------------|-----------------------|--|---------------------|--|
| <b>Interim Transmitter ULXTE-72</b>   | <b>\$1,604,100.00</b>       | <b>\$1,470,879.22</b> |  | <b>\$758,547.26</b> |  |
| Transmitter Control   | <i>\$0.00</i>               | \$0.00                | It is now understood that the FCC has deemed that transmitter controls are not a reimbursable expense.                       | \$0.00              | Includes Shipping and 8% State Sales Tax. See quote provided as Attachment 13. |
| Other Electrical Service: Electrical work including labor and materials not listed elsewhere. See Exhibit 7 | <i>\$52,500.00</i>          | \$52,500.00           | See Exhibit 7. (Note: Original 399 Filing reversed Primary and Interim Costs. This was corrected in a April, 2018 revision.) | \$0.00              | N/A  |
| 4" Rigid Conduit and Wiring (Cost per foot)   | \$40,400.00                 | \$38,400.00           | N/A  | N/A                 | N/A  |
| Switchgear - industrial 800 amp   | \$38,200.00                 | \$36,300.00           | N/A  | N/A                 | N/A  |

|  |                       |                       |  |                     |     |
|--|-----------------------|-----------------------|--|---------------------|-----|
| UHF -<br>Liquid<br>Cooled<br>Solid State<br>Transmitter<br>35 - 50 kW  | \$1,473,000.00        | \$1,343,679.22        | Includes<br>Transmitter,<br>Mask Filter,<br>RF<br>Accessories,<br>Electrical,<br>Installation &<br>Proof, Tax,<br>and Shipping.<br>See May<br>2018<br>Statement,<br>Attachment<br>5B, which<br>supersedes<br>Attachments<br>5 and 5A.                  | \$758,547.26        | N/A |
| <b>Primary<br/>Transmitter<br/>ULXTE-100</b>   | <b>\$1,946,500.64</b> | <b>\$1,942,600.64</b> |  | <b>\$647,562.12</b> |     |
| Other<br>Electrical<br>Service:<br>Electrical<br>work.<br>Includes<br>labor and<br>materials<br>not already<br>listed. | <i>\$47,500.00</i>    | \$47,500.00           | Electrical<br>service<br>required for<br>new<br>transmitter<br>and<br>transmitter<br>cooling<br>equipment.<br>(Note:<br>Original 399<br>Filing<br>reversed<br>Primary and<br>Interim Costs.<br>This was<br>corrected in a<br>April, 2018<br>revision.) | N/A                 | N/A |
| 4" Rigid<br>Conduit and<br>Wiring<br>(Cost per<br>foot)  | \$30,300.00           | \$28,800.00           | N/A  | N/A                 | N/A |

|  |                       |                       |   |                       |            |
|--|-----------------------|-----------------------|---|-----------------------|------------|
| Transformer<br>3 phase<br>/480v - 500<br>KVA                       | \$48,400.00           | \$46,000.00           | N/A   | N/A                   | N/A        |
| UHF -<br>Liquid<br>Cooled<br>Solid State<br>Transmitter<br>62.9 kW | <b>\$1,820,300.64</b> | \$1,820,300.64        | Present<br>transmitter<br>cannot be re-<br>tuned per<br>manufacturer.<br>Solid state<br>transmitter<br>cost is less<br>than<br>replacement<br>IOT<br>transmitter.<br>Includes<br>Shipping,<br>Tax, and<br>Installation.<br>See<br>Attachment<br>2A. | \$647,562.12          | N/A        |
| <b>Auxiliary<br/>Transmitter<br/>NV8303</b>                        | <b>\$108,230.00</b>   | <b>\$2,800.00</b>     |   | <b>\$0.00</b>         |            |
| UHF and<br>VHF - minor<br>banding<br>issues                        | \$105,200.00          | \$0.00                | N/A   | N/A                   | N/A        |
| 1.5 kW<br>mask filter  | \$3,030.00            | \$2,800.00            | N/A   | N/A                   | N/A        |
| <b>Sub-total</b>   | <b>\$3,658,830.64</b> | <b>\$3,416,279.86</b> | <b>N/A</b>  | <b>\$1,406,109.38</b> | <b>N/A</b> |
| <b>Total for all<br/>systems</b>                                   | <b>\$8,235,812.31</b> | <b>\$4,631,940.70</b> | <b>N/A</b>  | <b>\$1,722,113.81</b> | <b>N/A</b> |

## Components

| Actual Information<br>Description | File Name |
|-----------------------------------|-----------|
|-----------------------------------|-----------|

|   |  |
|---|--|
| Transmitter Control   | <p><b>Component Description:</b> Excludes \$1,200 Annual Support Contract at Primary Site which is not a Repack Related Expense. Adds Shipping not shown on original estimate, Attachment 13.</p> <p><b>Amount:</b> \$4,755.00</p>   |
| Other Electrical Service: Electrical work including labor and materials not listed elsewhere. See Exhibit 7 | Information not provided.  |
| 4" Rigid Conduit and Wiring (Cost per foot)   | Information not provided.  |
| Switchgear - industrial 800 amp   | Information not provided.  |
| UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW  | <p><b>Component Description:</b> Interim Transmitter Down Payment. Please see May 2018 Statement and Attachment 5B.</p> <p><b>Amount:</b> \$379,273.63</p> <p><b>Component Description:</b> Interim transmitter progress payment. See May 2018 Statement and Attachment 5B.</p> <p><b>Amount:</b> \$379,273.63</p> |
| Other Electrical Service: Electrical work. Includes labor and materials not already listed.                 | Information not provided.  |

|  |   |
|--|---|
| 4" Rigid Conduit and Wiring<br>(Cost per foot)         | Information not provided.   |
| Transformer 3 phase/480v<br>- 500 KVA                  | Information not provided.   |
| UHF - Liquid Cooled Solid<br>State Transmitter 62.9 kW | <p><b>Component Description:</b> Primary<br/>Transmitter Down<br/>Payment. We are<br/>installing a model<br/>ULXTE-120<br/>transmitter but<br/>seeking<br/>reimbursement for<br/>a comparable<br/>ULXTE-100 model.<br/>Quotes for both are<br/>in Attachment 8E.<br/>This invoice<br/>excludes tax and<br/>shipping.</p> <p><b>Amount:</b> \$647,562.12</p> |
| UHF and VHF - minor<br>banding issues                  | Information not provided.   |
| 1.5 kW mask filter                                     | Information not provided.   |

**Cost Information**

**Antennas**

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

| Description  | Predetermined Cost Estimate | Estimated Cost      | Estimated Cost Justification          | Actual Cost        | Actual Cost Justification |
|--|-----------------------------|---------------------|---------------------------------------|--------------------|---------------------------|
| <b>Interim Antenna PEPL48D-C170-2-6</b>  | <b>\$196,675.00</b>         | <b>\$115,395.00</b> |                                       | <b>\$28,848.75</b> |                           |
| Combiner Installation  | <i>\$5,000.00</i>           | \$5,000.00          | See EXHIBIT                           | \$1,250.00         | N/A                       |
| Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)                         | \$18,950.00                 | \$3,600.00          | N/A                                   | \$900.00           | N/A                       |
| New combiner, cost per channel (without antenna)   | \$84,200.00                 | \$22,500.00         | N/A                                   | \$5,625.00         | N/A                       |
| Sweep test of existing antenna   | \$6,730.00                  | \$2,500.00          | N/A                                   | \$625.00           | N/A                       |
| UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized | <i>\$81,795.00</i>          | \$81,795.00         | To accommodate move. See Attachment 7 | \$20,448.75        | N/A                       |



|  |                       |                     |   |                     |            |
|--|-----------------------|---------------------|---|---------------------|------------|
| <b>Primary Antenna 14 bay, 4 around,, 56 ele total</b>   | <b>\$1,216,980.00</b> | <b>\$308,213.00</b> |   | <b>\$77,053.25</b>  |            |
| Dielectric Combiner Installation   | <i>\$17,100.00</i>    | \$17,100.00         | Cost includes removal of existing combiner. See Attachment 6B, Section 3-C-2. | \$4,275.00          | N/A        |
| UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized | \$1,090,000.00        | \$202,113.00        | See Attachment 6B, Section 3B. This is WUPA's pro rata share.                 | \$50,528.25         | N/A        |
| Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)   | \$18,950.00           | \$18,000.00         | See Attachment 6B, Section 3-C-2  | \$4,500.00          | N/A        |
| New combiner, cost per channel (without antenna)   | \$84,200.00           | \$66,000.00         | See Attachment 6B Section 3-C-1   | \$16,500.00         | N/A        |
| Sweep test of existing antenna   | \$6,730.00            | \$5,000.00          | See Attachment 6B, Section 3-C-2  | \$1,250.00          | N/A        |
| <b>Sub-total</b>   | <b>\$1,413,655.00</b> | <b>\$423,608.00</b> | N/A   | <b>\$105,902.00</b> | <b>N/A</b> |

|                              |                |                |     |                |     |
|------------------------------|----------------|----------------|-----|----------------|-----|
| <b>Total for all systems</b> | \$8,235,812.31 | \$4,631,940.70 | N/A | \$1,722,113.81 | N/A |
|------------------------------|----------------|----------------|-----|----------------|-----|

## Components

| Actual Information   |  |
|--|--|
| Description  | File Name  |
| Combiner Installation  | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Combiner Installation, Attachment 7A section 3-C-2.</p> <p><b>Amount:</b> \$1,250.00</p> |
| Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed) | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Antenna Elbow Complex, Attachment 7A section 3-C-2.</p> <p><b>Amount:</b> \$900.00</p>   |

|   |  |
|---|--|
| <p>New combiner, cost per channel (without antenna)</p>   | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Combiner, Attachment 7A section 3-C-1.</p> <p><b>Amount:</b> \$5,625.00</p>              |
| <p>Sweep test of existing antenna</p>   | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Antenna Line Sweep Test, Attachment 7A section 3-C-2.</p> <p><b>Amount:</b> \$625.00</p> |
| <p>UHF - High Power Top Mount Five Station broadband panel antenna elliptically or circularly polarized</p> | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Antenna, Attachment 7A section 3-B.</p> <p><b>Amount:</b> \$20,448.75</p>                |

|   |   |
|---|---|
| <p>Dielectric Combiner Installation</p>   | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Combiner Installation, Attachment 6B section 3-C-2.</p> <p><b>Amount:</b> \$4,275.00</p> |
| <p>UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized</p> | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Antenna, Attachment 6B section 3-B.</p> <p><b>Amount:</b> \$50,528.25</p>                |
| <p>Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)</p>   | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Antenna Elbow Complex, Attachment 6B section 3-C-2.</p> <p><b>Amount:</b> \$4,500.00</p> |

|   |  |
|---|--|
| <p>New combiner, cost per channel (without antenna)</p> | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Combiner, Attachment 6B section 3-C-1.</p> <p><b>Amount:</b> \$16,500.00</p>                  |
| <p>Sweep test of existing antenna</p>                   | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Antenna Line RF Sweep Test, Attachment 6B section 3-C-2.</p> <p><b>Amount:</b> \$1,250.00</p> |

**Cost Information**

**Transmission Line**

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

| Description   | Predetermined Cost Estimate | Estimated Cost      | Estimated Cost Justification   | Actual Cost        | Actual Cost Justification |
|---|-----------------------------|---------------------|--|--------------------|---------------------------|
| <b>Interim Transmission Line</b>                    | <b>\$488,775.00</b>         | <b>\$46,121.00</b>  |  | <b>\$11,530.25</b> |                           |
| Rigid Transmission Line - copper, 8 3/16" broadband | \$488,775.00                | \$46,121.00         | N/A  | \$11,530.25        | N/A                       |
| <b>Primary Transmission Line</b>                    | <b>\$943,950.00</b>         | <b>\$130,933.50</b> |  | <b>\$17,958.38</b> |                           |
| Interconnect tx line aux                            | <i>\$28,800.00</i>          | \$28,800.00         | Aux transmitter interconnect to combiner. 150ft of 6-1/8" rigid copper line. | N/A                | N/A                       |
| TX line reducers                                    | <i>\$4,500.00</i>           | \$4,500.00          | Required for line adapter from 7-3/16" to 6-1/8" combiner aux interconnect.  | N/A                | N/A                       |
| Interconnect tx line main                           | <i>\$13,800.00</i>          | \$13,800.00         | 50ft of 7-3/16" line for main tx connect to combiner. Published price.       | N/A                | N/A                       |

|   |                    |                |   |                |     |
|---|--------------------|----------------|---|----------------|-----|
| Rigid Transmission Line - copper, 8 3/16" | \$884,850.00       | \$71,833.50    | Primary Site Transmission Line (pro rata share). See Attachment 6B section 3-A. | \$17,958.38    | N/A |
| Gas Blocks                                | <i>\$12,000.00</i> | \$12,000.00    | Required for aux interconnect to combiner                                       | N/A            | N/A |
| <b>Sub-total</b>                          | \$1,432,725.00     | \$177,054.50   | N/A   | \$29,488.63    | N/A |
| <b>Total for all systems</b>              | \$8,235,812.31     | \$4,631,940.70 | N/A   | \$1,722,113.81 | N/A |

### Components

| Actual Information                                  |   |
|---|---|
| Description   | File Name   |
| Rigid Transmission Line - copper, 8 3/16" broadband | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Transmission Line, Attachment 7A section 3-A.</p> <p><b>Amount:</b> \$11,530.25</p> |
| Interconnect tx line aux                            | Information not provided.   |
| TX line reducers                                    | Information not provided.   |
| Interconnect tx line main                           | Information not provided.   |

|  |  |
|--|--|
| <p>Rigid Transmission Line - copper, 8 3/16"</p> | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Transmission Line, Attachment 6B section 3-A.</p> <p><b>Amount:</b> \$17,958.38</p> |
| <p>Gas Blocks</p>                                | <p>Information not provided.</p>   |



**Cost Information**

**Tower Equipment and Rigging Costs**

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

| Description  | Predetermined Cost Estimate | Estimated Cost      | Estimated Cost Justification  | Actual Cost        | Actual Cost Justification |
|--|-----------------------------|---------------------|---|--------------------|---------------------------|
| <b>Primary Tower GTOWER</b>  | <b>\$882,066.67</b>         | <b>\$320,083.34</b> |   | <b>\$80,020.84</b> |                           |
| Tower Construction Management  | <i>\$10,000.00</i>          | \$10,000.00         | Modification project management and RF installation project management - Flat Fee. See Attachment 6B section 3-D-1. | \$2,500.00         | N/A                       |
| Structural engineering tower load study for a documented tower with candelabra | \$20,000.00                 | \$6,516.67          | Pro-Rata Share. See Attachment 6B Section 3-A-1   | \$1,629.17         | N/A                       |

|                       |                          |            |   |            |     |
|-----------------------|--------------------------|------------|---|------------|-----|
| Primary Tower Mapping | <b><i>\$8,266.67</i></b> | \$8,266.67 | Structural tower mapping to ensure the proper structural information is relayed to engineering for the rigorous structural assessment for the proposed repack equipment. See Attachment 6B section 3-A-1.                                     | \$2,066.67 | N/A |
| Site Security         | <b><i>\$1,800.00</i></b> | \$1,800.00 | Site security for installation and storage of Transmission line and materials for 9 days X 12 hours. These materials are a high risk of theft due to the material makeup such as copper, brass and aluminum. See Attachment 6B Section 1-B-1. | \$450.00   | N/A |

|  |                     |                     |   |                    |     |
|--|---------------------|---------------------|---|--------------------|-----|
| Complex Tower<br>(includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00        | \$136,000.00        | N/A   | \$34,000.00        | N/A |
| Major tower reinforcement /modifications   | \$421,000.00        | \$157,500.00        | N/A   | \$39,375.00        | N/A |
| <b>Auxiliary Tower GTOWER</b>  | <b>\$659,080.00</b> | <b>\$124,580.00</b> |   | <b>\$73,708.75</b> |     |
| Interim Tower Rent   | <i>\$57,600.00</i>  | \$57,600.00         | Flat rate for rental of interim tower while work is being done at the primary tower required to permit stations to continue broadcasting during modification in a safe and timely manner. See Attachment 6A, section 1-B-1. | \$57,600.00        | N/A |

|   |                   |                |  |                |     |
|---|-------------------|----------------|--|----------------|-----|
| Interim Tower Mapping   | <i>\$2,480.00</i> | \$2,480.00     | Structural tower mapping to ensure the proper structural information is relayed to engineering for the rigorous structural assessment for the proposed repack equipment. See Attachment 7 section 3-A-1. | \$620.00       | N/A |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00      | \$45,000.00    | N/A  | \$11,250.00    | N/A |
| Minor tower reinforcement /modifications  | \$158,000.00      | \$15,000.00    | N/A  | \$3,750.00     | N/A |
| Structural engineering tower load study for a documented tower with candelabra        | \$20,000.00       | \$4,500.00     | N/A  | \$488.75       | N/A |
| <b>Sub-total</b>  | \$1,541,146.67    | \$444,663.34   | N/A  | \$153,729.59   | N/A |
| <b>Total for all systems</b>  | \$8,235,812.31    | \$4,631,940.70 | N/A  | \$1,722,113.81 | N/A |

## Components

| Actual Information Description   | File Name   |
|--|---|
| Tower Construction Management  | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Tower Construction Management, Attachment 6B section 3-D-1.</p> <p><b>Amount:</b> \$2,500.00</p> |
| Structural engineering tower load study for a documented tower with candelabra | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Tower Structural Analysis, Attachment 6B section 3-A-1.</p> <p><b>Amount:</b> \$1,629.17</p>     |
| Primary Tower Mapping  | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Tower Mapping, Attachment 6B section 3-A-1.</p> <p><b>Amount:</b> \$2,066.67</p>                 |

|  |  |
|--|--|
| <p>Site Security</p>   | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Site Security, Attachment 6B section 1-B-1.</p> <p><b>Amount:</b> \$450.00</p>          |
| <p>Complex Tower (includes, for example, those with candelabras and/or stacked antennas)</p> | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Tower Rigging, Attachment 6B section 3-C-1.</p> <p><b>Amount:</b> \$34,000.00</p>       |
| <p>Major tower reinforcement /modifications</p>  | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Tower Reinforcement, Attachment 6B section 3-C-2.</p> <p><b>Amount:</b> \$39,375.00</p> |

|   |   |
|---|---|
| Interim Tower Rent  | <p><b>Component Description:</b> Interim Tower Rental - Flat Rate. See Attachment 6A, section 1-B-1.</p> <p><b>Amount:</b> \$57,600.00</p>  |
| Interim Tower Mapping   | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Tower Mapping, Attachment 7A section 3-A-1.</p> <p><b>Amount:</b> \$620.00</p>            |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Tower Complex Rigging, Attachment 7A section 3-C-1.</p> <p><b>Amount:</b> \$11,250.00</p> |

|   |  |
|---|--|
| <p>Minor tower reinforcement /modifications</p>                                       | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Tower Reinforcement, Attachment 7A section 3-A-2.</p> <p><b>Amount:</b> \$3,750.00</p>     |
| <p>Structural engineering tower load study for a documented tower with candelabra</p> | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Tower Structural Analysis, Attachment 7A section 3-A-1.</p> <p><b>Amount:</b> \$488.75</p> |



**Cost Information**

**Outside Professional Services**

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

| Description  | Predetermined Cost Estimate | Estimated Cost     | Estimated Cost Justification  | Actual Cost        | Actual Cost Justification |
|--|-----------------------------|--------------------|---|--------------------|---------------------------|
| <b>Outside Professional Services</b>   | <b>\$82,645.00</b>          | <b>\$70,825.00</b> |   | <b>\$12,194.17</b> |                           |
| RF System Tests  | <i>\$10,000.00</i>          | \$10,000.00        | Testing of the primary and interim combiners to ensure all frequencies are tuned for optimal patterns. See Attachments 6A and 7A section 1-B-1. | \$2,500.00         | N/A                       |
| RF Exposure Measurements   | \$21,050.00                 | \$8,000.00         | N/A   | \$1,250.00         | 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   | \$1,625.00         | N/A                       |

|  |                |                |  |                |     |
|--|----------------|----------------|--|----------------|-----|
| Perform engineering study for new channel assignment and antenna development | \$7,360.00     | \$10,825.00    | Engineering studies for new channel assignment and antenna development.<br>See Attachments 6 and 7 section 1-A-1 (\$5,000 each) and Attachment 16 (\$825). | \$3,325.00     | N/A |
| Project management of the transition   | \$39,500.00    | \$37,500.00    | N/A  | \$3,494.17     | N/A |
| <b>Sub-total</b>   | \$82,645.00    | \$70,825.00    | N/A  | \$12,194.17    | N/A |
| <b>Total for all systems</b>   | \$8,235,812.31 | \$4,631,940.70 | N/A  | \$1,722,113.81 | N/A |

### Components

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

|   |  |
|---|--|
| RF System Tests   | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Combiner Tests, Attachment 6B section 1-B-1.</p> <p><b>Amount:</b> \$1,250.00</p> <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Combiner Tests, Attachment 7A section 1-B-1.</p> <p><b>Amount:</b> \$1,250.00</p> |
| RF Exposure Measurements  | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Antenna RF Exposure Measurements, Attachment 6B section 1-A-4.</p> <p><b>Amount:</b> \$1,250.00</p>   |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | Information not provided.  |

|   |                                      |  |
|---|--------------------------------------|--|
| <p>Prepare engineering section of FCC Form 2100 (main), Construction Permit Application</p> | <p><b>Component Description:</b></p> | <p>Develop final ERP and operating parameters for Construction Permit application. See Attachment 16.</p>  |
|   | <p><b>Amount:</b></p>                | <p>\$1,625.00</p>  |
| <p>Perform engineering study for new channel assignment and antenna development</p>         | <p><b>Component Description:</b></p> | <p>Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B). This amount is 25% of primary antenna development, Attachment 6B section 1-A-2.</p> |
|   | <p><b>Amount:</b></p>                | <p>\$1,250.00</p>  |
|   | <p><b>Component Description:</b></p> | <p>Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Antenna Development, Attachment 7A section 1-A-2.</p>  |
|   | <p><b>Amount:</b></p>                | <p>\$1,250.00</p>  |
|   | <p><b>Component Description:</b></p> | <p>Conduct preliminary review of repacked channel with prospective shared antenna. See Attachment 16.</p>  |
|   | <p><b>Amount:</b></p>                | <p>\$825.00</p>  |

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Project management of the transition

**Component Description:**

Project Management and Repack Implementation. Review American Tower site plans.

**Amount:**

\$337.50

**Component Description:**

Project Management and Repack Implementation. Please see Attachment 15.

**Amount:**

\$3,156.67

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**Cost Information**

**Other Expenses**

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

| Description  | Predetermined Cost Estimate | Estimated Cost     | Estimated Cost Justification   | Actual Cost        | Actual Cost Justification |
|--|-----------------------------|--------------------|--|--------------------|---------------------------|
| <b>Other Expenses</b>  | <b>\$106,810.00</b>         | <b>\$99,510.00</b> |  | <b>\$14,690.04</b> |                           |
| Equipment Delivery and Handling Charges                                  | <i>\$15,000.00</i>          | \$15,000.00        | N/A  | \$2,083.33         | N/A                       |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$20,000.00</i>          | \$20,000.00        | Remove and dispose of transmitter and associated non-reused equipment.   | \$666.71           | N/A                       |
| Address Transition Timing  | <i>\$5,000.00</i>           | \$5,000.00         | Coordination and transition planning with all parties onsite and management of the timelines and schedules occurring during the repack. See Attachments 6B and 7A section 1-A-1. | \$1,250.00         | N/A                       |

|                                  |                           |             |  |            |     |
|----------------------------------|---------------------------|-------------|--|------------|-----|
| ATC Proj Mgmt                    | <b><i>\$18,960.00</i></b> | \$18,960.00 | American Tower project management and oversight for primary tower. See Attachments 6B and 7A, section 1-A-1.                                     | \$4,740.00 | N/A |
| Non-zoning permits               | <b><i>\$20,300.00</i></b> | \$20,300.00 | Prepare drawings for permits and permit filing costs for Main and Interim tower work. See Attachments 6B and 7, sections 3-D-1 and 1-A-3.        | \$5,075.00 | N/A |
| Site Coordination Meetings       | <b><i>\$3,500.00</i></b>  | \$3,500.00  | Site coordination meetings with all broadcasters, contractors and vendors involved with the site project. See Attachments 6 and 7 section 1-B-1. | \$875.00   | N/A |
| Main tx internal tx line         | <b><i>\$7,000.00</i></b>  | \$7,000.00  | Install line from transmitter to combiner and test.  | N/A        | N/A |
| Interim site tx internal tx line | <b><i>\$4,000.00</i></b>  | \$4,000.00  | Install line from transmitter to combiner and test.  | N/A        | N/A |

|   |                |                |     |                |     |
|---|----------------|----------------|-----|----------------|-----|
| MVPD Notification of Channel Change                     | \$1,500.00     | \$1,500.00     | N/A | N/A            | N/A |
| Develop and air announcement of upcoming channel change | \$0.00         | \$0.00         | N/A | N/A            | N/A |
| DTV Medical Facility Notification                       | \$11,550.00    | \$4,250.00     | N/A | N/A            | N/A |
| <b>Sub-total</b>  | \$106,810.00   | \$99,510.00    | N/A | \$14,690.04    | N/A |
| <b>Total for all systems</b>                            | \$8,235,812.31 | \$4,631,940.70 | N/A | \$1,722,113.81 | N/A |

## Components

| Actual Information                      |   |
|---|---|
| Description                             | File Name   |
| Equipment Delivery and Handling Charges | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Tower Equipment Delivery and Handling, Attachment 6B section 1-A-4.</p> <p><b>Amount:</b> \$2,083.33</p> |



|  |                                      |  |
|--|--------------------------------------|--|
| Disposal Costs (for equipment and other waste, net of any salvage value) | <p><b>Component Description:</b></p> | <p>Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Site Disposal Costs, Attachment 6B section 1-A-4.</p>             |
|  | <p><b>Amount:</b></p>                | <p>\$666.71</p>  |
| Address Transition Timing  | <p><b>Component Description:</b></p> | <p>Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Tower Address Transition Timing, Attachment 6B section 1-A-1.</p> |
|  | <p><b>Amount:</b></p>                | <p>\$625.00</p>  |
|  | <p><b>Component Description:</b></p> | <p>Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Address Transition Timing, Attachment 7A section 1-A-1.</p>        |
|  | <p><b>Amount:</b></p>                | <p>\$625.00</p>  |

ATC Proj Mgmt

**Component Description:**

Invoice is 25%  
Down Payment for  
\$187,690.00 ATC  
primary site quote.  
(See Attachment  
6B.) This amount  
is 25% of Primary  
Tower Project  
Management,  
Attachment 6B  
section 1-A-1.

**Amount:**

\$2,370.00

**Component Description:**

Invoice is 25%  
Down Payment for  
\$64,770.25 ATC  
interim site quote.  
(See Attachment  
7A). This amount  
is 25% of Interim  
Tower Project  
Management,  
Attachment 7A  
section 1-A-1.

**Amount:**

\$2,370.00

Non-zoning permits

**Component Description:**

Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Building and Tower drawings and building permit fees. See Attachment 6B sections 3-D-1 (\$1,175 plus \$1,175) and 1-A-3 (\$187.50).

**Amount:**

\$2,537.50

**Component Description:**

Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Building and Tower drawings and building permit fees. See Attachment 7A sections 3-D-1 and 1-A-3.

**Amount:**

\$2,537.50

|   |  |
|---|--|
| Site Coordination Meetings                              | <p><b>Component Description:</b> Invoice is 25% Down Payment for \$187,690.00 ATC primary site quote. (See Attachment 6B.) This amount is 25% of Primary Site Coordination Meetings, Attachment 6B section 1-B-1.</p> <p><b>Amount:</b> \$625.00</p> <p><b>Component Description:</b> Invoice is 25% Down Payment for \$64,770.25 ATC interim site quote. (See Attachment 7A). This amount is 25% of Interim Site Coordination Meetings, Attachment 7A section 1-B-1.</p> <p><b>Amount:</b> \$250.00</p> |
| Main tx internal tx line                                | Information not provided.  |
| Interim site tx internal tx line                        | Information not provided.  |
| MVPD Notification of Channel Change                     | Information not provided.  |
| Develop and air announcement of upcoming channel change | Information not provided.  |
| DTV Medical Facility Notification                       | Information not provided.  |

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

|                              | <b>Predetermined Cost Estimate</b> | <b>Estimated Cost</b> | <b>Actual Cost</b> |
|------------------------------|------------------------------------|-----------------------|--------------------|
| <b>Total for all systems</b> | \$8,235,812.31                     | \$4,631,940.70        | \$1,722,113.81     |

**Reimbursement Status**

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

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

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

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

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Andrew J Siegel**  
*Assistant Secretary*

11/09/2018



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

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

8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

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

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Andrew J Siegel**  
*Assistant Secretary*

11/09/2018

## Attachments