



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **69300** | Service: **DTS** | Call **WUNF-TV** | Channel: **20 (UHF)** |  
ID: | Sign:  
File **0000033807**  
Number:  
FRN: **0001910066** | Date **01/21**  
Submitted: **/2020**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant                           | Address                   | Phone       | Email                    | Applicant Type       |
|-------------------------------------|---------------------------|-------------|--------------------------|----------------------|
| <b>University of North Carolina</b> | PO Box 14900<br>Research  | +1<br>(919) | fcc_notice@unctv.<br>org | Government<br>Entity |
| Doing Business As:                  | Triangle Park,            | 549-        |                          |                      |
| University of North Carolina        | NC 27709<br>United States | 7000        |                          |                      |

## 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>Donald Smith</b>                 | Donald Smith                    | +1 (919) | dsmith@unctv. |
| <i>Director of New Technologies</i> | 10 T.W. Alexander               | 549-7025 | org           |
| <i>Compliance &amp; Planning</i>    | Drive                           |          |               |
| <i>University of North Carolina</i> | Research Triangle               |          |               |
| <i>Center for Public Television</i> | Park, NC 27709<br>United States |          |               |

**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. | No  |
| Briefly describe transition plan   | WUNF-TV is a DTS station with 2 sites. The transition plan for WUNF-TV is to construct a new facility at a different site for site #1 due to issues outlined in the unable to construct waiver request. Site #2 will be constructed at the existing site. |

**Transmitters**

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

**Auxiliary  
Transmitter****Add Transmitter Information**

| Section   | Question  | Response              |
|---|---|-----------------------|
| <b>Existing Transmitter<br/>Description</b>           | Type of change  | Purchase<br>New       |
|   | Use   | Auxiliary<br>(Backup) |
|   | Description of Use  | Auxiliary -<br>Site 1 |
|   | Ownership   | Owned                 |
|   | Owner   | N/A                   |
|   | Site  | N/A                   |
|   | Is this transmitter currently shared with<br>another station? | No                    |
|   | Is this transmitter currently in operating<br>condition?      | Yes                   |
| <b>Existing Transmitter<br/>Manufacturer and Type</b> | Manufacturer  |                       |
|   | Model   | LU2500ATD             |
|   | Year  | 2008                  |
|   | Type  | Solid State           |
|   | Solid State Cooling   | Air Cooled            |
|   | Solid State Power Capacity                                    | 2.5 kW                |

**Auxiliary  
Transmitter****New Transmitter Costs**

| Section                | Question                                  | Response   |
|------------------------|---|--|
| <b>New Transmitter</b> | Use                                       | Auxiliary<br>(Backup)  |
|                        | Change Type                               | Purchase<br>New  |
|                        | Is this a request for upgraded equipment? | No   |
|                        | Manufacturer                              |  |
|                        | Model                                     | ULXTE-30   |
|                        | Transmitter Type                          | Solid State  |
|                        | Solid State Cooling                       | Liquid<br>Cooled   |
|                        | Solid State Power capacity                | 16 kW  |
|                        | Justification for New Transmitter         | A different<br>site is<br>having to<br>be used<br>due to the<br>inability to<br>construct<br>the new<br>channel<br>facility at<br>the existing<br>channel 25<br>site.#1. |

**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**

| Section   | Question   | Response                 |
|---|--|--------------------------|
| <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   | 1                        |
|   | 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  | DCX-2                    |
|   | Year   | 1996                     |
|   | Type   | Inductive<br>Output Tube |
|   | IOT Power Type   | Two                      |
|   | Power Capacity   | 40 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-100  |
|                 | Transmitter Type                          | Solid State  |
|                 | Solid State Cooling                       | Liquid<br>Cooled   |
|                 | Solid State Power capacity                | 53.5 kW  |
|                 | Justification for New Transmitter         | A different<br>site is<br>having to<br>be used<br>due to the<br>inability to<br>construct<br>the new<br>channel<br>facility at<br>the existing<br>channel 25<br>site.#1. |

**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  | 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 |

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



**Primary  
Transmitter**

**Existing Transmitter Information**

| Section   | Question   | Response          |
|---|--|-------------------|
| <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   | 2                 |
|   | 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  | LU250             |
|   | Year   | 2003              |
|   | Type   | Solid State       |
|   | Solid State Cooling  | Air Cooled        |
|   | Solid State Power Capacity                                 | 0.25 kW           |

**Primary  
Transmitter**

**New Transmitter Costs**

| Section         | Question                                  | Response   |
|-----------------|---|--|
| New Transmitter | Use                                       | Primary (Main)   |
|                 | Change Type                               | Purchase New   |
|                 | Is this a request for upgraded equipment? | No   |
|                 | Manufacturer                              |  |
|                 | Model                                     | TXUD-250   |
|                 | Transmitter Type                          | Solid State  |
|                 | Solid State Cooling                       | Air Cooled   |
|                 | Solid State Power capacity                | 0.25 kW  |
|                 | Justification for New Transmitter         | The transmitter support company has indicated that they may be able to provide re-channelization proposals for some models. At this time they have failed to provide a proposal. See attachment for further details. |

**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  | 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 |

**Primary**

**Transmitter**

**Other Transmitter Cost Not Listed**

Information not provided.

**Antennas**

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

## Auxiliary Antenna

### Add Antenna Information

| Section                                   | Question   | Response              |
|---|--|-----------------------|
| Existing Antenna<br>Description           | Type of change   | Purchase<br>New       |
|   | Antenna Use  | Auxiliary<br>(Backup) |
|   | Description of Use   | Auxiliary -<br>Site 1 |
|   | Ownership  | Owned                 |
|   | Owner  | N/A                   |
|   | Site   | N/A                   |
|   | Is this antenna currently shared with any<br>other stations?       | No                    |
|   | Is this antenna directional?                                       | Yes                   |
|   | Is antenna in operating condition?                                 | Yes                   |
|   | Is antenna located on or in close proximity<br>to an antenna farm? | No                    |
| Existing Antenna<br>Manufacturer and Type | Class  | Full Power            |
|   | Mounting   | Side Mount            |
|   | Antenna position in stack  | Not in Stack          |
|   | Polarization   | Horizontal            |
|   | Type   | Slotted<br>Coaxial    |
|   | Number of Stations Supported                                       | N/A                   |
|   | Number of Panels   | N/A                   |
|   | Design power capacity in use                                       | N/A                   |
|   | Lower Limit  | N/A                   |
|   | Upper Limit  | N/A                   |
|   | Other Antenna Type   | N/A                   |
|   | ERP: (Effective Radiated Power)<br>.....                           | 113.5 kW              |

|              |             |
|--------------|-------------|
| Manufacturer |             |
| Model        | TFU-16DSB-M |
| Year         | 2003        |

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Auxiliary  
Antenna

New Antenna Costs

| Section                               | Question   | Response              |
|---------------------------------------|--|-----------------------|
| New Antenna Description               | Use  | Auxiliary<br>(Backup) |
|                                       | Description of Use   | Auxiliary             |
|                                       | Change Type  | Purchase<br>New       |
|                                       | Is this a request for upgraded equipment?                            | Yes                   |
|                                       | Ownership  | Owned                 |
|                                       | Owner  | N/A                   |
|                                       | Is antenna shared?   | No                    |
|                                       | Is antenna directional?  | Yes                   |
|                                       | Will antenna be located on or in close proximity to an antenna farm? | No                    |
| New Antenna<br>Manufacturer and Types | Class  | Full Power            |
|                                       | Mounting   | Side Mount            |
|                                       | Antenna position in stack  | Not in Stack          |
|                                       | Polarization   | Elliptical            |
|                                       | Type   | Slotted<br>Coaxial    |
|                                       | Number of Stations Supported   | N/A                   |
|                                       | Number of Panels/Bays  | N/A                   |
|                                       | Lower Limit  | N/A                   |
|                                       | Upper Limit  | N/A                   |
|                                       | Design power capacity in use   | N/A                   |
|                                       | Other Antenna Type   | N/A                   |
|                                       | ERP: (Effective Radiated Power)<br>.....                             | 1000.0 kW             |
|                                       | Manufacturer   |                       |
|                                       |  |                       |

|                               |  |
|-------------------------------|--|
| Model                         | SAA20-C170-G400-ES6R-20  |
| Year                          | 2019   |
| Justification for New Antenna | A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1. |

## Auxiliary Antenna

### Other Antenna Costs

| Section                            | Question  | Response             |
|------------------------------------|---|----------------------|
| <b>Combiner for Shared Antenna</b> | Do you need a Combiner for a Shared Antenna?                          | No                   |
|                                    | Type  |                      |
|                                    | Number of channels supported  | N/A                  |
|                                    | Frequencies of channels supported                                     | N/A                  |
|                                    | Frequency   | N/A                  |
|                                    | Do you need a combiner output splitter /switcher for dual feed lines? | N/A                  |
| <b>Elbow Complex</b>               | Do you require the separate purchase of the Elbow Complex?            | Yes                  |
|                                    | Broadband or Single Channel?  | Single Channel       |
|                                    | Feed Line Size  | 7 3/16 inches inches |



|                                 |   |     |
|---------------------------------|---|-----|
| <b>Side Mount Brackets</b>      | Do you require the separate purchase of side mount brackets for a high power antenna?                       | Yes |
| <b>Pattern Scatter Analysis</b> | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | Yes |
| <b>Sweep Test</b>               | Do you require the sweep testing of transmission line and antenna?  | Yes |

## Auxiliary Antenna

### Other Antenna Cost Not Listed

Information not provided.

## Primary Antenna

### Existing Antenna Information

| Section                                | Question   | Response            |
|--|--|---------------------|
| Existing Antenna Description           | Type of change   | Purchase<br>New     |
|  | Antenna Use  | Primary<br>(Main)   |
|  | Description of Use   | N/A                 |
|  | Ownership  | Owned               |
|  | Owner  | N/A                 |
|  | Site   | 2                   |
|  | Is the existing antenna shared with another station or stations? | No                  |
|  | Is the existing antenna directional?                             | Yes                 |
|  | Is antenna in operating condition?                               | Yes                 |
|  | Is antenna located on or in close proximity to an antenna farm?  | No                  |
| Existing Antenna Manufacturer and Type | Class  | Full Power          |
|  | Mounting   | Side Mount          |
|  | Antenna position in stack  | Not in Stack        |
|  | Polarization   | Horizontal          |
|  | Type   | Other               |
|  | 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   | Narrowband<br>Panel |
|  | ERP: (Effective Radiated Power)                                  | 1.5 kW              |

|              |           |
|--------------|-----------|
| Manufacturer |           |
| Model        | 4DR-8-2HW |
| Year         | 2003      |

Primary  
Antenna

New Antenna Costs

| Section                            | Question   | Response        |
|------------------------------------|--|-----------------|
| New Antenna Description            | Use  | Primary (Main)  |
|                                    | Description of Use   | N/A             |
|                                    | Change Type  | Purchase New    |
|                                    | Is this a request for upgraded equipment?                            | Yes             |
|                                    | Ownership  | Owned           |
|                                    | Owner  | N/A             |
|                                    | Is antenna shared?   | No              |
|                                    | Is antenna directional?  | Yes             |
|                                    | Will antenna be located on or in close proximity to an antenna farm? | No              |
| New Antenna Manufacturer and Types | Class  | Full Power      |
|                                    | Mounting   | Side Mount      |
|                                    | Antenna position in stack  | Not in Stack    |
|                                    | Polarization   | Elliptical      |
|                                    | Type   | Broadband Panel |
|                                    | Number of Stations Supported   | 1               |
|                                    | Number of Panels/Bays  | 4               |
|                                    | Lower Limit  | 470.00 MHz      |
|                                    | Upper Limit  | 862.00 MHz      |
|                                    | Design power capacity in use   | 25.0 %          |
|                                    | Other Antenna Type   | N/A             |
|                                    | ERP: (Effective Radiated Power)<br>.....                             | 1.35 kW         |
|                                    | Manufacturer   |                 |
|                                    |  |                 |

|                               |  |
|-------------------------------|--|
| Model                         | 2x2 750<br>10325   |
| Year                          | 2019   |
| Justification for New Antenna | The current antenna is designed to operate on channel 25 plus or minus one or two channels. The antenna will not operate properly on channel 20. |

## Primary Antenna

### Other Antenna Costs

| Section                            | Question  | Response |
|------------------------------------|---|----------|
| <b>Combiner for Shared Antenna</b> | Do you need a Combiner for a Shared Antenna?  | No       |
|                                    | Type  |          |
|                                    | Number of channels supported  | N/A      |
|                                    | Frequencies of channels supported   | N/A      |
|                                    | Frequency   | N/A      |
|                                    | Do you need a combiner output splitter /switcher for dual feed lines?                 | N/A      |
| <b>Elbow Complex</b>               | Do you require the separate purchase of the Elbow Complex?                            | No       |
|                                    | Broadband or Single Channel?  | N/A      |
|                                    | Feed Line Size  | N/A      |
| <b>Side Mount Brackets</b>         | Do you require the separate purchase of side mount brackets for 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**

Information not provided.

**Primary  
Antenna**

**Existing Antenna Information**

| Section   | Question   | Response           |
|---|--|--------------------|
| <b>Existing Antenna<br/>Description</b>           | Type of change   | Purchase<br>New    |
|   | Antenna Use  | Primary<br>(Main)  |
|   | Description of Use   | N/A                |
|   | Ownership  | Owned              |
|   | Owner  | N/A                |
|   | Site   | 1                  |
|   | Is the existing antenna shared with another station or stations? | No                 |
|   | Is the existing antenna directional?                             | Yes                |
|   | Is antenna in operating condition?                               | Yes                |
|   | Is antenna located on or in close proximity to an antenna farm?  | No                 |
| <b>Existing Antenna<br/>Manufacturer and Type</b> | Class  | Full Power         |
|   | Mounting   | Side Mount         |
|   | Antenna position in stack  | Not in Stack       |
|   | Polarization   | Elliptical         |
|   | Type   | Slotted<br>Coaxial |
|   | Number of Stations Supported                                     | N/A                |
|   | Number of Panels   | 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)                                  | 125.0 kW           |
|   |  |                    |

|              |                             |
|--------------|-----------------------------|
| Manufacturer |                             |
| Model        | ATW12HS4-<br>ESC170-<br>25S |
| Year         | 2010                        |



Primary  
Antenna

New Antenna Costs

| Section                            | Question   | Response        |
|------------------------------------|--|-----------------|
| New Antenna Description            | Use  | Primary (Main)  |
|                                    | Description of Use   | N/A             |
|                                    | Change Type  | Purchase New    |
|                                    | Is this a request for upgraded equipment?                            | No              |
|                                    | Ownership  | Owned           |
|                                    | Owner  | N/A             |
|                                    | Is antenna shared?   | No              |
|                                    | Is antenna directional?  | Yes             |
|                                    | Will antenna be located on or in close proximity to an antenna farm? | No              |
| New Antenna Manufacturer and Types | Class  | Full Power      |
|                                    | Mounting   | Top Mount       |
|                                    | Antenna position in stack  | Not in Stack    |
|                                    | Polarization   | Elliptical      |
|                                    | Type   | Slotted Coaxial |
|                                    | Number of Stations Supported   | N/A             |
|                                    | Number of Panels/Bays  | N/A             |
|                                    | Lower Limit  | N/A             |
|                                    | Upper Limit  | N/A             |
|                                    | Design power capacity in use   | N/A             |
|                                    | Other Antenna Type   | N/A             |
|                                    | ERP: (Effective Radiated Power)<br>.....                             | 1000.0 kW       |
|                                    | Manufacturer   |                 |
|                                    |  |                 |

|                               |  |
|-------------------------------|--|
| Model                         | SAA20-C170-E400-ET6R-20  |
| Year                          | 2019   |
| Justification for New Antenna | A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1. |

## Primary Antenna

### Other Antenna Costs

| Section                            | Question  | Response             |
|------------------------------------|---|----------------------|
| <b>Combiner for Shared Antenna</b> | Do you need a Combiner for a Shared Antenna?                          | No                   |
|                                    | Type  |                      |
|                                    | Number of channels supported  | N/A                  |
|                                    | Frequencies of channels supported                                     | N/A                  |
|                                    | Frequency   | N/A                  |
|                                    | Do you need a combiner output splitter /switcher for dual feed lines? | N/A                  |
| <b>Elbow Complex</b>               | Do you require the separate purchase of the Elbow Complex?            | Yes                  |
|                                    | Broadband or Single Channel?  | Single Channel       |
|                                    | Feed Line Size  | 7 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? | Yes |
| <b>Sweep Test</b>               | Do you require the sweep testing of transmission line and antenna?  | Yes |

**Primary  
Antenna**

**Other Antenna Cost Not Listed**

Information not provided.

**Transmission Line**

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

**Auxiliary**      **Add Transmission Line**  
**Transmission Line**

| Section   | Question   | Response                                    |
|---|--|---|
| <b>Existing Transmission Line Description</b>           | Type of change   | Purchase New                                |
|   | Use  | Auxiliary (Backup)                          |
|   | Description of Use   | Site #1<br>Emergency<br>Auxiliary<br>Part 1 |
|   | Ownership  | Owned                                       |
|   | Owner  | N/A   |
|   | Site   | N/A   |
|   | Is this transmission currently shared with any other stations? | No  |
|   | Is Transmission Line in operating condition?                   | Yes   |
| <b>Existing Transmission Line Manufacturer and Type</b> | Manufacturer   |   |
|   | Type   | Rigid                                       |
|   | Diameter   | 6 1/8 inches                                |
|   | Other Diameter   | N/A   |
|   | Segment Length   | 19 1/2 inches                               |
|   | Other Segment Length   | N/A   |
|   | Number of parallel runs  | 1   |
|   | Length   | 210 feet per run                            |

**Auxiliary** **New Transmission Line**  
**Transmission Line**

| Section                            | Question                                  | Response   |
|------------------------------------|---|--|
| <b>New Transmission Line Costs</b> | Use                                       | Auxiliary (Backup)   |
|                                    | Description of Use                        | Auxiliary  |
|                                    | Change Type                               | Purchase New   |
|                                    | Is this a request for upgraded equipment? | No   |
|                                    | Type                                      | Rigid  |
|                                    | Diameter                                  | 7 3/16 inches  |
|                                    | Other Diameter                            | N/A  |
|                                    | Segment Length                            | 19 1/2 inches  |
|                                    | Other Segment Length                      | N/A  |
|                                    | Number of parallel runs                   | 1  |
|                                    | Length                                    | 650 feet per run   |
|                                    | Justification for New Transmission Line   | A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1. |

**Auxiliary** **Other Transmission Line Expenses Not Listed**  
**Transmission Line**

Information not provided.

**Primary  
Transmission Line**

**Add Transmission Line**

| Section   | Question   | Response         |
|---|--|------------------|
| <b>Existing Transmission Line Description</b>           | Type of change   | Purchase New     |
|   | Use  | Primary (Main)   |
|   | Description of Use   | N/A              |
|   | Ownership  | Owned            |
|   | Owner  | N/A              |
|   | Site   | 1                |
|   | Is this transmission currently shared with any other stations? | No               |
|   | 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   | 19 1/2 inches    |
|   | Other Segment Length   | N/A              |
|   | Number of parallel runs  | 1                |
|   | Length   | 400 feet per run |

**Primary**      **New Transmission Line**  
**Transmission Line**

| Section                            | Question                                  | Response   |
|------------------------------------|---|--|
| <b>New Transmission Line Costs</b> | Use                                       | Primary (Main)   |
|                                    | Description of Use                        | N/A  |
|                                    | Change Type                               | Purchase New   |
|                                    | Is this a request for upgraded equipment? | No   |
|                                    | Type                                      | Rigid  |
|                                    | Diameter                                  | 7 3/16 inches  |
|                                    | Other Diameter                            | N/A  |
|                                    | Segment Length                            | 19 1/2 inches  |
|                                    | Other Segment Length                      | N/A  |
|                                    | Number of parallel runs                   | 1  |
|                                    | Length                                    | 830 feet per run   |
|                                    | Justification for New Transmission Line   | A different site is having to be used due to the inability to construct the new channel facility at the existing channel 25 site.#1. |

**Primary**      **Other Transmission Line Expenses Not Listed**  
**Transmission Line**

Information not provided.



**Tower Equipment And Rigging Costs**

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

**Primary Tower**

**Add Tower**

| Section   | Question  | Response          |
|---|---|-------------------|
| Existing Tower Description                          | Type of change  | Move Equipment    |
|   | 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           |
| Existing Tower Structure Registration               | Do you have a tower registration number?                | Yes               |
|   | ASR Number  | 1023079           |
| Coordinates (NAD83 ( North American Datum of 1983)) | Latitude (NAD83)  | 35° 13' 20.0" N-  |
|   | Longitude (NAD83)                                       | 082° 32' 58.0" W- |
|   | Overall Structure Height                                | 721.78 feet       |
|   | Support Structure Height                                | 672.56 feet       |
|   | Ground Elevation Above Mean Sea Level (AMSL)            | 3425.16 feet      |

|  |                  |  |
|--|------------------|--|
|  | Structure Type   | TOWER - Free Standing or Guyed Structure |
|  | Tower Owner      | Capstar Radio Operating Company          |
|  | Date Constructed | 09/01/1997                               |

**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 |
|-------------|-----------|---------|
| 59818       | WMYI      | FM      |
| 70149       | WYCW      | DTV     |

**Primary  
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         |

**Primary  
Tower**

**Other Tower Expenses Not Listed**

Information not provided.

## Primary Tower

### Existing Tower

| Section   | Question  | Response                                 |
|---|---|--|
| Existing Tower Description                          | Type of change  | Move Equipment                           |
|   | Tower Use   | Primary (Main)                           |
|   | Description of Use                                      | N/A                                      |
|   | Ownership   | Owned                                    |
|   | Is this tower consider Complex?                         | No                                       |
|   | Is this tower currently shared with any other stations? | No                                       |
|   | One or more FM, AM or TV radio broadcaster(s)           | N/A                                      |
|   | Others Types of Users                                   | N/A                                      |
|   | Is tower documented for structural analysis?            | No                                       |
|   | Is tower compliant with Rev G?                          | Unknown                                  |
| Existing Tower Structure Registration               | Do you have a tower registration number?                | No                                       |
|   | ASR Number  |  |
| Coordinates (NAD83 ( North American Datum of 1983)) | Latitude (NAD83)  | 35° 28' 25.0" N-                         |
|   | Longitude (NAD83)                                       | 083° 19' 23.0" W-                        |
|   | Overall Structure Height                                | 98.00 feet                               |
|   | Support Structure Height                                | 98.00 feet                               |
|   | Ground Elevation Above Mean Sea Level (AMSL)            | 2421.00 feet                             |
|   | Structure Type  | TOWER - Free Standing or Guyed Structure |
|   |   |  |

|  |                  |                              |
|--|------------------|------------------------------|
|  | Tower Owner      | University of North Carolina |
|  | Date Constructed | 06/07/2012                   |

**Primary Tower**

**Tower Rigging Costs**

| Section                      | Question                          | Response |
|------------------------------|-----------------------------------|----------|
| Tower Rigging Costs          | Complex Tower                     | N/A      |
| Helicopter Services Required | Are helicopter services required? | No       |

**Primary Tower**

**Other Tower Expenses Not Listed**

Information not provided.

**Outside  
Professional Services Costs**

| Section   | Question   | Response   |
|---|--|--|
| <b>Outside Project Management Services</b>        | Do you require outside project management services?                          | Yes  |
|   | Number of Hours  | 250  |
|   | Explanation  | Because the transmission site is leased by the State of North Carolina, it is subject to various state construction project rules. One rule is the hiring of a designer to create submittals for project review and approval by the state. |
| <b>Outside RF consulting Engineering Services</b> | Perform engineering study for new channel assignment and antenna development | Yes  |
|   | Prepare engineering section of Form FCC Construction Permit Application      | Yes  |
|   | For Auxiliary Facility   | Yes  |
|   | For Main Facility  | Yes  |
|   | Prepare engineering section of Form FCC License to Cover Application         | Yes  |
|   | For Auxiliary Facility   | Yes  |
|   | For Main Facility  | Yes  |
|   | Prepare request for Special Temporary Authority                              | Yes  |
|   | Quantity   | 2  |

|   |  |     |
|---|--|-----|
|   | Do you have Distributed Transmission System engineering services?                          | Yes |
|   | Critical Facility  | 1   |
|   | Terrain-Shielded Facility  | 10  |
| <b>Attorney and Other Outside Consulting Services</b> | Prepare and file Form FCC Construction Permit Application                                  | Yes |
|   | For Auxiliary Facility   | Yes |
|   | For Main Facility  | Yes |
|   | Prepare and file Form FCC License to Cover Application                                     | Yes |
|   | For Auxiliary Facility   | Yes |
|   | For Main Facility  | Yes |
|   | Prepare request for Special Temporary Authority  | Yes |
|   | Quantity   | 1   |
|   | NEPA Section 106 environmental review  | No  |
|   | Environmental Assessment   | No  |
|   | ASR Modification   | Yes |
|   | FAA Consultation (including preparation of FAA Form 7460)                                  | Yes |
|   | Negotiation of Lease and other Matter for Shared Locations                                 | No  |
|   | Prepare or Review FCC Form 399 for Reimbursement   | Yes |
|   | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| <b>RF Field Engineering Services</b>                  | Comprehensive coverage verification via field study  | No  |
|   | RF exposure measurements   | No  |
|   | Additional Field Engineering Service   | No  |
|   | Number of Days   | N/A |

|  |               |     |
|--|---------------|-----|
|  | Justification | N/A |
|--|---------------|-----|

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

| Name                          | Description  |
|-------------------------------|--|
| Additional Legal Expenses     | Legal expenses for non-catalog advice and review, including transition status reports and other miscellaneous legal needs.   |
| Microwave Frequency Study     | Microwave system frequency search for available frequencies.   |
| Microwave License Preparation | Licensing of microwave system  |
| Microwave PCN                 | Prior coordination notices for microwave system construction to extend program content distribution to the replacement site. |
| Tower Structural Analysis     | Required by State  |

## 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  | No       |
|                                     | 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   | No       |
|                                     | BLM or NFS Coordination  | No       |
|                                     | FCC Construction Permit Minor Change   | No       |
|                                     | FCC License to Cover Application   | No       |
|                                     | FCC Special Temporary Authority Application  | No       |
| <b>Other Miscellaneous Expenses</b> | Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?        | Yes      |
|                                     | Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs? | No       |
|                                     | 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**

| Name                                       | Description  |
|--|--|
| <b>Microwave System</b>                    | Microwave radios, antenna systems, configuration, and other items necessary for a complete system                                    |
| <b>Network Interfaces</b>                  | Router interfaces and network switches   |
| <b>Program Transport Stream Processing</b> | Equipment necessary to "rebrand" for the station the generic transport delivered to the site.  |
| <b>Mechanical Construction</b>             | Construction and modifications to the HVAC infrastructure of the existing building as required to support the new transmitters.      |
| <b>Electrical Construction</b>             | Construction and modifications to the electrical infrastructure of the existing building as required to support the new transmitters |
| <b>General Construction</b>                | General construction and administrative costs necessary for the installation of transmitters in an existing building.                |

## Cost Information

### Transmitters

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

| Description  | Predetermined Cost Estimate | Estimated Cost        | Estimated Cost Justification  | Actual Cost           | Actual Cost Justification |
|--|-----------------------------|-----------------------|---|-----------------------|---------------------------|
| <b>Primary Transmitter ULXTE-100</b>                   | <b>\$1,824,800.00</b>       | <b>\$1,705,744.00</b> |   | <b>\$1,424,866.36</b> |                           |
| UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW | \$1,788,000.00              | \$1,700,000.00        | N/A   | \$1,419,122.36        | N/A                       |
| Transformer 3 phase /480v - 300 KVA                    | \$36,800.00                 | \$5,744.00            | ***System Notice: Estimate adjusted and locked because line has been superseded. ***Remainder of expenses relocated to Other Expenses | \$5,744.00            | N/A                       |
| <b>Primary Transmitter TXUD-250</b>                    | <b>\$15,040.00</b>          | <b>\$15,040.00</b>    |   | <b>\$15,040.00</b>    |                           |
| UHF - Air Cooled Solid State Transmitter 0.25 kW       | <i>\$15,040.00</i>          | \$15,040.00           | Manufacturer purchase quote   | \$15,040.00           | N/A                       |
| <b>Auxiliary Transmitter ULXTE-30</b>                  | <b>\$709,550.00</b>         | <b>\$651,958.60</b>   |   | <b>\$347,916.61</b>   |                           |

|   |                |                |   |                |     |
|---|----------------|----------------|---|----------------|-----|
| UHF -<br>Liquid<br>Cooled<br>Solid State<br>Transmitter<br>14.2 - 20 kW | \$684,000.00   | \$650,000.00   | N/A   | \$345,958.01   | N/A |
| Transformer<br>3 phase<br>/480v - 150<br>KVA                            | \$25,550.00    | \$1,958.60     | ***System<br>Notice:<br>Estimate<br>adjusted and<br>locked<br>because line<br>has been<br>superseded.<br>***Remaining<br>expense<br>relocated to<br>Other<br>Expenses | \$1,958.60     | N/A |
| <b>Sub-total</b>  | \$2,549,390.00 | \$2,372,742.60 | N/A   | \$1,787,822.97 | N/A |
| <b>Total for all<br/>systems</b>  | \$5,838,046.78 | \$5,340,925.31 | N/A   | \$4,067,630.60 | N/A |

## Components

**Actual Information**  
**Description**

**File Name**

UHF - Liquid Cooled Solid  
State Transmitter 52 - 61 kW

**Component Description:**

50% Primary  
Transmitter &  
Installation.  
Installation  
included w  
/Transmitter Cost  
on Form 399.  
Purchase Order is  
for all 11 Sites.  
Transformer on  
line 16 of quote is  
separate Form  
399 Line Item.

**Amount:**

\$764,040.63

**Component Description:**

Primary  
Transmitter Per  
FCC Hotline  
(Paige, 7/8/2019)  
credit for  
transformer  
applied to  
transmitter,  
otherwise causes  
system error.  
Immediate Due  
Date on invoice  
adjusted to  
vendor terms of  
60 days. Refer to  
attachment pgs 2-  
4 & PO/Quotes  
pgs 5-27.

**Amount:**

\$655,081.73

|   |  |                               |   |                |             |
|---|--|-------------------------------|---|----------------|-------------|
| <p>Transformer 3 phase/480v -<br/>300 KVA</p>           | <table> <tr> <td data-bbox="711 98 1145 786"><b>Component Description:</b></td><td data-bbox="1145 98 1428 786"> <p>50% Request for Transformer that is included on invoice with the cost for transmitter. Transformer has unique 399 Line Item. See line 16 of quote for detail cost. Purchase Order is for all 11 sites.</p> </td></tr> <tr> <td data-bbox="711 786 1145 786"><b>Amount:</b></td><td data-bbox="1145 786 1428 786">\$5,744.00</td></tr> </table> | <b>Component Description:</b> | <p>50% Request for Transformer that is included on invoice with the cost for transmitter. Transformer has unique 399 Line Item. See line 16 of quote for detail cost. Purchase Order is for all 11 sites.</p> | <b>Amount:</b> | \$5,744.00  |
| <b>Component Description:</b>                           | <p>50% Request for Transformer that is included on invoice with the cost for transmitter. Transformer has unique 399 Line Item. See line 16 of quote for detail cost. Purchase Order is for all 11 sites.</p>  |                               |   |                |             |
| <b>Amount:</b>  | \$5,744.00   |                               |   |                |             |
| <p>UHF - Air Cooled Solid State Transmitter 0.25 kW</p> | <table> <tr> <td data-bbox="711 786 1145 1034"><b>Component Description:</b></td><td data-bbox="1145 786 1428 1034"> <p>Primary Transmitter</p> </td></tr> <tr> <td data-bbox="711 1034 1145 1034"><b>Amount:</b></td><td data-bbox="1145 1034 1428 1034">\$15,040.00</td></tr> </table>   | <b>Component Description:</b> | <p>Primary Transmitter</p>  | <b>Amount:</b> | \$15,040.00 |
| <b>Component Description:</b>                           | <p>Primary Transmitter</p>   |                               |   |                |             |
| <b>Amount:</b>  | \$15,040.00  |                               |   |                |             |

|  |  |
|--|--|
| UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW | <p><b>Component Description:</b> 50% Aux Transmitter &amp; Installation. Installation included w /Transmitter on Form 399. Purchase Order is for all 11 sites. Transformer on line 16 of quote is separate Form 399 Line Item.</p> <p><b>Amount:</b> \$189,142.59</p>  |
|  | <p><b>Component Description:</b> Aux. Transm. See attach. pg. 2-4 for payment details. Per FCC Hotline (Paige, 7/8/2019) credit for transformer applied to transmitter, otherwise causes system error. Immediate Due Date adjusted to vendor terms of 60 days. PO for multiple sites.</p> <p><b>Amount:</b> \$156,815.42</p> |
| Transformer 3 phase/480v - 150 KVA                       | <p><b>Component Description:</b> 50% Transformer on line 16 of quote included w /cost of transmitter on invoice. Purchase Order includes all 11 sites.</p> <p><b>Amount:</b> \$1,958.60</p>  |

## Cost Information

### Antennas

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

| Description   | Predetermined Cost Estimate | Estimated Cost      | Estimated Cost Justification   | Actual Cost        | Actual Cost Justification |
|---|-----------------------------|---------------------|--|--------------------|---------------------------|
| <b>Primary Antenna 2x2 750 10325</b>  | <b>\$14,741.80</b>          | <b>\$14,411.80</b>  |  | <b>\$8,011.80</b>  |                           |
| UHF - High Power, Side Mount, broadband panel, 4 bay,, 1 kW input, directional,, elliptically or circularly polarized | <i>\$0.00</i>               | \$0.00              | N/A  | N/A                | N/A                       |
| Sweep test of existing antenna  | \$6,730.00                  | \$6,400.00          | N/A  | N/A                | N/A                       |
| UHF - High Power, Side Mount, broadband panel, 4 bay,, 1 kW input, directional,, horizontally polarized               | <i>\$8,011.80</i>           | \$8,011.80          | ***System Notice: Estimate adjusted and locked because line has been superseded.<br>***Manufacturer's estimated cost | \$8,011.80         | N/A                       |
| <b>Primary Antenna SAA20-C170-E400-ET6R-20</b>  | <b>\$315,390.00</b>         | <b>\$182,236.50</b> |  | <b>\$78,818.25</b> |                           |

|  |                     |                     |  |                    |     |
|--|---------------------|---------------------|--|--------------------|-----|
| Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)                      | \$13,900.00         | \$13,200.00         | N/A  | N/A                | N/A |
| UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized   | \$289,500.00        | \$157,636.50        | See attached RFS Antenna Change Narrative with Pricing | \$78,818.25        | N/A |
| Sweep test of existing antenna   | \$6,730.00          | \$6,400.00          | N/A  | N/A                | N/A |
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost) | \$5,260.00          | \$5,000.00          | N/A  | N/A                | N/A |
| <b>Auxiliary Antenna SAA20-C170-G400-ES6R-20</b>   | <b>\$170,061.50</b> | <b>\$167,621.50</b> |  | <b>\$60,510.75</b> |     |



|   |                     |              |  |              |     |
|---|---------------------|--------------|--|--------------|-----|
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)              | \$5,260.00          | \$5,000.00   | N/A  | N/A          | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost)                                  | \$23,150.00         | \$22,000.00  | N/A  | N/A          | N/A |
| Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)                                   | \$13,900.00         | \$13,200.00  | N/A  | N/A          | N/A |
| Sweep test of existing antenna  | \$6,730.00          | \$6,400.00   | N/A  | N/A          | N/A |
| UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized | <b>\$121,021.50</b> | \$121,021.50 | See attached RFS Antenna Change Narrative with Pricing | \$60,510.75  | N/A |
| <b>Sub-total</b>  | \$500,193.30        | \$364,269.80 | N/A  | \$147,340.80 | N/A |

|                              |                |                |     |                |     |
|------------------------------|----------------|----------------|-----|----------------|-----|
| <b>Total for all systems</b> | \$5,838,046.78 | \$5,340,925.31 | N/A | \$4,067,630.60 | N/A |
|------------------------------|----------------|----------------|-----|----------------|-----|

## Components

| <b>Actual Information</b>   |   |
|---|---|
| <b>Description</b>  | <b>File Name</b>  |
| UHF - High Power, Side Mount, broadband panel, 4 bay,, 1 kW input, directional,, elliptically or circularly polarized | Information not provided.   |
| Sweep test of existing antenna  | Information not provided.   |
| UHF - High Power, Side Mount, broadband panel, 4 bay,, 1 kW input, directional,, horizontally polarized               | <b>Component Description:</b> Primary Antenna w/freight cost.<br><b>Amount:</b> \$8,011.80  |
| Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)                                     | Information not provided.   |
| UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized                  | <b>Component Description:</b> 50% Primary Antenna included in Inv & PO Line 7. Invoice & Purchase Order are for 10 sites.<br><b>Amount:</b> \$78,818.25 |
| Sweep test of existing antenna  | Information not provided.   |
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)                | Information not provided.   |

|   |   |
|---|---|
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)              | Information not provided.   |
| Side mount brackets for high power antennas (if not included in antenna base cost)                                  | Information not provided.   |
| Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)                                   | Information not provided.   |
| Sweep test of existing antenna  | Information not provided.   |
| UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized | <div> <div> <b>Component Description:</b> </div> <div> 50% Auxilliary Antenna included in Inv &amp; PO Line 7. Invoice &amp; Purchase Order are for 10 sites. </div> </div> <div> <div> <b>Amount:</b> </div> <div> \$60,510.75 </div> </div> |

Cost  
Information

Transmission Line

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

| Description                                | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification                           | Actual Cost    | Actual Cost Justification |
|--|-----------------------------|----------------|--|----------------|---------------------------|
| Primary Transmission Line                  | \$240,700.00                | \$172,486.63   |  | \$86,243.32    |                           |
| Rigid Transmission Line - copper, 7 3 /16" | \$240,700.00                | \$172,486.63   | See attached RFS Antenna Change Narrative with Pricing | \$86,243.32    | N/A                       |
| Auxiliary Transmission Line                | \$188,500.00                | \$146,788.88   |  | \$73,394.44    |                           |
| Rigid Transmission Line - copper, 7 3 /16" | \$188,500.00                | \$146,788.88   | See attached RFS Antenna Change Narrative with Pricing | \$73,394.44    | N/A                       |
| Sub-total                                  | \$429,200.00                | \$319,275.51   | N/A  | \$159,637.76   | N/A                       |
| Total for all systems                      | \$5,838,046.78              | \$5,340,925.31 | N/A  | \$4,067,630.60 | N/A                       |

Components

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

|  |   |
|--|---|
| Rigid Transmission Line -<br>copper, 7 3/16" | <div> <b>Component Description:</b> 50% Primary<br/>Transmission Line<br/>included in Inv &amp;<br/>PO Line 7. Invoice<br/>&amp; Purchase Order<br/>are for 10 sites. </div> <div> <b>Amount:</b> \$86,243.32 </div>    |
| Rigid Transmission Line -<br>copper, 7 3/16" | <div> <b>Component Description:</b> 50% Auxilliary<br/>Transmission Line<br/>included in Inv &amp;<br/>PO Line 7. Invoice<br/>&amp; Purchase Order<br/>are for 10 sites. </div> <div> <b>Amount:</b> \$73,394.44 </div> |

Cost  
Information

Tower Equipment and Rigging Costs

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

| Description   | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification                           | Actual Cost    | Actual Cost Justification |
|---|-----------------------------|----------------|--|----------------|---------------------------|
| Primary Tower TOWER   | \$84,200.00                 | \$10,000.00    |  | \$0.00         |                           |
| Short Tower (less than 500')  | \$84,200.00                 | \$10,000.00    | N/A  | N/A            | N/A                       |
| Primary Tower TOWER   | \$421,000.00                | \$312,255.28   |  | \$180,345.45   |                           |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00                | \$312,255.28   | See attached RFS Antenna Change Narrative with Pricing | \$180,345.45   | N/A                       |
| Sub-total   | \$505,200.00                | \$322,255.28   | N/A  | \$180,345.45   | N/A                       |
| Total for all systems   | \$5,838,046.78              | \$5,340,925.31 | N/A  | \$4,067,630.60 | N/A                       |

Components

| Actual Information           |                           |
|------------------------------|---------------------------|
| Description                  | File Name                 |
| Short Tower (less than 500') | Information not provided. |

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

**Component Description:**

50% Primary  
/Complex Tower  
Installation for  
Auxilliary Antenna  
included in Inv &  
PO Line 8.  
Invoice &  
Purchase Order  
are for 10 sites.  
\$24,217.81

**Amount:**

**Component Description:**

50% Primary  
/Complex Tower  
Installation for  
Auxilliary Antenna  
included in Inv &  
PO Line 8.  
Invoice &  
Purchase Order  
are for 10 sites.  
\$24,217.81

**Amount:**

**Component Description:**

50% Primary  
/Complex Tower  
Installation for  
Primary Antenna  
included in Inv &  
PO Line 8.  
Invoice &  
Purchase Order  
are for 10 sites.  
\$131,909.83

**Amount:**

**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>\$182,245.00</b>         | <b>\$296,113.64</b> |  | <b>\$213,423.48</b> |                           |
| Tower Structural Analysis            | <i>\$50,060.00</i>          | \$50,060.00         | -Tower Consultants Terminated Contract \$18,820 (see approved invoice 8593) - Potential Services from TEPCO (see invoice 336764 w/supporting documentation): Structural Analysis \$2,500, Updated App. Map \$2,500, TIA \$1,500 - ERI Contract \$24,740 InvWUNF001-003 | \$45,060.00         | N/A                       |
| Microwave PCN                        | <i>\$1,000.00</i>           | \$1,000.00          | Preliminary estimate of services   | N/A                 | N/A                       |
| Microwave License Preparation        | <i>\$1,000.00</i>           | \$1,000.00          | Preliminary Estimate for Services  | N/A                 | N/A                       |
| Microwave Frequency Study            | <i>\$1,100.00</i>           | \$1,100.00          | Preliminary Estimate of Engineering Services   | N/A                 | N/A                       |



|  |                    |             |  |            |     |
|--|--------------------|-------------|--|------------|-----|
| Additional Legal Expenses  | <b>\$10,000.00</b> | \$10,000.00 | Preliminary estimate for legal expenses for non-catalog advice and review including transition status reports and other miscellaneous legal needs; estimate exceeds predetermined cost estimate. | \$5,219.44 | N/A |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | \$2,105.00         | \$2,000.00  | N/A  | N/A        | N/A |
| ASR modification (prepare FCC Form 854)  | \$2,105.00         | \$2,000.00  | N/A  | N/A        | N/A |
| Attorney Fees - Prepare and File request for Special Temporary Authorization   | \$3,680.00         | \$10,000.00 | Cost estimated to exceed Predetermined Cost Estimate.  | \$5,278.50 | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application  | \$2,365.00         | \$2,250.00  | N/A  | N/A        | N/A |

|  |             |             |     |            |     |
|--|-------------|-------------|-----|------------|-----|
| Attorney Fees<br>- Aux Antenna,<br>prepare and<br>File Form<br>2100<br>Construction<br>Permit or<br>License<br>Application                         | \$4,210.00  | \$4,000.00  | N/A | N/A        | N/A |
| Attorney Fees<br>- Prepare and<br>File FCC Form<br>2100 (main),<br>Construction<br>Permit<br>Application   | \$5,260.00  | \$5,000.00  | N/A | \$2,089.40 | N/A |
| DTS Site RF<br>Consulting<br>Engineer -<br>Terrain-<br>shielded<br>Facility  | \$26,300.00 | \$25,000.00 | N/A | N/A        | N/A |
| DTS Site RF<br>Consulting<br>Engineer -<br>Critical Facility   | \$8,420.00  | \$8,000.00  | N/A | N/A        | N/A |
| Prepare<br>request for<br>Special<br>Temporary<br>Authorization  | \$4,100.00  | \$3,000.00  | N/A | \$1,425.00 | N/A |
| RF Consulting<br>Engineer<br>Fees- Aux<br>Antenna:<br>Prepare<br>engineering<br>section of FCC<br>Form 2100,<br>License to<br>Cover<br>Application | \$1,580.00  | \$1,500.00  | N/A | N/A        | N/A |

|   |            |            |  |            |     |
|---|------------|------------|--|------------|-----|
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application                                       | \$1,580.00 | \$1,500.00 | N/A  | N/A        | N/A |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application | \$2,105.00 | \$5,000.00 | Estimated Cost Exceeds PreDetermined Cost Estimate | N/A        | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application                                    | \$3,155.00 | \$3,000.00 | N/A  | \$2,937.50 | N/A |
| Perform engineering study for new channel assignment and antenna development  | \$7,360.00 | \$7,000.00 | N/A  | \$6,250.00 | N/A |
| Address transition timing and coordination issues w/ other stations and wireless  | \$2,630.00 | \$2,500.00 | N/A  | N/A        | N/A |

|  |                |                |  |                |     |
|--|----------------|----------------|--|----------------|-----|
| Project management of the transition     | \$39,500.00    | \$148,703.64   | See attachment "WUNF Program Designer - Manager Narrative" for details on estimated cost Amendment #3 attached to Invoice 157570 | \$145,163.64   | N/A |
| Prepare and or review reimbursement form | \$2,630.00     | \$2,500.00     | N/A  | N/A            | N/A |
| <b>Sub-total</b>                         | \$182,245.00   | \$296,113.64   | N/A  | \$213,423.48   | N/A |
| <b>Total for all systems</b>             | \$5,838,046.78 | \$5,340,925.31 | N/A  | \$4,067,630.60 | N/A |

## Components

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

|                                  |   |
|----------------------------------|---|
| Tower Structural Analysis        | <p><b>Component Description:</b> Other Expenses<br/>Tower Analysis &amp;<br/>Mapping<br/>Foundation<br/>Mapping</p> <p><b>Amount:</b> \$5,190.00</p>      |
|                                  | <p><b>Component Description:</b> Structural<br/>Analysis, see<br/>attachment pg. 7<br/>for Schedule of<br/>Services.</p> <p><b>Amount:</b> \$1,500.00</p> |
|                                  | <p><b>Component Description:</b> Other Expenses<br/>Tower Analysis &amp;<br/>Mapping Climbing<br/>Inspection</p> <p><b>Amount:</b> \$11,350.00</p>        |
|                                  | <p><b>Component Description:</b> Outside<br/>Professional<br/>Services Tower<br/>Structural Analysis</p> <p><b>Amount:</b> \$18,820.00</p>                |
|                                  | <p><b>Component Description:</b> Other Expenses<br/>Tower Analysis &amp;<br/>Mapping Structural</p> <p><b>Amount:</b> \$8,200.00</p>                      |
| Microwave PCN                    | Information not provided.   |
| Microwave License<br>Preparation | Information not provided.   |
| Microwave Frequency Study        | Information not provided.   |
| Additional Legal Expenses        |   |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$630.00  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$67.40/11<br>as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$6.13   |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$350.00<br>/11 as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$31.82  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$315.00<br>/11 as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$28.64  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$175.00  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$175.00<br>/11 as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$15.91  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$70.00   |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$959.50<br>/11 as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$87.22  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside Prof Svcs<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$182.50  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$292.00  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional Svcs<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$109.50   |



**Component Description:**

Outside  
Professional  
Services  
Additional Legal  
Expenses Invoice  
applies to all 11  
repack stations,  
amount requested  
reflects portion  
payable per  
Station: \$402.00  
/11 as indicated on  
page 1 of Invoice

**Amount:**

\$36.55

**Component Description:**

Outside  
Professional  
Services  
Additional Legal  
Expenses Invoice  
applies to all 11  
repack stations,  
amount requested  
reflects portion  
payable per  
Station: \$765.00  
/11 as indicated on  
page 1 of Invoice

**Amount:**

\$69.55

**Component Description:**

Outside  
Professional  
Services  
Additional Legal  
Expenses

**Amount:**

\$33.70

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$245.00<br>/11 as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$22.27  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$303.30  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$303.30  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses \$292.00<br>for Attorney Fees<br>STA |
| <b>Amount:</b>                | \$146.00   |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$368.00 /11 as indicated on page 1 of Invoice |
| <b>Amount:</b>                | \$33.46  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside Professional Services Additional Legal Expenses |
| <b>Amount:</b>                | \$182.50  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 1617.10/11 for \$147.01 as outlined on page 1 of invoice. |
| <b>Amount:</b>                | \$147.01  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside Prof. Svcs Additional Legal Expenses |
| <b>Amount:</b>                | \$182.50                                     |

**Component Description:**

Outside  
Professional  
Services  
Additional Legal  
Expenses Legal  
services benefit  
entire FCC  
Repack project  
across all 11 Call  
Signs/Facility IDs,  
2594.40/11 for  
235.85 as outlined  
on page 1 of  
invoice.

**Amount:**

\$235.85

**Component Description:**

Outside  
Professional  
Services  
Additional Legal  
Expenses Legal  
services benefit  
entire FCC  
Repack project  
across all 11 Call  
Signs/Facility IDs,  
2059.90/11 for  
187.27 as outlined  
on page 1 of  
invoice.

**Amount:**

\$187.27

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$70.00/11<br>as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$6.37   |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$105.00  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$3472.00<br>/11 as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$315.63  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$175.00  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$572.90<br>/11 as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$52.08  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$35.00   |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses |
| <b>Amount:</b>                | \$868.70  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services<br>Additional Legal<br>Expenses Invoice<br>applies to all 11<br>repack stations,<br>amount requested<br>reflects portion<br>payable per<br>Station: \$323.00<br>/11 as indicated on<br>page 1 of Invoice |
| <b>Amount:</b>                | \$29.36  |

|  |   |
|--|---|
|  | <p><b>Component Description:</b> Outside Professional Services Additional Legal Expenses</p> <p><b>Amount:</b> \$105.00</p>   |
|  | <p><b>Component Description:</b> Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$168.50 /11 as indicated on page 1 of Invoice</p> <p><b>Amount:</b> \$15.32</p> |
| FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase | Information not provided.   |
| ASR modification (prepare FCC Form 854)  | Information not provided.   |

|  |   |
|--|---|
| Attorney Fees - Prepare and File request for Special Temporary Authorization       | <b>Component Description:</b> Outside Prof. Svcs<br>Attorney Fees STA<br><b>Amount:</b> \$36.50   |
|  | <b>Component Description:</b> Outside Profess<br>Svcs. Attorney<br>Fees STA<br><b>Amount:</b> \$265.50  |
|  | <b>Component Description:</b> Outside<br>Professional<br>Services Attorney<br>Fees STA<br><b>Amount:</b> \$1,519.80                                   |
|  | <b>Component Description:</b> Outside<br>Professional<br>Services Attorney<br>Fees STA<br><b>Amount:</b> \$560.40                                     |
|  | <b>Component Description:</b> Outside<br>Professional<br>Services Attorney<br>Fees STA \$146.00<br>Other Legal<br>Expenses<br><b>Amount:</b> \$292.00 |
|  | <b>Component Description:</b> Outside<br>Professional<br>Services Attorney<br>Fees STA<br><b>Amount:</b> \$2,604.30                                   |
| Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application | Information not provided.   |



|   |  |
|---|--|
| Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application                      | Information not provided.  |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application                                  | <div> <div> <b>Component Description:</b> </div> <div> Outside Professional Services Attorney Fees Construction Permit </div> </div> <div> <b>Amount:</b> </div> <div> \$2,089.40 </div> |
| DTS Site RF Consulting Engineer - Terrain-shielded Facility   | Information not provided.  |
| DTS Site RF Consulting Engineer - Critical Facility   | Information not provided.  |
| Prepare request for Special Temporary Authorization   | <div> <div> <b>Component Description:</b> </div> <div> Outside Professional Services Prepare STA </div> </div> <div> <b>Amount:</b> </div> <div> \$1,425.00 </div>                       |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application    | Information not provided.  |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application                                       | Information not provided.  |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application | Information not provided.  |

|  |                               |   |
|--|-------------------------------|---|
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | <b>Component Description:</b> | Outside Professional Services RF Engineering Consulting Fees Construction Permit Application Main/Primary |
|  | <b>Amount:</b>                | \$2,937.50  |

|  |   |
|--|---|
| Perform engineering study for new channel assignment and antenna development     | <div> <div>Component Description:</div> <div>Outside Professional Services Perform Engineering Studies Quote is RATE CARD furnished by vendor for Professional Services they offer and are not specific to any particular station.</div> </div> <div> <div>Amount:</div> <div>\$1,775.00</div> </div> |
|  | <div> <div>Component Description:</div> <div>Outside Professional Services Engineering Study New Channel Assignment Antenna Development</div> </div> <div> <div>Amount:</div> <div>\$1,875.00</div> </div>  |
|  | <div> <div>Component Description:</div> <div>Outside Professional Services Engineering Study New Channel Assignment Antenna Development</div> </div> <div> <div>Amount:</div> <div>\$2,600.00</div> </div>  |
| Address transition timing and coordination issues w/ other stations and wireless | Information not provided.   |
| Project management of the transition   |   |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside Prof Svcs<br>Proj Mgmt of<br>Transition See<br>attach pg. 2-5 for<br>Contract/Invoice<br>Summary.<br>Amendment #3 on<br>pg. 6. 12,800<br>divided by 11<br>equal 1,164.64 for<br>7 sites, 1,164.63<br>for 4 sites. PO<br>/Contract for all<br>eleven transmitter<br>sites. |
| <b>Amount:</b>                | \$1,163.64  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg 3-5<br>for Contract<br>/Invoice Summary. |
| <b>Amount:</b>                | \$5,312.27   |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg. 3-6<br>for Contract<br>/Invoice Summary.<br>PO/Contract for all<br>eleven transmitter<br>sites. |
| <b>Amount:</b>                | \$3,991.61   |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg 3-6<br>for Contract<br>/Invoice Summary.<br>PO/Contract for all<br>eleven transmitter<br>sites. |
| <b>Amount:</b>                | \$10,624.54   |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg 3-5<br>for Contract<br>/Invoice Summary.<br>PO/Contract for all<br>eleven transmitter<br>sites. |
| <b>Amount:</b>                | \$5,312.27  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg. 3-6<br>for Contract<br>/Invoice Summary.<br>PO/Contract for all<br>eleven transmitter<br>sites. |
| <b>Amount:</b>                | \$2,439.90   |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg 3-5<br>for Contract<br>/Invoice Summary. |
| <b>Amount:</b>                | \$26,350.00  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside Proj Svcs<br>Proj Mgmt of<br>Transition PO for<br>eleven multiple<br>sites See attach<br>pg 3-6 for Contract<br>/Invoice summary |
| <b>Amount:</b>                | \$1,554.90   |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg 3-5<br>for Contract<br>/Invoice Summary. |
| <b>Amount:</b>                | \$4,446.41   |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | See project &<br>invoice summary<br>in attachment pgs<br>3-6 |
| <b>Amount:</b>                | \$53,102.70  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg 3-5<br>for Contract<br>/Invoice Summary. |
| <b>Amount:</b>                | \$12,375.40  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management See<br>attachment pg. 3 &<br>4 for Project<br>Summary |
| <b>Amount:</b>                | \$6,707.50  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management See<br>Attachment Pg. 3<br>& 4 for Summary |
| <b>Amount:</b>                | \$9,022.50   |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Outside<br>Professional<br>Services Project<br>Management of<br>Transition See<br>attachment pg 3-5<br>for Contract<br>/Invoice Summary. |
| <b>Amount:</b>                | \$53,102.70  |

|  |   |
|--|---|
|  | <div data-bbox="715 159 1023 192"><b>Component Description:</b></div> <div data-bbox="1157 159 1378 427">Outside Proj Svcs<br/>Proj Mgmt of<br/>Transition PO for<br/>eleven multiple<br/>sites See attach<br/>pg 5-8 for Contract<br/>/Invoice summary</div> <div data-bbox="715 439 825 472"><b>Amount:</b></div> <div data-bbox="1157 439 1275 472">\$2,760.00</div> <div data-bbox="715 577 1023 611"><b>Component Description:</b></div> <div data-bbox="1157 577 1350 728">Outside<br/>Professional<br/>Services Project<br/>Management</div> <div data-bbox="715 736 825 770"><b>Amount:</b></div> <div data-bbox="1157 736 1275 770">\$9,022.50</div> |
| Prepare and or review reimbursement form | Information not provided.   |



## Cost Information

### Other Expenses

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

| Description  | Predetermined Cost Estimate | Estimated Cost        | Estimated Cost Justification  | Actual Cost           | Actual Cost Justification |
|--|-----------------------------|-----------------------|---|-----------------------|---------------------------|
| <b>Other Expenses</b>  | <b>\$1,671,818.48</b>       | <b>\$1,666,268.48</b> |   | <b>\$1,579,060.14</b> |                           |
| General Construction   | <i>\$473,005.94</i>         | \$473,005.94          | See attached document WUNF GC Budget  | \$458,890.70          | N/A                       |
| Electrical Construction  | <i>\$701,034.00</i>         | \$701,034.00          | See attached document WUNF GC Budget  | \$670,316.96          | N/A                       |
| Mechanical Construction  | <i>\$197,624.00</i>         | \$197,624.00          | See attached document WUNF GC Budget  | \$194,065.05          | N/A                       |
| Program Transport Stream Processing                                      | <i>\$22,718.40</i>          | \$22,718.40           | See Program Delivery and Network Budget Attachment                                  | \$22,718.40           | N/A                       |
| Network Interfaces   | <i>\$5,178.14</i>           | \$5,178.14            | See Program Delivery and Network Budget Attachment                                  | \$1,047.97            | N/A                       |
| Microwave System   | <i>\$227,808.00</i>         | \$227,808.00          | See Program Delivery and Networking Budget attachment                               | \$227,807.42          | N/A                       |
| DTV Medical Facility Notification  | \$11,550.00                 | \$6,000.00            | Preliminary Service Estimate  | \$3,750.00            | N/A                       |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$24,900.00</i>          | \$24,900.00           | The decommissioning of site #1 is an unknown due to the current site access issues. | N/A                   | N/A                       |

|   |                   |                |                              |                |     |
|---|-------------------|----------------|------------------------------|----------------|-----|
| Develop and air announcement of upcoming channel change | <b>\$2,000.00</b> | \$2,000.00     | N/A                          | N/A            | N/A |
| MVPD Notification of Channel Change                     | <b>\$6,000.00</b> | \$6,000.00     | Preliminary Service Estimate | \$463.64       | N/A |
| <b>Sub-total</b>  | \$1,671,818.48    | \$1,666,268.48 | N/A                          | \$1,579,060.14 | N/A |
| <b>Total for all systems</b>                            | \$5,838,046.78    | \$5,340,925.31 | N/A                          | \$4,067,630.60 | N/A |

## Components

| Actual Information   |  |
|----------------------|--|
| Description          | File Name  |
| General Construction | <p><b>Component Description:</b> General Contract PO for multiple sites</p> <p><b>Amount:</b> \$29,640.00</p> <p><b>Component Description:</b> Other Expenses General Contract Payment details begin on attachment pg 14. PO for multiple sites.</p> <p><b>Amount:</b> \$72,890.96</p> <p><b>Component Description:</b> Other Expenses General Contract See attachment pg 1 for payment details. PO for multiple sites.</p> <p><b>Amount:</b> \$135,489.00</p> |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Oth Exp Filing Gen<br>& Mech together<br>due to Credit for<br>Mech. System error<br>results when filing<br>Gen because<br>amount exceeds<br>total inv. Attach pg<br>1 specifics of<br>payment Attach pg<br>2-9 inv. Attach pg<br>10 begins PO Sum<br>& associated doc.<br>PO for multiple<br>sites. |
| <b>Amount:</b>                | \$9,149.14  |

|                               |  |
|-------------------------------|--|
| <b>Component Description:</b> | Other Expenses<br>General Contract<br>See attachment pg<br>1 for payment<br>details. See<br>attachment pg 25-<br>26 for PO<br>Summary w<br>/approved change<br>orders. |
| <b>Amount:</b>                | \$31,694.03  |

|                               |   |
|-------------------------------|---|
| <b>Component Description:</b> | Other Expenses<br>General Contract<br>Attachment pg 1<br>specifics of<br>payment<br>Attachment pg 2-8<br>Vendor supplied<br>invoice Attachment<br>pg 9 begins PO<br>Summary &<br>associated<br>documentation. PO<br>for multiple sites. |
| <b>Amount:</b>                | \$2,982.00  |

|                         |                               |   |
|-------------------------|-------------------------------|---|
|                         | <b>Component Description:</b> | General Contract<br>PO for multiple sites   |
|                         | <b>Amount:</b>                | \$161,690.00  |
|                         | <b>Component Description:</b> | Other Expenses<br>General Contract<br>Payment details<br>begin on<br>attachment pg 1.<br>PO for multiple<br>sites.  |
|                         | <b>Amount:</b>                | \$15,355.57   |
|                         |                               |   |
|                         |                               |   |
| Electrical Construction | <b>Component Description:</b> | Electrical Contract<br>PO for multiple sites  |
|                         | <b>Amount:</b>                | \$78,319.90   |
|                         | <b>Component Description:</b> | Other Expenses<br>Electrical Contract<br>See attachment pg<br>1 for payment<br>detail. PO for<br>multiple sites.  |
|                         | <b>Amount:</b>                | \$453,375.15  |
|                         | <b>Component Description:</b> | Other Expenses<br>Electrical Contract<br>See attachment pg<br>1 for payment<br>details. See<br>attachment pg 25-<br>26 for PO<br>Summary w<br>/approved change<br>orders. |
|                         | <b>Amount:</b>                | \$133,501.47  |

**Component Description:**

Other Expenses  
Electrical Contract  
Attachment pg 1  
specifics of  
payment  
Attachment pg 2-8  
Vendor supplied  
invoice Attachment  
pg 9 begins PO  
Summary &  
associated  
documentation. PO  
for multiple sites.

**Amount:**

\$2,890.47

**Component Description:**

Other Expenses  
Electrical Contract  
Payment details  
begin on  
attachment pg 1.  
PO for multiple  
sites.

**Amount:**

\$2,229.97

|                                     |  |
|-------------------------------------|--|
| Mechanical Construction             | <p><b>Component Description:</b> Mechanical/HVAC<br/>Contract PO for multiple sites</p> <p><b>Amount:</b> \$111,660.15</p>   |
|                                     | <p><b>Component Description:</b> Other Expenses<br/>Mechanical<br/>Contract Payment details begin on attachment pg 14.<br/>PO for multiple sites.</p> <p><b>Amount:</b> \$10,578.25</p>  |
|                                     | <p><b>Component Description:</b> Other Expenses<br/>Mechanical<br/>Contract See attachment pg. 1 for payment details.<br/>PO for multiple sites.</p> <p><b>Amount:</b> \$57,902.50</p>   |
|                                     | <p><b>Component Description:</b> Other Expenses<br/>Mechanical<br/>Contract See attachment pg 1 for payment details.<br/>See attachment pg 25-26 for PO Summary w /approved change orders.</p> <p><b>Amount:</b> \$13,924.15</p> |
| Program Transport Stream Processing | <p><b>Component Description:</b> Program Transport Stream Processing</p> <p><b>Amount:</b> \$22,718.40</p>   |

|   |  |
|---|--|
| Network Interfaces  | <p><b>Component Description:</b> Other Expenses<br/>Network Switch 11<br/>Switches for total of<br/>11,527.67 equals<br/>1,047.97 per<br/>transmitter site.</p> <p><b>Amount:</b> \$1,047.97</p>   |
| Microwave System  | <p><b>Component Description:</b> Other Expenses<br/>Microwave System</p> <p><b>Amount:</b> \$13,456.00</p> <p><b>Component Description:</b> Other Expenses<br/>Microwave System<br/>Power System</p> <p><b>Amount:</b> \$8,058.42</p> <p><b>Component Description:</b> Other Expenses<br/>Microwave System<br/>Power Supply</p> <p><b>Amount:</b> \$8,563.00</p> <p><b>Component Description:</b> Other Expenses<br/>Microwave System</p> <p><b>Amount:</b> \$197,730.00</p> |
| DTV Medical Facility<br>Notification  | <p><b>Component Description:</b> Medical<br/>Notification, See<br/>schedule of<br/>services. PO/quote<br/>for multiple call<br/>/locations.</p> <p><b>Amount:</b> \$3,750.00</p>   |
| Disposal Costs (for<br>equipment and other<br>waste, net of any salvage<br>value) | Information not provided.  |

|   |   |
|---|---|
| Develop and air announcement of upcoming channel change | Information not provided.   |
| MVPD Notification of Channel Change                     | <div> <div> <b>Component Description:</b> </div> <div> MVPD Notify See attach pg. 12-13<br/> \$5,100 for 11 sites<br/> equal 463.64 each </div> </div> <div> <div> <b>Amount:</b> </div> <div> \$463.64 </div> </div> |



**Cost  
Information**

**Grand Total**

|                       | Predetermined<br>Cost Estimate | Estimated Cost | Actual Cost    |
|-----------------------|--------------------------------|----------------|----------------|
| Total for all systems | \$5,838,046.78                 | \$5,340,925.31 | \$4,067,630.60 |

**Reimbursement Status**

| Question   | Response |
|--|----------|
| The facility has ceased operating on its pre-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       |

| Certification | Section                                     | Question  | Response |
|---------------|---|---|----------|
|               | Submission of Estimated Expenses Statements | <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.

|   |   |
|---|---|
| <p>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.</p> |   |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>   | <p><b>Donald Smith</b><br/> <i>Director of New Technologies Compliance &amp; Planning</i></p> <p>01/21/2020</p> |

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

|  |   |
|--|---|
| <p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>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.</p> |   |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>  | <p><b>Robert Levin</b><br/> <i>Director of Finance and Administration</i></p> <p>01/21/2020</p> |

## Attachments