



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **10802** | Service: **DTV** | Call **WTTW** | Channel: **47 (UHF)** |
ID: | Sign: |
File **0000028360**
Number:
FRN: **0002860179** | Date **12/19**
Submitted: **/2019**

Applicant Information

Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|---|--|-------------------|-------------------|----------------|
| WINDOW TO THE WORLD COMMUNICATIONS, INC. | Eshed Halpern | +1 (773) 509-5412 | ehalpern@wttw.com | Not-for-Profit |
| Doing Business As: WINDOW TO THE WORLD COMMUNICATIONS, INC. | 5400 NORTH ST. LOUIS AVE CHICAGO, IL 60625 United States | | | |

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 |
|--|---|-------------------|-------------------|
| Mike Tompary <i>Window to the World Communications, Inc.</i> | 5400 N. St. Louis Ave Chicago, IL 60625 United States | +1 (773) 509-2460 | mtompary@wttw.com |

**Broadcaster
Information
and
Transition
Plan**

| Question | Response |
|--|---|
| Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information. | Yes |
| Briefly describe transition plan | Replace aux transmitter with new transmitter and place on air. Replace main transmitter and antenna and place on air at end of phase six. Reconfigure aux and antenna and place into standby. |

Transmitters

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

**Auxiliary
Transmitter****Existing Transmitter Information**

| Section | Question | Response |
|---|---|---|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Auxiliary (Backup) |
| | Description of Use | For backup if main transmitter fails |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | Sigma CD Diamond Drive |
| | Year | 2001 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Single |
| | Power Capacity | 24 kW |

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

| Section | Question | Response |
|-----------------|---|---|
| New Transmitter | Use | Auxiliary (Backup) |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Manufacturer | |
| | Model | ULXTE-20 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 10.8 kW |
| | Justification for New Transmitter | Due to channel reassignment need lower power transmitter and new exciters. |

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

**Auxiliary
Transmitter**

Other Transmitter Cost Not Listed

Information not provided.

**Primary
Transmitter**

Existing Transmitter Information

| Section | Question | Response |
|---|--|------------------------------|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | Sigma CD Diamond Drive |
| | Year | 2001 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Single |
| | Power Capacity | 24 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? | Yes |
| | Manufacturer | |
| | Model | ULXTE-20 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 10.8 kW |
| | Justification for New Transmitter | Due to channel reassignment need lower power transmitter and new exciters. |

**Primary
Transmitter**

Other Transmitter Costs

| Section | Question | Response |
|--------------------|---------------------------------------|----------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | No |
| | Transformer (480V) | No |
| | Power | N/A |
| | Rigid Conduit and Wiring | No |
| | Size | N/A |
| | Length | N/A |
| | Other Electrical Service | Yes |

| | | |
|--|---|---|
| | Description | Electricians to remove old equipment and install new equipment. Relocate or remove and reinstall all electric work. To remove existing and hang new transmission line. To remove offsite all old equipment. |
| HVAC Service | Does the replacement transmitter require HVAC Service? | Yes |
| | Type | Cooling Only |
| | Size | 20 tons |
| | Other Size | N/A |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No |
| | Size | N/A |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | N/A |
| | Is a channel 14 Mask Filer needed? | N/A |
| | Is additional field engineering time needed? | N/A |
| | Number of Days | N/A |

Primary Transmitter

Other Transmitter Cost Not Listed

| Name | Description |
|----------------------|---|
| Great Lakes Plumbing | Remove and install two 10 ton A/C units |

| | |
|-----------------------------|---|
| Great Lakes Plumbing | GL Plumbing to connect cooling system to building water |
|-----------------------------|---|

Antennas

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

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

| Section | Question | Response |
|---|--|--|
| Existing Antenna Description | Type of change | Retune Existing |
| | Antenna Use | Auxiliary (Backup) |
| | Description of Use | Used as backup if main antenna fails |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | Yes |
| | Is the existing antenna directional? | Yes |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | Yes |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Middle |
| | Polarization | Horizontal |
| | Type | Broadband Panel |
| | Number of Stations Supported | 7 |
| | Number of Panels | 8 |

| | |
|---------------------------------|------------|
| Design power capacity in use | 100.0 % |
| Lower Limit | 470.00 MHz |
| Upper Limit | 700.00 MHz |
| Other Antenna Type | N/A |
| ERP: (Effective Radiated Power) | 300.0 kW |
| Manufacturer | RFS |
| Model | PHP24C |
| Year | 2004 |

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

| Facility ID | Call Sign |
|-------------|-----------|
| 10981 | WCPX-TV |
| 22211 | WFLD |
| 32334 | WJYS |
| 47905 | WMAQ-TV |
| 71428 | WCIU-TV |
| 72115 | WGN-TV |

**Auxiliary
Antenna**

Adjustment to Existing Antenna

| Section | Question | Response |
|---------------------------------------|---|----------|
| Sweep Test of Existing Antenna | Do you need a sweep test of existing antenna? | Yes |

**Auxiliary
Antenna**

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|--|----------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | No |

| | |
|-----------------------------------|-----|
| Type | |
| Number of channels supported | N/A |
| Frequencies of channels supported | N/A |
| Frequency | |

**Auxiliary
Antenna**

Other Antenna Cost Not Listed

| Name | Description |
|-----------------|---|
| East RFS System | See Willis Tower Preliminary Budget Overview East RFS System |

**Primary
Antenna**

Existing Antenna Information

| Section | Question | Response |
|---|--|--------------------|
| Existing Antenna Description | Type of change | Purchase New |
| | Antenna Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | No |
| | Is the existing antenna directional? | Yes |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | Yes |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Middle |
| | Polarization | Horizontal |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels | N/A |
| | Design power capacity in use | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 300.0 kW |
| | | |

| | |
|--------------|-------------------------|
| Manufacturer | |
| Model | ATW13H4 - HSC1 - 47S |
| Year | 2001 |

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? | Yes |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | Yes |
| New Antenna Manufacturer and Types | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Middle |
| | Polarization | Elliptical |
| | Type | Broadband Panel |
| | Number of Stations Supported | 2 |
| | Number of Panels/Bays | 24 |
| | Lower Limit | 488.00 MHz |
| | Upper Limit | 608.00 MHz |
| | Design power capacity in use | 100.0 % |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 193.0 kW |
| | Manufacturer | |
| | Model | PEPL24C |

| | | |
|--|-------------------------------|----------------------------------|
| | Year | 2017 |
| | Justification for New Antenna | Channel reassignment from repack |

Primary Antenna

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|---|---------------------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | Yes |
| | Type | New |
| | Number of channels supported | 2 |
| | Frequencies of channels supported | Upper and lower frequency |
| | Frequency | 488.0 MHz - 608.0 MHz |
| | Do you need a combiner output splitter /switcher for dual feed lines? | No |
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | No |
| | Broadband or Single Channel? | N/A |
| | Feed Line Size | N/A |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for a high power antenna? | Yes |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | Yes |
| Sweep Test | Do you require the sweep testing of transmission line and antenna? | Yes |

**Primary
Antenna**

Other Antenna Cost Not Listed

| Name | Description |
|---|--|
| Outside Project Management | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Equipment Storage | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Structional Engineering | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Combiner Freight | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Transmission Line | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Combiner Spine | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Antenna Mounts | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Tower Modifications | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Combiner Module | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Antenna Installation and Commissioning | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Combiner Delivery to Willis | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Transmission Line Mounts | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |

| | |
|--|--|
| Transmission Line Installation | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Combiner Installation and Commissioning | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Radome Modifications | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Permitting | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Internal Transmission Line | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| RFR Measurements | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Combiner Room Construction | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Antenna Freight | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| RF Safety Coordination | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |
| Antenna Delivery to Willis | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System |

Transmission Line

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

Auxiliary **Existing Transmission Line**
Transmission Line

| Section | Question | Response |
|---|--|------------------------|
| Existing Transmission Line Description | Type of change | Purchase New |
| | Use | Auxiliary (Backup) |
| | Description of Use | Use if main line fails |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing transmission line shared with another station or stations? | No |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | |
| | Type | Rigid |
| | Diameter | 4 1/16 inches |
| | Other Diameter | N/A |
| | Segment Length | 20 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 100 feet per run |

Auxiliary **New Transmission Line**
Transmission Line

| Section | Question | Response |
|------------------------------------|---|--|
| New Transmission Line Costs | Use | Auxiliary (Backup) |
| | Description of Use | Use if main fails |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Type | Rigid |
| | Diameter | 6 1/8 inches |
| | Other Diameter | N/A |
| | Segment Length | 20 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 100 feet per run |
| | Justification for New Transmission Line | Additional power to antenna. See exhibit attached page 6 |

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

| Name | Description |
|----------------------------|--|
| Electrician Hanging | Electrician to hang and remove old transmission lines. |

Primary
Transmission Line

Existing Transmission Line

| Section | Question | Response |
|---|--|------------------|
| Existing Transmission Line Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing transmission line shared with another station or stations? | No |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | |
| | Type | Rigid |
| | Diameter | 4 1/16 inches |
| | Other Diameter | N/A |
| | Segment Length | 20 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 100 feet per run |

Primary
Transmission Line

New Transmission Line

| Section | Question | Response |
|------------------------------------|---|--|
| New Transmission Line Costs | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Type | Rigid |
| | Diameter | 6 1/8 inches |
| | Other Diameter | N/A |
| | Segment Length | 20 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 100 feet per run |
| | Justification for New Transmission Line | Additional power to antenna. See exhibit attached page 6 |

Primary
Transmission Line

Other Transmission Line Expenses Not Listed

| Name | Description |
|----------------------------|--|
| Electrician Hanging | Electrician to hang and remove old transmission line |

**Tower
Equipment
And
Rigging
Costs**

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

**Auxiliary
Tower**

Existing Tower

| Section | Question | Response |
|---|---|-------------------------|
| Existing Tower Description | Type of change | Modify Existing |
| | Tower Use | Auxiliary (Backup) |
| | Description of Use | Use if main tower fails |
| | Ownership | Leased |
| | Is this tower consider Complex? | Located on Building |
| | Is this tower currently shared with any other stations? | Yes |
| | One or more FM, AM or TV radio broadcaster(s) | Yes |
| | Others Types of Users | No |
| | Is tower documented for structural analysis? | Yes |
| | Is tower compliant with Rev G? | Yes |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1032960 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 41° 52' 44.0" N- |
| | Longitude (NAD83) | 087° 38' 08.0" W- |
| | Overall Structure Height | 1722.09 feet |
| | Support Structure Height | 1435.35 feet |

| | | |
|--|--|----------------------------|
| | Ground Elevation Above Mean Sea Level (AMSL) | 595.14 feet |
| | Structure Type | BMAST - Building with Mast |
| | Tower Owner | 233 Broadcast, LLC |
| | Date Constructed | 09/30/2012 |

**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 |
|-------------|-----------|---------|
| 71428 | WCIU-TV | DTV |
| 9613 | WBBM-FM | FM |
| 28621 | WBMX | FM |
| 73226 | WLS-TV | DTV |
| 48772 | WPWR-TV | DTV |
| 66978 | WEDE-CD | DTV |
| 32334 | WJYS | DTV |
| 70119 | WSNS-TV | DTV |
| 71283 | WCFS-FM | FM |
| 72115 | WGN-TV | DTV |
| 47906 | KNBC | DTV |
| 74178 | WKSC-FM | FM |
| 22211 | WFLD | DTV |
| 9617 | WBBM-TV | DTV |
| 10981 | WCPX-TV | DTV |
| 73228 | WLS-FM | FM |

| | | |
|--------|---------|-----|
| 10801 | WFMT | FM |
| 10802 | WTTW | DTV |
| 71425 | WWME-CD | DTV |
| 168662 | WMEU-CD | DTV |
| 53971 | WEBG | FM |
| 6377 | WTMX | FM |
| 51165 | WGCI-FM | FM |
| 70042 | WLIT-FM | FM |

Auxiliary Tower

Tower Modification Costs

| Section | Question | Response |
|----------------------|--|-----------------------------|
| Engineering Study | Please what type of engineering study is required, if any: | No study needed |
| Tower Reinforcements | Please select whether tower reinforcements are needed: | Major Reinforcements needed |

Auxiliary Tower

Tower Rigging Costs

| Section | Question | Response |
|------------------------------|-----------------------------------|---------------------|
| Tower Rigging Costs | Complex Tower | Located on Building |
| Helicopter Services Required | Are helicopter services required? | No |

Auxiliary Tower

Other Tower Expenses Not Listed

Information not provided.

Primary Tower

Existing Tower

| Section | Question | Response |
|--|---|----------------------------|
| Existing Tower Description | Type of change | Modify Existing |
| | Tower Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Leased |
| | Is this tower consider Complex? | Located on Building |
| | Is this tower currently shared with any other stations? | Yes |
| | One or more FM, AM or TV radio broadcaster(s) | Yes |
| | Others Types of Users | No |
| | Is tower documented for structural analysis? | Yes |
| | Is tower compliant with Rev G? | Yes |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1032959 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 41° 52' 44.1" N- |
| | Longitude (NAD83) | 087° 38' 10.2" W- |
| | Overall Structure Height | 1729.97 feet |
| | Support Structure Height | 1435.35 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 595.14 feet |
| | Structure Type | BTWR - Building with Tower |
| | | |

| | | |
|--|------------------|--------------------------|
| | Tower Owner | 233 Broadcast, LLC |
| | Date Constructed | 01/01/2002 |

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

| Facility ID | Call Sign | Service |
|-------------|-----------|---------|
| 9617 | WBBM-TV | DTV |
| 9613 | WBBM-FM | FM |
| 70042 | WLIT-FM | FM |
| 28621 | WBMX | FM |
| 66978 | WEDE-CD | DTV |
| 168662 | WMEU-CD | DTV |
| 10801 | WFMT | FM |
| 22211 | WFLD | DTV |
| 10981 | WCPX-TV | DTV |
| 32334 | WJYS | DTV |
| 10802 | WTTW | DTV |
| 74178 | WKSC-FM | FM |
| 48772 | WPWR-TV | DTV |
| 6377 | WTMX | FM |
| 51165 | WGCI-FM | FM |
| 73228 | WLS-FM | FM |
| 70119 | WSNS-TV | DTV |
| 53971 | WEBG | FM |
| 72115 | WGN-TV | DTV |

| | | |
|-------|---------|-----|
| 47906 | KNBC | DTV |
| 73226 | WLS-TV | DTV |
| 71428 | WCIU-TV | DTV |
| 71425 | WWME-CD | DTV |
| 71283 | WCFS-FM | FM |

**Primary
Tower**

Tower Modification Costs

| Section | Question | Response |
|-----------------------------|--|-----------------------------|
| Engineering Study | Please what type of engineering study is required, if any: | No study needed |
| Tower Reinforcements | Please select whether tower reinforcements are needed: | Major Reinforcements needed |

**Primary
Tower**

Tower Rigging Costs

| Section | Question | Response |
|-------------------------------------|-----------------------------------|---------------------|
| Tower Rigging Costs | Complex Tower | Located on Building |
| Helicopter Services Required | Are helicopter services required? | Yes |

**Primary
Tower**

Other Tower Expenses Not Listed

| Name | Description |
|---|---|
| SW Pole Material Removal and Disposal | Removal and disposal of remaining SW pole material |
| WTTW Antenna Removal Engineering | Antenna Removal Engineering |
| WTTW T L Removal to 100 in smoke shaft | Removal of line in shaft from 109 to 100. |
| SW Pole Decommission Engineering | Pole Decommission Engineering |
| SW Pole Decommission Prep. Work RF Safety Coord. | RF safety coordination for SW pole decom. prep work |

| | |
|--|---|
| WTTW Antenna Removal RF Safety Coordination | Antenna Removal RF Safety Coordination |
| WTTW Transmission Line Removal to Smoke Shaft | Estimated 5 nights of work to complete. |
| Willis Tower Project Management | Willis Tower Project Management |
| WTTW Antenna Removal | Helicopter not required. Estimated 4 nights. |
| SW Pole Decommission Preparation Work | Estimated 10 nights of work for preparation. |
| WTTW T L Removal RF Safety Coordination | RF safety coordination during line removal to shaft |

**Outside
Professional**

| Section | Question | Response |
|---|--|---|
| Services Costs Outside Project Management Services | Do you require outside project management services? | Yes |
| | Number of Hours | 500 |
| | Explanation | Outside services, such as legal, engineering, consultant. |
| Outside RF consulting Engineering Services | Perform engineering study for new channel assignment and antenna development | No |
| | Prepare engineering section of Form FCC Construction Permit Application | No |
| | For Auxiliary Facility | N/A |
| | For Main Facility | N/A |
| | Prepare engineering section of Form FCC License to Cover Application | No |
| | For Auxiliary Facility | N/A |
| | For Main Facility | N/A |
| | Prepare request for Special Temporary Authority | No |
| | Quantity | N/A |
| | Do you have Distributed Transmission System engineering services? | N/A |
| | Critical Facility | N/A |
| | Terrain-Shielded Facility | N/A |
| Attorney and Other Outside Consulting Services | Prepare and file Form FCC Construction Permit Application | No |
| | For Auxiliary Facility | N/A |
| | For Main Facility | N/A |
| | Prepare and file Form FCC License to Cover Application | Yes |

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

Outside Professional Services Costs **Other Professional Services Expenses Not Listed**

Services not provided.

Other Expenses

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

| | |
|-----------------------|---|
| Other Expenses | Other Expenses Not Listed Information not provided. |
|-----------------------|---|

Cost Information

Transmitters

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|-----------------------|--|---------------------|---------------------------|
| Primary Transmitter ULXTE-20 | \$930,123.00 | \$1,015,458.88 | | \$632,557.26 | |
| Great Lakes Plumbing | <i>\$35,000.00</i> | \$35,000.00 | N/A | N/A | N/A |
| Other Electrical Service: Electricians to remove old equipment and install new equipment. Relocate or remove and reinstall all electric work. To remove existing and hang new transmission line. To remove offsite all old equipment. | <i>\$290,000.00</i> | \$290,000.00 | Cost - Site work Changed, Access to loading dock and elevator, late arrival of equipment due to tight schedule working around clock. See quote from Okeh Electric revision #1 uploaded | \$246,000.00 | N/A |
| Other -- HVAC Service Type: C Size:20 (Other) | <i>\$110,623.00</i> | \$110,623.00 | N/A | N/A | N/A |

| | | | | | |
|--|---------------------|---------------------|-----------------------|---------------------|-----|
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | \$494,500.00 | \$579,835.88 | Whole system included | \$386,557.26 | N/A |
| Auxiliary Transmitter ULXTE-20 | \$494,500.00 | \$552,003.92 | | \$368,002.60 | |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | \$494,500.00 | \$552,003.92 | Whole system included | \$368,002.60 | N/A |
| Sub-total | \$1,424,623.00 | \$1,567,462.80 | N/A | \$1,000,559.86 | N/A |
| Total for all systems | \$5,688,182.64 | \$4,002,852.44 | N/A | \$1,650,201.14 | N/A |

Components

| Actual Information | |
|----------------------|---------------------------|
| Description | File Name |
| Great Lakes Plumbing | Information not provided. |

| | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------------------------|------------------------|----------------|------------|-------------------------------|---|----------------|-------------|-------------------------------|--|----------------|--------------|-------------------------------|---|----------------|-------------|-------------------------------|---|----------------|-------------|
| <p>Other Electrical Service: Electricians to remove old equipment and install new equipment. Relocate or remove and reinstall all electric work. To remove existing and hang new transmission line. To remove offsite all old equipment.</p> | <table> <tr> <td data-bbox="722 174 1034 208">Component Description:</td><td data-bbox="1161 174 1361 241">Moving electrical line</td></tr> <tr> <td data-bbox="722 253 831 286">Amount:</td><td data-bbox="1161 253 1281 286">\$6,000.00</td></tr> <tr> <td data-bbox="722 398 1034 432">Component Description:</td><td data-bbox="1161 398 1377 544">final installment of transmitter install and disconnect, etc.</td></tr> <tr> <td data-bbox="722 555 831 589">Amount:</td><td data-bbox="1161 555 1297 589">\$35,000.00</td></tr> <tr> <td data-bbox="722 701 1034 734">Component Description:</td><td data-bbox="1161 701 1353 846">Disconnect old transmitters and reconnect new transmitters</td></tr> <tr> <td data-bbox="722 857 831 891">Amount:</td><td data-bbox="1161 857 1313 891">\$132,125.00</td></tr> <tr> <td data-bbox="722 1003 1034 1037">Component Description:</td><td data-bbox="1161 1003 1353 1104">3rd installment - 2nd transmitter removal</td></tr> <tr> <td data-bbox="722 1115 831 1149">Amount:</td><td data-bbox="1161 1115 1297 1149">\$33,750.00</td></tr> <tr> <td data-bbox="722 1261 1034 1294">Component Description:</td><td data-bbox="1161 1261 1369 1440">the next progress billing on the electrical work performed for the transmitters</td></tr> <tr> <td data-bbox="722 1451 831 1485">Amount:</td><td data-bbox="1161 1451 1297 1485">\$39,125.00</td></tr> </table> | Component Description: | Moving electrical line | Amount: | \$6,000.00 | Component Description: | final installment of transmitter install and disconnect, etc. | Amount: | \$35,000.00 | Component Description: | Disconnect old transmitters and reconnect new transmitters | Amount: | \$132,125.00 | Component Description: | 3rd installment - 2nd transmitter removal | Amount: | \$33,750.00 | Component Description: | the next progress billing on the electrical work performed for the transmitters | Amount: | \$39,125.00 |
| Component Description: | Moving electrical line | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$6,000.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | final installment of transmitter install and disconnect, etc. | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$35,000.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | Disconnect old transmitters and reconnect new transmitters | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$132,125.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | 3rd installment - 2nd transmitter removal | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$33,750.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | the next progress billing on the electrical work performed for the transmitters | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$39,125.00 | | | | | | | | | | | | | | | | | | | | |
| <p>Other -- HVAC Service Type: C Size:20 (Other)</p> | <p>Information not provided.</p> | | | | | | | | | | | | | | | | | | | | |

| | |
|--|--|
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | <div> Component Description: 1/3 down payment on Primary transmitter cost of \$579,835.88 </div> <div> Amount: \$193,278.63 </div> |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | <div> Component Description: 2nd installment of the primary transmitter cost </div> <div> Amount: \$193,278.63 </div> |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | <div> Component Description: 2nd installment of the Auxiliary Transmitter cost </div> <div> Amount: \$184,001.30 </div> |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | <div> Component Description: 1/3 of auxiliary transmitter cost of \$552,003.92 </div> <div> Amount: \$184,001.30 </div> |

Cost
Information

Antennas

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|----------------|-------------------------------|--------------|---------------------------|
| Primary Antenna PEPL24C | \$1,422,242.97 | \$1,302,902.97 | | \$588,831.61 | |
| Antenna Delivery to Willis | <i>\$10,000.00</i> | \$10,000.00 | N/A | N/A | N/A |
| RF Safety Coordination | <i>\$75,000.00</i> | \$75,000.00 | N/A | N/A | N/A |
| Antenna Freight | <i>\$12,500.00</i> | \$12,500.00 | N/A | N/A | N/A |
| RFR Measurements | <i>\$5,000.00</i> | \$5,000.00 | N/A | N/A | N/A |
| Internal Transmission Line | <i>\$75,000.00</i> | \$75,000.00 | N/A | N/A | N/A |
| Permitting | <i>\$20,000.00</i> | \$20,000.00 | N/A | N/A | N/A |
| Radome Modifications | <i>\$50,000.00</i> | \$50,000.00 | N/A | N/A | N/A |
| Combiner Installation and Commissioning | <i>\$9,062.50</i> | \$9,062.50 | N/A | N/A | N/A |
| Transmission Line Mounts | <i>\$15,000.00</i> | \$15,000.00 | N/A | N/A | N/A |
| Combiner Delivery to Willis | <i>\$10,000.00</i> | \$10,000.00 | N/A | N/A | N/A |
| Antenna Installation and Commissioning | <i>\$99,154.87</i> | \$99,154.87 | WTTWs portion of installation | \$99,154.87 | N/A |

| | | | | | |
|--|---------------------|--------------|--|--------------|--|
| Combiner Module | \$60,980.00 | \$60,980.00 | N/A | \$60,980.00 | Price increases since the cost estimates were entered. |
| Tower Modifications | \$200,000.00 | \$200,000.00 | N/A | N/A | N/A |
| Antenna Mounts | \$15,000.00 | \$15,000.00 | N/A | N/A | N/A |
| Combiner Spine | \$20,000.00 | \$20,000.00 | N/A | N/A | N/A |
| Structional Engineering | \$150,000.00 | \$150,000.00 | N/A | \$113,099.30 | N/A |
| UHF - High Power, Side Mount, broadband panel, 24 bay,, 193 kW input, directional,, elliptically or circularly polarized | \$120,862.50 | \$120,862.50 | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System | \$120,862.50 | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$0.00 | N/A | N/A | N/A |
| New combiner, cost per channel (without antenna) | \$84,200.00 | \$0.00 | N/A | N/A | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost) | \$23,150.00 | \$0.00 | N/A | N/A | N/A |

| | | | | | |
|--|---------------------|--------------|---|--------------|-----|
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost) | \$5,260.00 | \$0.00 | N/A | N/A | N/A |
| Transmission Line | \$111,298.10 | \$111,298.10 | N/A | \$111,298.10 | N/A |
| Equipment Storage | \$1,000.00 | \$1,000.00 | N/A | N/A | N/A |
| Outside Project Management | \$92,500.00 | \$92,500.00 | N/A | \$2,167.97 | N/A |
| Combiner Freight | \$5,000.00 | \$5,000.00 | N/A | N/A | N/A |
| Combiner Room Construction | \$45,000.00 | \$45,000.00 | See Willis Tower Preliminary Budget Overview WEST Tower RFS Antenna /Combiner System | \$23,712.59 | N/A |
| Transmission Line Installation | \$75,000.00 | \$75,000.00 | N/A | \$32,011.28 | N/A |
| Combiner Commissioning | \$9,062.50 | \$9,062.50 | ***System Notice: Estimate adjusted and locked because line has been superseded. *** | \$9,062.50 | N/A |

| | | | | | |
|--|-----------------------|-----------------------|---|-----------------------|------------|
| Antenna Commissioning | \$16,482.50 | \$16,482.50 | ***System Notice: Estimate adjusted and locked because line has been superseded. *** | \$16,482.50 | N/A |
| Auxiliary Antenna PHP24C | \$476,156.67 | \$464,166.67 | | \$50,852.91 | |
| Sweep test of existing antenna | \$6,730.00 | \$0.00 | N/A | N/A | N/A |
| Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost) | \$5,260.00 | \$0.00 | N/A | N/A | N/A |
| East RFS System | \$464,166.67 | \$464,166.67 | N/A | \$50,852.91 | N/A |
| Sub-total | \$1,898,399.64 | \$1,767,069.64 | N/A | \$639,684.52 | N/A |
| Total for all systems | \$5,688,182.64 | \$4,002,852.44 | N/A | \$1,650,201.14 | N/A |

Components

| Actual Information | |
|----------------------------|---------------------------|
| Description | File Name |
| Antenna Delivery to Willis | Information not provided. |
| RF Safety Coordination | Information not provided. |
| Antenna Freight | Information not provided. |
| RFR Measurements | Information not provided. |
| Internal Transmission Line | Information not provided. |

| | |
|---|--|
| Permitting | Information not provided. |
| Radome Modifications | Information not provided. |
| Combiner Installation and Commissioning | Information not provided. |
| Transmission Line Mounts | Information not provided. |
| Combiner Delivery to Willis | Information not provided. |
| Antenna Installation and Commissioning | <div> <div> Component Description: Amount: </div> <div> Antenna installation portion of this invoice \$99,154.87 </div> </div> |
| Combiner Module | <div> <div> Component Description: Amount: </div> <div> 50% Combiner, Module from manufacturer quotation #20061310 \$60,980.00 </div> </div> |
| Tower Modifications | Information not provided. |
| Antenna Mounts | Information not provided. |
| Combiner Spine | Information not provided. |

Structional Engineering

Component Description: As stated on cover letter, requesting payment of one penny short of invoice total due to vendor error.

Amount: \$39,377.81

Component Description: Structural Engineering costs associated with West and East tower work

Amount: \$28,908.74

Component Description: Structural Engineering portion of this invoice.

Amount: \$7,362.50

Component Description: Structural engineering: Ruck inv 1901410 & 1901411 and ERE LLC inv 1366 &1342

Amount: \$27,431.25

Component Description: WTTW share of WEST RFS Antenna/Combiner System, details attached

Amount: \$10,019.00

| | |
|--|--|
| UHF - High Power, Side Mount, broadband panel, 24 bay,, 193 kW input, directional,, elliptically or circularly polarized | <p>Component Description: 50% UHF High Power, Side Mount, Broadband panel, 24Bay 193kW input, Directional, Elliptically or circular polarized. Quotation #20061310</p> <p>Amount: \$120,862.50</p> |
| Sweep test of existing antenna | Information not provided. |
| New combiner, cost per channel (without antenna) | Information not provided. |
| Side mount brackets for high 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. |
| Transmission Line | <p>Component Description: 50% of various Transmission Line costs as indicated by line number on quotation #20061310</p> <p>Amount: \$111,298.10</p> |
| Equipment Storage | Information not provided. |

| | |
|--------------------------------|---|
| Outside Project Management | <div> Component Description: Shared cost EAST RFS System, back up attached </div> <div> Amount: \$65.29 </div> |
| | <div> Component Description: Share of West RFS Antenna/Combiner System, details attached </div> <div> Amount: \$1,290.17 </div> |
| | <div> Component Description: Outside Project Mgmt: ERE LLC invoices 1359, 1337, 1351 </div> <div> Amount: \$812.51 </div> |
| Combiner Freight | Information not provided. |
| Combiner Room Construction | <div> Component Description: Combiner Room Construction: ISI invoices 6018a, 6018, 6019 and Ruck invoice 1901429 </div> <div> Amount: \$23,712.59 </div> |
| Transmission Line Installation | <div> Component Description: Transmission line installation portion of this invoice. </div> <div> Amount: \$29,261.28 </div> <div> Component Description: Transmission Line Installation, detail sheet from vendor ERE,LLC inv #1331 </div> <div> Amount: \$2,750.00 </div> |

| | |
|--|---|
| Combiner Commissioning | Component Description: 50% Combiner Commissioning Amount: \$9,062.50 |
| Antenna Commissioning | Component Description: 50% Antenna Commissioning Amount: \$16,482.50 |
| 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. |
| East RFS System | Component Description: Shared UHF Channel Combiner Amount: \$50,852.91 |

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 | \$30,200.00 | \$29,000.00 | | \$0.00 | |
| Rigid Transmission Line - copper, 6 1/8" | \$20,200.00 | \$19,000.00 | N/A | N/A | N/A |
| Electrician Hanging | <i>\$10,000.00</i> | \$10,000.00 | N/A | N/A | N/A |
| Auxiliary Transmission Line | \$30,200.00 | \$29,000.00 | | \$0.00 | |
| Rigid Transmission Line - copper, 6 1/8" | \$20,200.00 | \$19,000.00 | N/A | N/A | N/A |
| Electrician Hanging | <i>\$10,000.00</i> | \$10,000.00 | N/A | N/A | N/A |
| Sub-total | \$60,400.00 | \$58,000.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,688,182.64 | \$4,002,852.44 | N/A | \$1,650,201.14 | N/A |

Components

Information not provided.

Cost
Information

Tower Equipment and Rigging Costs

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|----------------|------------------------------|-------------|---------------------------|
| Primary Tower BTWR | \$1,349,500.00 | \$507,500.00 | | \$0.00 | |
| WTTW Antenna Removal | <i>\$40,000.00</i> | \$40,000.00 | N/A | N/A | N/A |
| WTTW Antenna Removal RF Safety Coordination | <i>\$10,000.00</i> | \$10,000.00 | N/A | N/A | N/A |
| WTTW T L Removal to 100 in smoke shaft | <i>\$40,000.00</i> | \$40,000.00 | N/A | N/A | N/A |
| SW Pole Decommission Preparation Work | <i>\$50,000.00</i> | \$50,000.00 | N/A | N/A | N/A |
| SW Pole Decommission Engineering | <i>\$32,500.00</i> | \$32,500.00 | N/A | N/A | N/A |
| SW Pole Material Removal and Disposal | <i>\$25,000.00</i> | \$25,000.00 | N/A | N/A | N/A |
| Willis Tower Project Management | <i>\$27,500.00</i> | \$27,500.00 | N/A | N/A | N/A |
| WTTW T L Removal RF Safety Coordination | <i>\$12,500.00</i> | \$12,500.00 | N/A | N/A | N/A |

| | | | | | |
|---|-----------------------|---------------------|-----|---------------|-----|
| WTTW Antenna Removal Engineering | \$30,000.00 | \$30,000.00 | N/A | N/A | N/A |
| SW Pole Decommission Prep. Work RF Safety Coord. | \$12,500.00 | \$12,500.00 | N/A | N/A | N/A |
| WTTW Transmission Line Removal to Smoke Shaft | \$50,000.00 | \$50,000.00 | N/A | N/A | N/A |
| Tower Helicopter Lift | \$177,500.00 | \$177,500.00 | N/A | N/A | N/A |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00 | \$0.00 | N/A | N/A | N/A |
| Major tower reinforcement /modifications | \$421,000.00 | \$0.00 | N/A | N/A | N/A |
| Auxiliary Tower BMAST | \$842,000.00 | \$0.00 | | \$0.00 | |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00 | \$0.00 | N/A | N/A | N/A |
| Major tower reinforcement /modifications | \$421,000.00 | \$0.00 | N/A | N/A | N/A |
| Sub-total | \$2,191,500.00 | \$507,500.00 | N/A | \$0.00 | N/A |

| | | | | | |
|------------------------------|----------------|----------------|-----|----------------|-----|
| Total for all systems | \$5,688,182.64 | \$4,002,852.44 | N/A | \$1,650,201.14 | N/A |
|------------------------------|----------------|----------------|-----|----------------|-----|

Components

Information not provided.

Cost Information

Outside Professional Services

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|-----------------------|------------------------------|-----------------------|---------------------------|
| Outside Professional Services | \$107,150.00 | \$96,750.00 | | \$9,956.76 | |
| RF Exposure Measurements | \$21,050.00 | \$20,000.00 | N/A | N/A | N/A |
| Project management of the transition | \$79,000.00 | \$70,000.00 | N/A | \$8,557.26 | N/A |
| Prepare and or review reimbursement form | \$2,630.00 | \$2,500.00 | N/A | \$549.00 | N/A |
| Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application | \$2,105.00 | \$2,000.00 | N/A | \$576.00 | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application | \$2,365.00 | \$2,250.00 | N/A | \$274.50 | N/A |
| Sub-total | \$107,150.00 | \$96,750.00 | N/A | \$9,956.76 | N/A |
| Total for all systems | \$5,688,182.64 | \$4,002,852.44 | N/A | \$1,650,201.14 | N/A |

Components

| Actual Information | |
|--------------------------------------|--|
| Description | File Name |
| RF Exposure Measurements | Information not provided. |
| Project management of the transition | <div> <div> Component Description: Amount: </div> <div> email on FCC post-auction transition procedures and payments \$50.50 </div> </div> <div> <div> Component Description: Amount: </div> <div> Various FCC repack related topics \$6,810.26 </div> </div> <div> <div> Component Description: Amount: </div> <div> Preparation of 2100 CP application and maximization application \$1,657.50 </div> </div> <div> <div> Component Description: Amount: </div> <div> Email regarding auction closing and channel reassignment \$50.50 </div> </div> <div> <div> Component Description: Amount: </div> <div> Analysis and review of FCC online databases, etc. \$39.00 </div> </div> |

| | | | | | | | | | | | | | | | | | | | | | |
|---|--|-------------------------------|--|----------------|----------|-------------------------------|---|----------------|----------|-------------------------------|---------------------------|----------------|----------|-------------------------------|-------------------------------------|----------------|----------|-------------------------------|--------------------------------|----------------|---------|
| <p>Prepare and or review reimbursement form</p> | <table> <tr> <td data-bbox="702 174 1015 210">Component Description:</td><td data-bbox="1147 174 1385 286">Analysis and research for reimbursement form</td></tr> <tr> <td data-bbox="702 297 815 333">Amount:</td><td data-bbox="1147 297 1244 333">\$156.00</td></tr> <tr> <td data-bbox="702 434 1015 470">Component Description:</td><td data-bbox="1147 434 1347 506">Review form 399 estimates</td></tr> <tr> <td data-bbox="702 517 815 553">Amount:</td><td data-bbox="1147 517 1244 553">\$336.00</td></tr> <tr> <td data-bbox="702 654 1015 689">Component Description:</td><td data-bbox="1147 654 1334 725">Email regarding form 1876</td></tr> <tr> <td data-bbox="702 736 815 772">Amount:</td><td data-bbox="1147 736 1244 772">\$101.00</td></tr> <tr> <td data-bbox="702 873 1015 909">Component Description:</td><td data-bbox="1147 873 1385 945">Prepare & review reimbursement form</td></tr> <tr> <td data-bbox="702 956 815 992">Amount:</td><td data-bbox="1147 956 1244 992">\$112.00</td></tr> <tr> <td data-bbox="702 1093 1015 1128">Component Description:</td><td data-bbox="1147 1093 1385 1164">Analysis of reimbursement form</td></tr> <tr> <td data-bbox="702 1176 815 1211">Amount:</td><td data-bbox="1147 1176 1230 1211">\$78.00</td></tr> </table> | Component Description: | Analysis and research for reimbursement form | Amount: | \$156.00 | Component Description: | Review form 399 estimates | Amount: | \$336.00 | Component Description: | Email regarding form 1876 | Amount: | \$101.00 | Component Description: | Prepare & review reimbursement form | Amount: | \$112.00 | Component Description: | Analysis of reimbursement form | Amount: | \$78.00 |
| Component Description: | Analysis and research for reimbursement form | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$156.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | Review form 399 estimates | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$336.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | Email regarding form 1876 | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$101.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | Prepare & review reimbursement form | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$112.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | Analysis of reimbursement form | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$78.00 | | | | | | | | | | | | | | | | | | | | |
| <p>Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application</p> | <table> <tr> <td data-bbox="702 1341 1015 1377">Component Description:</td><td data-bbox="1147 1341 1374 1413">review construction permit application</td></tr> <tr> <td data-bbox="702 1424 815 1460">Amount:</td><td data-bbox="1147 1424 1230 1460">\$78.00</td></tr> <tr> <td data-bbox="702 1561 1015 1597">Component Description:</td><td data-bbox="1147 1561 1374 1749">preparation of construction permit application and form 399 application</td></tr> <tr> <td data-bbox="702 1760 815 1796">Amount:</td><td data-bbox="1147 1760 1244 1796">\$498.00</td></tr> </table> | Component Description: | review construction permit application | Amount: | \$78.00 | Component Description: | preparation of construction permit application and form 399 application | Amount: | \$498.00 | | | | | | | | | | | | |
| Component Description: | review construction permit application | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$78.00 | | | | | | | | | | | | | | | | | | | | |
| Component Description: | preparation of construction permit application and form 399 application | | | | | | | | | | | | | | | | | | | | |
| Amount: | \$498.00 | | | | | | | | | | | | | | | | | | | | |

Attorney Fees -Prepare
and File FCC Form 2100
(main), License to Cover
Application

Component Description:

ungranted repack
applications

Amount:

\$50.50

Component Description:

repack process
and timing

Amount:

\$168.00

Component Description:

regarding repack
transition report
and form 2100
schedule 387
availability

Amount:

\$56.00

Cost
Information

Other Expenses

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Other Expenses | \$6,110.00 | \$6,070.00 | | \$0.00 | |
| FCC Filing Fees - Form 2100 minor change CP application | \$1,110.00 | \$1,070.00 | N/A | N/A | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | \$0.00 | \$0.00 | N/A | N/A | N/A |
| Equipment Storage | \$0.00 | \$0.00 | N/A | N/A | N/A |
| Develop and air announcement of upcoming channel change | \$5,000.00 | \$5,000.00 | N/A | N/A | N/A |
| Sub-total | \$6,110.00 | \$6,070.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,688,182.64 | \$4,002,852.44 | N/A | \$1,650,201.14 | N/A |

Components

Information not provided.

| | | | |
|-----------------------------|------------------------------|--|-----------------------|
| Cost Information | Grand Total | | |
| | | Predetermined Cost Estimate | Estimated Cost |
| | | | Actual Cost |
| | Total for all systems | \$5,688,182.64 | \$4,002,852.44 |
| | | | \$1,650,201.14 |

| | | |
|-----------------------------|--|-----------------|
| 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"> 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. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. | |

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

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

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

**Paul
Gosiewski**
*Director of
Finance*

12/19/2019

| 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"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. | |

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

| | |
|--|--|
| <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>Paul Gosiewski <i>Director of Finance</i></p> <p>12/19/2019</p> |

Attachments