

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

69292 Service: DTV Call **WUND-TV** Channel: 29 (UHF) Facility Sign:

0000025920

Number:

ID:

File

FRN: 0001910066 Date 04/19

> Submitted: /2018

Applicant Information

Applicant Name, Type, and Contact Information

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

Reimbursement Contact Name and Information Reimbursement Contact Information

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

Preparer Contact Information

Preparer Contact Name and Information

| Applicant | Address | Phone | Email |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------|----------------------|
| Donald Smith Director of New Technologies Compliance & Planning University of North Carolina Center for Public Television | Donald Smith 10 T.W. Alexander Drive Research Triangle Park, NC 27709 United States | +1 (919) 549-7025 | dsmith@unctv. org |

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 | The transition plan is to construct an interim facility at the existing site. The interim facility would be used when operation on the new channel begins. After that the necessary changes would be made to the primary transmission system. |

Transmitters

| rs | 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 | Auxiliary (Backup to Main) |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter | Manufacturer | |
| Manufacturer and Type | Model | DHD30P1 |
| | Year | 2001 |
| | Туре | Solid State |
| | Solid State Cooling | Air Cooled |
| | Solid State Power Capacity | 7.25 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 kW |
| | Justification for New Transmitter | The transmitter manufacturer has indicated that components necessary to modify the transmitter for operation on its new channel are no longer available and it will not be able to provide rechannelization services for the transmitter. See attached letter |

Auxiliary Transmitter

Other Transmitter Costs

| Section | Question | Response |
|---------|----------|----------|
| | | |

| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| | Switchgear (industrial 800 amp) | No |
| | Transformer (480V) | Yes |
| | Power | 150 kVA |
| | Rigid Conduit and Wiring | Yes |
| | Size | 2 inches |
| | Length | 50.0 feet |
| | Other Electrical Service | Yes |
| | Description | Electrical feed disconnect and other items necessary to meet electrical code requiremen |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Туре | N/A |
| | Size | N/A |
| | Other Size | N/A |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leashold improvement? | No |
| | Size | N/A |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | N/A |
| | Is a channel 14 Mask Filer needed? | N/A |
| | Is additional field engineering time needed? | N/A |
| | Number of Days | N/A |

Other Transmitter Cost Not Listed

Auxiliary
Transmitter 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 | |
| Manufacturer and Type | Model | CD3300P3 |
| | Year | 2001 |
| | Туре | Inductive Output Tube |
| | IOT Power Type | Three |
| | Power Capacity | 60 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-100 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 57.0 kW |
| | Justification for New Transmitter | The transmitter manufacturer has indicated that components necessary to modify the transmitter for operation on its new channel are no longer available and it will not be able to provide rechannelization services for the transmitter. See attached letter |

Primary Transmitter

Other Transmitter Costs

| Section | Question | Response |
|--------------------|---------------------------------------|----------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
| | | , |

| | Switchgear (industrial 800 amp) | Yes |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| | Transformer (480V) | Yes |
| | Power | 300 kVA |
| | Rigid Conduit and Wiring | Yes |
| | Size | 2 inches |
| | Length | 100.0 feet |
| | Other Electrical Service | Yes |
| | Description | Electrical feed disconnects and other items necessary to meet electrical code requirements |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Туре | N/A |
| | Size | N/A |
| | Other Size | N/A |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leashold improvement? | No |
| | Size | N/A |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | N/A |
| | Is a channel 14 Mask Filer needed? | N/A |
| | Is additional field engineering time needed? | N/A |
| | Number of Days | N/A |

Primary Transmitter

Transmitter Information not provided.

Antennas

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

Existing Antenna Information

| Section | Question | Response |
|-------------------------------------------|------------------------------------------------------------------|-----------------------|
| Existing Antenna Description | Type of change | Purchase New |
| | Antenna Use | Auxiliary (Backup) |
| | Description of Use | Backup to main |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | No |
| | Is the existing antenna directional? | No |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | No |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Туре | 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) | 741.0 kW |

| Manufacturer | |
|--------------|-----------------------|
| Model | TFU- 30GTH-R O4 |
| Year | 2000 |

New Antenna Costs

| Section | Question | Response |
|-------------------------|----------------------------------------------------------------------|-----------------------------------------|
| New Antenna Description | Use | Auxiliary (Backup) |
| | Description of Use | Interim Facility and Eventual Auxiliary |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | No |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna | Class | Full Power |
| Manufacturer and Types | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Elliptical |
| | Туре | 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) | 775.0 kW |

| Manufacturer | |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model | TFU- 30DSC O4A |
| Year | 2019 |
| Justification for New Antenna | The antenna is a single channel slotted pylon style antenna. It cannot operate on a channel other than what it was designed, channel 20. The only viable option is to replace the antenna. |

Other Antenna Costs

| Section | Question | Response |
|--------------------------------|-----------------------------------------------------------------------|-------------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | No |
| | Туре | |
| | 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 |
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | Yes |
| | Broadband or Single Channel? | Single Channel |

| | Feed Line Size | 6 1/8 inches inches |
|--------------------------|-------------------------------------------------------------------------------------------------------------|---------------------|
| 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 |

Other Antenna Cost Not Listed

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? | No |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | No |
| Existing Antenna | Class | Full Power |
| Manufacturer and Type | Mounting | Top Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Elliptical |
| | Туре | 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) | 543.0 kW |

| Manufacturer | |
|--------------|----------------------|
| Model | ATW25HS3- ETO-20H |
| Year | 2010 |

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? | No |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna | Class | Full Power |
| Manufacturer and Types | Mounting | Top Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Elliptical |
| | Туре | 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) | 657.0 kW |
| | Manufacturer | |
| | | |

| Model | TFU-30GTH /VP-R O4 |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Year | 2019 |
| Justification for New Antenna | The antenna is a single channel slotted pylon style antenna. It cannot operate on a channel other than what it was designed, channel 20. The only viable option is to replace the antenna. |

Other Antenna Costs

| Response |
|-------------------|
| No |
| |
| N/A |
| N/A |
| N/A |
| N/A |
| yes Yes |
| Single Channel |
| |

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

Other Antenna Cost Not Listed

| Transmission | effien | Question | Response |
|--------------|---------------------------------------|-------------------------------------------------|----------|
| | Transmission Line Related Expenses | Do you have transmission line related expenses? | No |

Tower
Equipment
And
Rigging
Costs

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

Primary Tower

Existing Tower

| Section | Question | Response |
|-----------------------------------------------------------|---------------------------------------------------------|----------------------|
| Existing Tower Description | Type of change | 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? | 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 |
| Registration | ASR Number | 1063239 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 35° 54' 01.0" N- |
| | Longitude (NAD83) | 076° 20' 44.0" W- |

| Overall Structure Height | 1640.07 feet |
|----------------------------------------------|------------------------------------------------------|
| Support Structure Height | 1574.13 feet |
| Ground Elevation Above Mean Sea Level (AMSL) | 5.91 feet |
| Structure Type | TOWER - Free Standing or Guyed Structure |
| Tower Owner | UNIVERSITY OF NORTH CAROLINA |
| Date Constructed | 10/21/2010 |

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 |
|-------------|-----------|---------|
| 89274 | WUND-FM | FM |

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

Outside Professional

| Section | Question | Response |
|----------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Services Costs Outside Project Management Services | Do you require outside project management services? | Yes |
| | Number of Hours | 120 |
| | Explanation | Because the transmission site is owned 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. |
| Outside RF consulting Engineering Services | Perform engineering study for new channel assignment and antenna development | Yes |
| | Prepare engineering section of Form FCC Construction Permit Application | Yes |
| | For Auxiliary Facility | 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 | 1 |

| | Do you have Distributed Transmission System engineering services? | N/A |
|---------------------------------------|--------------------------------------------------------------------------------------------|-----|
| | Critical Facility | N/A |
| | Terrain-Shielded Facility | N/A |
| Attorney and Other Outside Consulting | Prepare and file Form FCC Construction Permit Application | Yes |
| Services | 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 |
| RF Field Engineering Services | Comprehensive coverage verification via field study | No |
| | RF exposure measurements | No |
| | Additional Field Engineering Service | No |
| | Number of Days | N/A |
| | | |

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

Outside Professional

Other Professional Services Expenses Not Listed

| Services Costs | Description |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Additional Legal Expenses | Legal expenses for non-catalog advice and review, including transition status reports and other miscellaneous legal needs. |

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? | Yes |
| Permit and Filing Costs | 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 |
| 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? | Yes |
| | Does this relocation require Equipment Storage? | No |
| | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change? | Yes |
| | Does this relocation require MVPD Notification of a Channel Change? | Yes |

Other Expenses Not Listed

Expenses 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-100 | \$1,880,600.00 | \$1,788,800.00 | | \$0.00 | |
| UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW | \$1,788,000.00 | \$1,700,000.00 | A quote from Comark for a replacement IOT transmitter is attached. That quote is substantially higher than the catalog pricing amount for the proposed solid state transmitter. The proposed transmitter should be eligible for full reimbursement. | N/A | N/A |
| Switchgear - industrial 800 amp | \$38,200.00 | \$36,300.00 | N/A | N/A | N/A |
| Transformer 3 phase /480v - 300 KVA | \$36,800.00 | \$35,000.00 | N/A | N/A | N/A |
| 2" Rigid Conduit and Wiring (Cost per foot) | \$2,600.00 | \$2,500.00 | N/A | N/A | N/A |

| Other Electrical Service: Electrical feed disconnects and other items necessary to meet electrical code requirements | \$15,000.00 | \$15,000.00 | Estimate for non-categorized items necessary to meet electrical code requirements | N/A | N/A |
|----------------------------------------------------------------------------------------------------------------------|----------------|----------------|-----------------------------------------------------------------------------------|--------|-----|
| Auxiliary Transmitter ULXTE-20 | \$546,250.00 | \$520,450.00 | | \$0.00 | |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | \$494,500.00 | \$470,000.00 | N/A | N/A | N/A |
| Transformer 3 phase /480v - 150 KVA | \$25,550.00 | \$24,300.00 | N/A | N/A | N/A |
| 2" Rigid Conduit and Wiring (Cost per foot) | \$1,300.00 | \$1,250.00 | N/A | N/A | N/A |
| Other Electrical Service: Electrical feed disconnects and other items necessary to meet electrical code requirements | \$24,900.00 | \$24,900.00 | Estimate for non-categorized items necessary to meet electrical code requirements | N/A | N/A |
| Sub-total | \$2,426,850.00 | \$2,309,250.00 | N/A | \$0.00 | N/A |

| Total for all | \$3,354,713.00 | \$3,195,118.00 | N/A | \$5,166.22 | N/A |
|---------------|----------------|----------------|-----|------------|-----|
| systems | | | | | |

Components

Cost Information

Antennas

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

| | | | Estimated | | |
|-----------------------------------------------------------------------------------------------------------|-----------------------------|-------------------|-----------------------|----------------|------------------------------|
| Description | Predetermined Cost Estimate | Estimated Cost | Cost Justification | Actual Cost | Actual Cost Justification |
| Primary Antenna TFU-30GTH /VP-R O4 | \$311,480.00 | \$295,900.00 | | \$0.00 | |
| UHF - High Power Top Mount (200-1000 kW), One station antenna, elliptically or circularly polarized | \$289,500.00 | \$275,000.00 | N/A | N/A | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | N/A | N/A |
| Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed) | \$15,250.00 | \$14,500.00 | N/A | N/A | N/A |
| Auxiliary Antenna TFU- 30DSC O4A | \$247,440.00 | \$245,100.00 | | \$0.00 | |

| 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 6 1/8. feedline (if needed) | \$12,300.00 | \$11,700.00 | N/A | N/A | N/A |
| UHF - High Power, Side Mount, basic slot antenna, 775 kW input, elliptically or circularly polarized | \$200,000.00 | \$200,000.00 | Manufacturer's estimate. | N/A | N/A |

| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | N/A | N/A |
|-----------------------------------------|----------------|----------------|-----|------------|-----|
| Sub-total | \$558,920.00 | \$541,000.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$3,354,713.00 | \$3,195,118.00 | N/A | \$5,166.22 | N/A |

Components

Cost

Transmission Line

Information 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 TOWER | \$210,500.00 | \$200,000.00 | | \$0.00 | |
| Tall Tower (greater than 500') | \$210,500.00 | \$200,000.00 | N/A | N/A | N/A |
| Sub-total | \$210,500.00 | \$200,000.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$3,354,713.00 | \$3,195,118.00 | N/A | \$5,166.22 | N/A |

Components

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 | \$66,775.00 | \$58,250.00 | | \$5,166.22 | |
| Additional Legal Expenses | \$5,000.00 | \$5,000.00 | Preliminary estimate for legal expenses for non-catalog advice and review including transition status reports and other miscellaneous legal needs. | \$2,628.72 | 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 | \$3,500.00 | N/A | N/A | 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 - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application | \$4,210.00 | \$4,000.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00 | \$5,000.00 | N/A | N/A | N/A |
| Prepare request for Special Temporary Authorization | \$2,050.00 | \$1,500.00 | N/A | N/A | N/A |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application | \$1,580.00 | \$1,500.00 | N/A | N/A | N/A |

| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | \$1,580.00 | \$1,500.00 | N/A | N/A | N/A |
|----------------------------------------------------------------------------------------------------|-------------|-------------|-----|------------|-----|
| Project management of the transition | \$18,960.00 | \$18,000.00 | N/A | N/A | N/A |
| Prepare and or review reimbursement form | \$2,630.00 | \$2,500.00 | N/A | N/A | 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 |
| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$2,000.00 | N/A | \$725.00 | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00 | \$3,000.00 | N/A | \$1,812.50 | N/A |

| RF Consulting Engineer | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |
|---------------------------|----------------|----------------|-----|------------|-----|
| Fees- Aux | | | | | |
| Antenna: | | | | | |
| Prepare | | | | | |
| engineering | | | | | |
| section of FCC | | | | | |
| Form 2100, | | | | | |
| Construction | | | | | |
| Permit | | | | | |
| Application | | | | | |
| Sub-total | \$66,775.00 | \$58,250.00 | N/A | \$5,166.22 | N/A |
| Total for all systems | \$3,354,713.00 | \$3,195,118.00 | N/A | \$5,166.22 | N/A |

Components

| Component Description: Component Description: 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 outline on page 1 of invoice. Amount: \$147.01 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| entire FCC Repack project across all 11 Call Signs/Facility IDs 1617.10/11 for 147.01 as outline on page 1 of invoice. |
| |
| |

Component Description: Outside

Professional Services

Additional Legal Expense Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 2059.90/11 for 187.26 as outlined on page 1 of invoice.

Amount: \$187.26

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 235.86 as outlined

on page 1 of invoice.

Amount: \$235.86

Component Description: Outside

Professional Services

Additional Legal

Expense

Amount: \$346.50

Component Description: Outside

Professional Services

Additional Legal

Expenses

Amount: \$597.70

Component Description: Outside

Professional Services

Additional Legal

Expenses

Amount: \$742.80

Component Description: Outside

Professional Services

Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 3378.88/10 for 337.89 as outlined on page 1 of

invoice. \$337.89

Amount: \$337.89

Component Description: Outside

Professional Services

Additional Legal

Expenses

Amount: \$33.70

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 | Information not provided. |
| 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 | Information not provided. |
| Prepare request for Special Temporary Authorization | Information not provided. |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application | Information not provided. |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | Information not provided. |
| Project management of the transition | Information not provided. |
| Prepare and or review reimbursement form | Information not provided. |
| Address transition timing and coordination issues w/ other stations and wireless | Information not provided. |

| Perform engineering study | | |
|------------------------------------------------------|-------------------------------|--------------------|
| for new channel assignment and antenna development | Component Description: | Outside |
| and antenna development | | Professional |
| | | Services |
| | | Engineering Study |
| | | New Channel |
| | | Assignment |
| | | Antenna |
| | | Development |
| | Amount: | \$725.00 |
| Prepare engineering section of FCC Form 2100 (main), | | |
| Construction Permit | Component Description: | Outside |
| Application | | Professional |
| Application | | Services |
| | | Engineering |
| | | Section FCC Form |
| | | 2100 Construction |
| | | Permit Application |
| | | - Primary (Main) |
| | Amount: | \$1,812.50 |
| RF Consulting Engineer | Information not provided. | |
| Fees- Aux Antenna: | · | |
| Prepare engineering section of FCC Form 2100, | | |
| Construction Permit | | |
| Application | | |
| ADDIICALION | | |

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 | \$91,668.00 | \$86,618.00 | | \$0.00 | |
| DTV Medical Facility Notification | \$11,550.00 | \$6,500.00 | Preliminary cost estimate for service | N/A | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | \$66,618.00 | \$66,618.00 | Preliminary quotes attached | N/A | N/A |
| Equipment Delivery and Handling Charges | \$6,000.00 | \$6,000.00 | Preliminary estimates | N/A | N/A |
| Develop and air announcement of upcoming channel change | \$2,000.00 | \$2,000.00 | Preliminary estimate | N/A | N/A |
| MVPD Notification of Channel Change | \$5,500.00 | \$5,500.00 | Preliminary cost estimate for service | N/A | N/A |
| Sub-total | \$91,668.00 | \$86,618.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$3,354,713.00 | \$3,195,118.00 | N/A | \$5,166.22 | N/A |

Components

Information not provided.

Cost Information

Grand Total

| | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
|-----------------------|--------------------------------|----------------|-------------|
| Total for all systems | \$3,354,713.00 | \$3,195,118.00 | \$5,166.22 |

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

Section Question Response

Submission of Estimated Expenses Statements

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

- 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 abovenamed applicant for the Authorization(s) specified above. Don Sm
Director of
New
Technologies
Compliance
& Planning

04/19/2018

Section Question Response

Submission of Actual Cost Documentation Statements

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

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

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

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Robert
Levin
Director of
Finance and
Administration

04/19/2018

Attachments