



Corporation  
for Public  
Broadcasting

## **FY10-01 Digital Radio Conversion Fund Program Guidelines**

At any time, during the application process, applicants are invited to contact us with questions, concerns, or comments about the FY10 Digital Radio Conversion Fund.

Assistance is available for stations as follows:

**Application questions** to CPB's Radio Digital Grants Manager, Media Technologies:  
Djinni Field (202) 879-9647 or [dfield@cpb.org](mailto:dfield@cpb.org)

**Engineering questions** to CPB's Engineering Consultant:  
Doug Vernier (319) 266-8402 or [dvernier@v-soft.com](mailto:dvernier@v-soft.com)

**Deadline:**  
**~~April 30, 2010~~**  
**Extended to May 14, 2010**



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## FY10-01 Digital Radio Conversion Fund Program Guidelines

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## **I. Introduction**

The Corporation for Public Broadcasting, with guidance from the Digital Consultation Panel comprised of leadership from public radio and television membership organizations and representatives of the station community, has recommended an additional allocation of funds for the digital conversion of public radio transmitters.

CPB is giving priority to projects that include power increases in this round. CPB will support funding for stations to increase IBOC power levels up to the FCC allowed maximum and will continue to fund digital conversions and radio projects that facilitate the delivery of digital content, multicasting and other advanced digital radio services. *The purpose of the Digital Radio Conversion Fund is to ensure all Americans have access to digital public radio. The program is not intended for the replacement of worn-out equipment.*

To date, CPB has provided funding for the digital conversion of over 600 public radio transmitters. Over 550 public radio stations have completed conversions and are now transmitting digital signals. Of those, nearly 180 are multicasting with over 230 multicast streams

## **II. FY10-01 CPB Digital Radio Conversion Funding Objectives**

The FY10-01 Digital Radio Conversion Grant Round's program objectives are to:

- Provide funding assistance to help stations meet the elevated IBOC power levels approved by the FCC
- Provide universal digital radio service to as many Americans as possible
- Convert as many station transmitters to digital radio as possible
- Maintain public radio's technical parity with commercial broadcasters
- Address the particular needs of entities converting multiple transmitters

## **III. Priority I Digital Radio Conversion Projects**

Priority I digital radio projects will assist stations in the purchase and installation of digital transmission equipment that is necessary to complete construction of digital radio facilities per FCC IBOC specifications or to increase the station's current IBOC power level.

CPB will only support projects that propose complete digital radio transmission conversions or IBOC power increases.

See Appendix A for eligible and ineligible project components.

### 3.1 IBOC Power Increase Advisory

The FCC has recently changed the maximum allowable IBOC injection level to -10 dBc. This amounts to a maximum IBOC sideband power that is 10 percent of the analog licensed power. CPB advises the applicant to consider developing a project that provides an IBOC side-band injection level of at least 6 percent. Such projects will receive a higher priority than those proposing side-band levels of lesser injection rates unless the lower power level is factually predicated on reducing interference. The FCC has released new rules that allow elevated IBOC, the applicant should consult these rules and discuss your proposal with your equipment manufacturer (See: <http://tinyurl.com/yb6fjmb>).

### 3.2 Priority I Funding Levels

As in prior funding rounds, only CPB-qualified stations are eligible to receive a grant.

#### a. Standard

CPB will provide grants of up to **\$85,000 per transmitter**. The total grant will not exceed 70 percent of the total eligible digital conversion cost (see Appendix A for a description of eligible project components). The applicant will be required to provide matching funds for the project (from non-federal sources) of not less than 30%.

#### b. Rural/Minority

For licensees that qualify as minority and/or rural grantees under the CPB Radio CSG program, CPB will grant up to **\$95,000 per transmitter**. The total grant will not exceed 80 percent of the total eligible digital conversion cost. Applicant must provide matching funds for the project (from non-federal sources) of not less than 20%.

#### c. Hardship

A licensee that is unable to undertake and complete its digital conversion project with a grant funded by CPB at the above funding levels may apply to CPB for “Hardship Status”. If CPB grants Hardship Status, additional funds for the licensee’s conversion project will be provided. However, CPB will grant Hardship Status only sparingly and the status is only intended for the licensee whose financial contribution to the total eligible digital conversion cost, as calculated under the appropriate non-hardship funding level, represents a disproportionately high percentage of the licensee’s total station revenues.

The additional CPB hardship support may take the form of an increase in the CPB-funded portion of the total eligible digital conversion costs (*i.e.*, a greater than 70 or 80 percent CPB match rate) and/or (ii) relief from the relevant \$85,000 or \$95,000 funding cap. CPB will tailor any additional CPB support for individual hardship cases to the circumstances presented in the licensee’s hardship showing on a case-by-case basis. CPB will determine the nature and extent of hardship relief in CPB’s sole discretion. However, CPB does not expect to fund

any hardship grant where the CPB-funded portion of the project is in excess of (a) 85% of the total eligible project costs or (b) \$120,000.

***CPB intends the hardship status only for those licensees proposing first time digital conversions that are unable to complete the digital conversion process at the standard CPB funding level. Power increase projects are not eligible.***

To apply for hardship status, follow the directions in the grant application. CPB will evaluate requests on a case-by-case basis, and will grant hardship status, if at all, at CPB's sole discretion. Additionally, CPB may elect to cancel or defer the hardship status program for any reason, including to increase the number of grants funded at the standard funding level.

### 3.3 Project Timeline

CPB expects a grantee to commence its digital conversion project promptly and complete the project within 12 months after full execution of the grant contract. Applicants should expect to execute grant contracts for this funding round by July 2010.

Applicants may propose a project timeline in excess of one year. CPB recognizes that some situations may require more time, including multi-transmitter projects and projects with newly issued CPs. If the project is expected to exceed 12 months, applicants must justify the expected timeline in their application narrative.

Once awarded, CPB will only consider providing grant extensions for delays beyond the control of the grantee in a conversion project.

### 3.4 iBiquity License Agreement

Successful applicants for new IBOC conversions will be required to enter into an iBiquity station license agreement (SLA) and must provide a copy of it as a condition to CPB executing the award document.

To obtain a preferred price for stations, CPB prepaid license fees to iBiquity at a preferred rate of \$5,000 per license. An applicant that has not previously paid a Main Channel License Fee to iBiquity can request a \$5,000 credit for the license. The \$5,000 credit amount will be deducted from the total CPB cash grant amount.

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## **IV. Priority II Projects**

This priority includes funding for digital technology projects that facilitate the delivery of digital content, multicasting and other advanced digital radio services. Including:

- Digital Radio Projects that propose equipment for transmission and distribution of digital content via multicast channels.
- CPB will consider a limited number of HD translators or boosters or asymmetrical IBOC side-band, station based, demonstration projects.

All equipment must be directly relevant to the project. See Appendix A for eligible and ineligible project components.

### 4.1 Priority II Funding Levels

CPB will provide grants of up to \$50,000 for Priority II grant requests; the total grant will not exceed 70 percent of the total eligible cost. The applicant will be required to provide matching funds for the project (from non-federal sources) of not less than 30%.

A hardship funding level is not available for these projects.

### 4.2 Project Timeline:

CPB expects a grantee to commence its digital conversion project promptly and complete the project within 12 months after full execution of the grant contract. Applicants should expect to execute grant contracts for this funding round by July 2010.

## **V. Digital Radio Conversion Fund Procedures**

### 5.1 Who May Apply

All CPB-qualified radio licensees are eligible to apply.

### 5.2 How Many Applications May Be Submitted

A grantee may submit multiple grant applications. If a grantee submits applications for more than one transmitter conversion, the applicant must assign a priority ranking to the applications and state the priority ranking in the project narrative. CPB reserves the right to defer or deny any application.

### 5.3 Retroactive Funding

Retroactive funding is not available. Project expenditures made prior to submission of the application are not to be included and are considered “retroactive” for the purpose of this funding program.

Parties who expect to receive CPB funds may from time to time elect to begin work on a project prior to the completion of the process of negotiating a grant or contract. Notwithstanding anything to the contrary herein or in any other communication, all work that an applicant elects to undertake prior to the full execution of a grant agreement will be solely at the applicant's option and solely at applicant's financial risk. CPB makes no promise or commitment of any kind to reimburse any applicant (including the recipient of project approval notification) for any costs or expenses of any kind incurred after an application is filed with CPB if, for any reason, a grant agreement is not executed in connection with the project.

#### 5.4 Funding Criteria

CPB will apply the priorities listed in this section in evaluating and awarding grants for digital radio conversion funding. Applications will be evaluated on, but not limited to, the following points:

- Transmitters and IBOC power levels having the greatest audience impact
- Projects that significantly advance the broad goals of public radio's digital transition, where the applicants demonstrate a robust technical and financial readiness for implementation of digital services
- First service to areas not currently served by a public radio HD transmitter
- CSG-qualified minority grantees
- CSG-qualified rural grantees
- Projects that significantly advance public radio's public service.

*CPB reserves the right to defer or deny any application.*

#### 5.5 Application Deadline

Applications are due at CPB by **May 14, 2010**.

CPB reserves the right to alter or withdraw this application window at any time with no financial, legal, or other obligation to any applicant responding or planning to respond to this application window.

## **VII. Application Process**

1. Download Application and Narrative: Files are available on CPB's website while the round is open.
  - A. Application spreadsheet**: The application is an Excel Spreadsheet. Detailed instructions are included on the first tab. Please print the instructions for reference while completing the application.
  - B. Narrative document**: The applicant must provide a separate narrative proposal. The Narrative document includes instructions and specifies the project details that must be addressed in that proposal.

*Both application and narrative are required in order for the application to be considered complete. If applying for multiple projects, separate applications must be provided – do not combine in one application form.*

2. Save Files: Save using this naming convention: “WXYZ-FM\_application” and “WXYZ-FM\_narrative,” where “WXYZ-FM” is your station’s call sign and AM or FM the extension for your station.
3. Submit Files by E-Mail: Submit the electronic files together by e-mail to [digitalradiogrants@cpb.org](mailto:digitalradiogrants@cpb.org). Faxed proposals will not be accepted. Applications will not be considered complete without both the application spreadsheet (including electronic signature or X where indicated) and project narrative.

Once the application and narrative are submitted CPB will consider them to be complete, CPB may, at its discretion, initiate discussion with any applicant to clarify points in a proposal and/or request additional information.

## **VII. Funding Timeline**

CPB expects an expedient process that will result in contract execution as early as July 2010. CPB will make disbursements to grantees once it receives the required documents and certifications listed in the deliverables section of the grant contract. No disbursements will be made upon execution of the grant contract.

As a condition of the grant or contract, grantees and contractors must agree to the standard terms and conditions in CPB’s grant agreements. CPB will not entertain changes to the form of the grant agreement.

**CPB may rescind offers to recipients who receive a grant contract and fail to meet the execution requirements within 30 days of receipt.**

## **VIII. Use of Submitted Proposals**

By submitting a proposal to the Digital Radio Conversion Fund, each applicant grants to CPB the right to duplicate, use, disclose, and distribute all of the materials submitted to CPB for purposes of evaluation, review, and research.

CPB is not responsible for loss or damage to the materials submitted to CPB or for any unauthorized use or misuse of the submitted materials by any third party.

Applicants may withdraw a proposal at any time by written notice to CPB. CPB does not extend any binding unconditional commitments to provide funds prior to the execution of a grant or contract containing terms acceptable to CPB. Any notification to an applicant that CPB has approved a project is only an expression of CPB's then-

present intention to offer to enter into a grant or contract with that applicant, and that offer is expressly subject to the condition that the applicant agrees to grant or contract terms acceptable to CPB.

## **IX. After the Award – Expectations**

### 9.1 Certifications

Successful applicants for funding will be required to make certain representations, warranties and certifications as a part of a grant contract, including, but not limited to, the following:

- The grantee is the licensee of a CPB-supported FM or AM radio station that currently qualifies for a CPB Community Service Grant.
- The grantee will have available, and will commit and use, sufficient funding from non-federal sources to complete the project within the project timeline.
- The grantee will have adequate financial support to sustain the operation of any facilities obtained by the grantee through the grant project for a period of at least twelve (12) months.
- Stations must have obtained all necessary permits, permissions or licenses in order to proceed rapidly.
- Applicants will maintain an ongoing digital radio service.
- Stations must time-align their analog and digital signals, check this alignment on a regular basis and make adjustments to keep both signals synchronized.

Specific terms and provisions will be set forth in the document provided to each applicant that successfully completes the selection process.

### 9.2 Reporting

Grant reporting templates will be sent to recipients shortly after grant agreements are executed. Please be advised that grantees will be asked for detailed responses to a narrative questionnaire once the project is complete. Including, but not limited to:

- Problems encountered & lessons learned
- Subjective reporting on signal monitoring in the applicant's coverage area
- Plans for using the additional digital capacity
- Cost of operation
- Use of multicast services and PAD
- Time alignment

**APPENDIX A**  
**Eligible and Ineligible Items**

**1. PRIORITY I PROJECTS**

***Eligible items for planning Priority I projects may include:***

***New Conversion Projects (see next page for power increase projects)***

- HD Radio Transmitters.
- HD Radio Conversion Kits: Kits to convert existing HD ready transmitters.
- HD Radio Digital Exciters: Must be FCC type-approved.
- HD Radio Importers/Exporters: As necessary to implement HD Multicast function.
- HD Radio Compatible STL units: This includes the microwave transmitters and receivers, T1 transmit and receive codecs, satellite dish antennas and associated equipment and spread spectrum options.
- STL microwave pre-amplifiers, amplifiers, filters, antennas, hangers and transmission line.
- HD Radio Audio Processors: Such processors must be certified for HD digital operation.
- Digital Audio Wire: Wire must be designed for transmission of digital data. Analog to Digital or Digital to Analog converters: When necessary.
- Combiners: To provide coupling for digital IBOC Reject and test/dummy Loads.
- Uninterruptable Power supply for digital equipment.
- Power line MOVs.
- Test Equipment: Digital audio analyzers or spectrum analyzers as required by good engineering practice.
- HD Specialized Equipment Racks: For use of grant acquired equipment at studio and/or transmitter.
- HD Radio Receiving Equipment. HD audio demodulator, as required by good engineering practice for monitoring the off-air transmission of R.F. signals.
- Transmitter Spare Parts Kit: A transmitter spare parts kit and one set of final and driver tubes or semi-conductors for a transmitter(s) awarded in the grant.
- Antennas, as necessary to implement a space-combining IBOC installation or to replace existing antenna unable to deliver IBOC signal (narrative must provide detailed explanation of why the existing antenna is incapable of delivering an IBOC signal).
- Pattern studies for new directional or optimized antenna installations.
- Transmission Lines, elbows, spring hangers, gas fittings, coaxial switching.
- Content management equipment to be used for multicast programming
- iBiquity License Fee.
- Shipping and delivery charges for the eligible equipment acquired with the award.
- Installation charges for services of non-staff engineers.
- Sales tax when required by state or local governments.

### **IBOC Power Increase Projects**

- HD Radio Transmitters (including required exciters for elevated power operations).
- HD Radio Conversion Kits: Kits to convert existing HD transmitters.
- Digital Audio Wire: Wire must be designed for transmission of digital data.
- Combiners: To provide coupling for digital IBOC Reject and test/dummy Loads.
- Uninterruptable Power supply for digital equipment.
- Power line MOVs.
- Transmitter Spare Parts Kit: A transmitter spare parts kit and one set of final and driver tubes or semi-conductors for a transmitter(s) awarded in the grant.
- Antennas, as necessary to implement a space-combining IBOC installation or to replace an existing antenna unable to deliver IBOC signal at a higher level (narrative must provide detailed explanation of why the existing antenna is incapable of delivering an elevated IBOC signal).
- Pattern studies for new directional or optimized antenna installations.
- Transmission Lines, elbows, spring hangers, gas fittings, coaxial switching.
- Equipment racks required for elevated HD operations.
- Reject and dummy loads.
- Metering required for higher IBOC power level operation.
- Shipping and delivery charges for the eligible equipment acquired with the award.
- Installation charges for services of non-staff engineers.
- Sales tax when required by state or local governments.

### ***Ineligible items for planning a Priority I projects:***

Note that stations that are already broadcasting digitally are not eligible to apply for a Priority I digital conversion project *except* in the case of an elevated IBOC project.

- Construction of and modifications to buildings, including the renovation of space for transmitters intended to house eligible equipment; costs associated with removing old equipment.
- Land and land improvements. Site preparation necessary to construct tower and guy anchors for transmission and interconnection equipment. Purchase or lease of land.
- Moving costs required by relocation of facilities.
- Tower Modifications: Strengthening or modifying a tower to accommodate a public broadcasting antenna, except in cases where an auxiliary or space-combined antenna is to be used for IBOC. Modifying or strengthening the applicant's tower to accommodate a commercial entity.
- Production and Control Room Equipment. Examples include: consumer-type mixers, tape recorders, turntables, CD players, stopwatches and stop-clocks, building lights, sound effects, scenery and props, cycloramas, sound insulation devices and materials, draperies and related equipment for production use, film and still photography processing, film sound synchronization editing.
- Furniture and Office Equipment. Examples include: studio clocks and systems, equipment inventory labels and label-makers, office productivity software, telephone systems, and printing and duplication equipment.
- Expendable Items and Spare Parts: Spare circuit components, spare parts kits for studio equipment, recording tape, cartridge tapes, records, compact discs, and record or tape cleaning equipment; art and graphics supplies; maintenance supplies.

- Backup Equipment: Spare transmitters to be used as backups, spare exciters, microwave equipment for the main studio-to-transmitter link or other STL relays; other redundant equipment.
- Analog only transmitters.
- Electric Power. Costs of installing primary power to the facility and to the transmitter, including poles and power lines, electric panels, electric wiring, circuit breakers, transformers, gasoline or diesel powered generators, and related equipment. (Three phase to single phase converters may be allowed with adequate documentation as to their need.)
- Maintenance Equipment: such as hand and power tools, storage cabinets, and maintenance services.
- Air Conditioning and Ventilation. Air conditioning for equipment rooms, control rooms, studios, mobile units, and other operational rooms and offices.
- Vehicles. Items to equip a remote van for audio production.
- Construction Applications: Salary expenses, including staff installation costs, and pre-application legal and engineering fees.
- Audit Costs. Final report audit costs. Applicants are reminded that audits may be conducted by the Office of Inspector General.
- Staff planning and preparation costs.
- Administrative costs and overhead.

## **2. PRIORITY II PROJECTS**

### ***Eligible items for planning a Priority II project may include:***

- Multicast audio processors.
- Content management equipment to be used for multicast programming.
- Importers & Exporters for multicast HD systems.
- Digital STL systems for the purpose of adding multicast channels.
- EAS equipment for use with multicast channels.
- Monitors for multicast channels.
- Routers to facilitate multicast audio distribution.
- HD transmitter test/dummy loads.
- Translators, Boosters, associated antennas and interconnection equipment.
- Equipment used for conditional access technology.
- Equipment used for digitized subcarrier technology.

### ***Ineligible items for planning a Priority II project:***

Equipment from the Priority I ineligible list, above, and that which would not clearly facilitate priority II HD projects is ineligible. Applicant's already transmitting in multicast are not eligible for equipment grants that facilitate multicast transmission.