

DTV Freeze Waiver Request

South Carolina Educational Television Commission ("SCETV"), licensee of eleven noncommercial educational television broadcast stations serving the State of South Carolina, requests a waiver of the freeze announced by Public Notice "Freeze on the Filing of Certain TV and DTV Requests for Allotment or Service Area Changes," released August 3, 2004, DA 04-2446 (the "DTV Freeze").

Waiver would permit the acceptance and grant of SCETV's applications for minor modifications to the analog and digital facilities for three of SCETV's Stations: WJWJ-TV, Beaufort, SC; WNSC-TV, Rock Hill, SC; and WEBA-TV, Allendale, SC (the "Stations"). SCETV submits that, under the unique circumstances a waiver of the DTV Freeze would best serve the public interest and speed the DTV transition in South Carolina.

SCETV needs the DTV Freeze waived so that its applications can be granted by the FCC.¹ The applications are necessary in order for SCETV to be able to purchase already-state-approved directional antennas for the Stations, so that it can complete the buildout of DTV facilities for its statewide network. Because the planned directional antennas are combination NTSC/DTV antennas, it needs waivers for both DTV and analog applications proposing the directional antennas.

Background on SCETV

SCETV, a publicly funded agency of the State of South Carolina, operates a statewide network consisting of eleven NCE television stations: WHMC-TV, Conway; WRLK-TV, Columbia; WNTV(TV), Greenville; WITV(TV), Charleston; WEBA-TV, Allendale; WJPM-TV, Florence; WJWJ-TV, Beaufort; WNEH(TV), Greenwood; WNSC-TV, Rock Hill; WRET-TV, Spartanburg; and WRJA-TV, Sumter. SCETV has devoted substantial resources to the digital conversion throughout its large, statewide network of stations, having spent to date more than \$27.254 million on DTV, with \$21.405 million of that total spent on planning, construction and equipment for origination, distribution and transmission facilities. The remainder has been spent on facilities and equipment for production of digital programming. The cost of the DTV transition has been a very major financial undertaking for SCETV and the State of South Carolina.

¹ The DTV Freeze was imposed on:

Television modification applications that would increase a station's DTV service area in channels 2-51 in one or more directions beyond the combined area resulting from the station's parameters as defined in the following: (1) the DTV Table of Allotments; (2) Commission authorizations (license and/or construction permit); and (3) applications on file with the Commission prior to release of this Public Notice; and television modification applications that would increase a station's analog service area in channels 2-51 in one or more directions beyond the combined area resulting from the station's parameters as defined in the following: (1) Commission authorizations (license and/or construction permit) and (2) applications on file with the Commission prior to release of this Public Notice.

SCETV's station WRLK-DT in Columbia went on the air in March 2000, making it the first DTV station to begin broadcasting in the State of South Carolina -- more than three years before the FCC's 2003 deadline for commencement of DTV operations by NCE broadcasters.

Moreover, SCETV's extraordinary commitment to digital broadcasting goes beyond its status at South Carolina's DTV "pioneer." WRLK-DT was the first DTV station (commercial or noncommercial) to be fully transcoded onto a digital cable channel. SCETV also participated in innovative engineering studies at WRLK-DT's launch. For instance, WRLK-DT served as the beta test site for a "wideband slot," dual-mode antenna manufactured by TCI, which was designed to provide a means for broadcasting both a digital and an analog signal on a single antenna. This design greatly reduced the wind load on existing towers. SCETV's early adoption of this technology for WRLK-DT allowed the station to commence on-air operations with a top-mounted antenna, thereby increasing the signal coverage area and eliminating the need for expensive tower modifications.

SCETV's DTV Plans and Rollout

SCETV continued to expand operations at WRLK-DT and to make ready its plans for its other permitted DTV stations throughout 2000 and 2001. On August 8 and 14, 2000 the FCC granted SCETV construction permits for each of the Stations. SCETV thereafter made significant strides towards placing all of its stations on-air, and did so in spite of the severe fiscal constraints caused by state budgeting decisions that were beyond SCETV's control. In 2000 and 2001, a critical time period in the digital transition process, SCETV received only \$1.5 million in funding for digital television from the South Carolina state legislature, with none of that \$1.5 million appropriated until July 2001. SCETV nonetheless continued to make headway, by issuing various requests for proposals and awarding various DTV services and equipment contracts.

The state legislature restored full funding for SCETV's digital conversion process in July 2002. Once it had obtained the funds needed to continue DTV construction and conversion, SCETV immediately ordered digital transmitters and encoder equipment for its remaining DTV stations awaiting construction, contracted for tower engineering services necessary to complete construction of all of its permitted DTV facilities, and awarded a contract for a statewide digital microwave upgrade.

In September 2002, however, SCETV learned of an unforeseeable problem that is still impacting completion of its DTV facilities. Shortly after taking the steps described above to order DTV transmitters for the Stations in July 2002 and contract for completion of the digital microwave upgrade in August 2002, SCETV turned its attention to procuring antennas for each of the Stations. Based on the tremendous success it had experienced at WRLK-DT, Columbia, with the TCI-manufactured "wideband slot" dual-mode antenna, SCETV had decided to equip its other Stations with the same model UHF antenna. Unfortunately, the manufacturer of the antenna, TCI, had been purchased during the intervening period of time by Dielectric Communications. When it attempted to place orders for the Stations' antennas in September 2002, SCETV learned from Dielectric that the company had decided to stop production of the wideband slot antenna model.

In connection with the necessary revisiting of its DTV antenna plans and, in particular, antennas, SCETV decided to modify its plans for the Stations in order to specify directional antennas that would provide better, more cost effective service to its TV markets, without duplicating coverage with other SCETV stations. The directional antennas were designed to fulfill SCETV's long term strategic plan, including filling in coverage gaps in the state and reaching population centers that could provide ongoing financial support for the stations.

In October 2002, as SCETV began the process of revising its DTV antenna plans, SCETV was notified by the Office of the State Engineer, State of South Carolina that a very complex "design-built" method for Requests for Proposals (RFPs) would have to be used for the procurement of the antennas and for the corresponding tower modifications. Use of this procurement method was predicted to delay the remaining DTV build out – and it did. SCETV spent nearly six months waiting for state approval for the directional antennas that it planned to use for the Stations -- following mandated state procurement methods.

The directional antennas are combination NTSC/DTV. The combination antennas were planned to provide a top-mounted antenna for the DTV stations and avoid further expensive tower modifications after analog shutdown, to give maximum DTV signal coverage from the outset (instead of lesser coverage from side mounted antennas) and to minimize tower loading by eliminating the need for two transmission lines.

SCETV did not file any FCC applications for the Stations' directional facilities at this time, because it had not yet received authority from the State to use those antennas and it was not cost effective to incur engineering and other fees for applications until it was legally permitted to pursue them.

SCETV finally received state approval for the directional antennas in April 2004 and commissioned its consulting engineers to prepare the FCC modification applications in May 2004. The engineers completed the applications for the directional antennas for the Stations and uploaded them onto CDBS on the following dates: WEBA-TV 6/7/04, WEBA-DT 6/11/04, WJWJ-TV 6/15/04, WJWJ-DT 6/14/04, WNSC-TV 8/4/04, and WNSC-DT 6/23/04. However, the completed applications showed multiple discrepancies in tower coordinates between the licensed analog facilities, the DTV facilities authorized by outstanding construction permits and antenna structure registrations (ASR). These issues stemmed from SCETV's problems with the company it hired to register the antenna towers back in January 1998. Therefore, SCETV held off filing the applications, as it attempted to investigate and correct these discrepancies. Before that process could be completed, the DTV Freeze was imposed on August 3, 2004, drastically affecting three of SCETV's stations -- WJWJ-TV/DT in Beaufort, WNSC-TV/DT in Rock Hill and WEBA-TV/DT in Allendale.

Request for DTV Freeze Waiver

SCETV did not file its applications for the three Stations before the onset of the DTV Freeze, even though it had planned the applications for many months and the applications were poised for submission to the FCC. Because SCETV believes that it is critical to its DTV efforts to implement the proposed technical modifications, SCETV respectfully requests that the Commission grant a waiver of the DTV Freeze.

SCETV understands that a waiver is justified only when the applicant meets the high hurdle required for departure from the FCC rules. The DTV Freeze Order stated:

The Bureau will consider, on a case-by-case basis, requests for waiver of this freeze when a modification application is necessary or otherwise in the public interest for technical or other reasons to maintain quality service to the public, such as when zoning restrictions preclude tower construction at a particular site or when unforeseen events, such as extreme weather events or other extraordinary circumstances, require relocation to a new tower site. As with any request for waiver of our rules, a request for waiver of the freeze imposed in this Public Notice will be granted only upon a showing of good cause and when grant of the waiver will serve the public interest.

"Freeze on the Filing of Certain TV and DTV Requests for Allotment or Service Area Changes," released August 3, 2004, DA 04-2446.

SCETV's current problems present just the type of extraordinary situation justifying a waiver of the DTV Freeze. *WAIT Radio* states that the Commission may waive any provision of its rules or orders if special circumstances warrant a deviation from the general rule and such deviation will serve the public interest. *Northwest Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) *citing* *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972) ("WAIT Radio"). The Court of Appeals for the D.C. Circuit has stated that waiver may permit a more rigorous adherence to an effective regulation by allowing the agency to take into account considerations of hardship, equity, or more effective implementation of overall policy on an individualized basis. *WAIT Radio*, 418 F.2d at 1157. Thus, under the *WAIT Radio* doctrine, the Commission is bound to consider waiver requests. *Id.* at 1158. In this particular instance, special circumstances are present that warrant a waiver.

The Commission anticipated that noncommercial broadcasters would experience more difficulties with the complex and costly broadcasting transition to DTV than their commercial station counterparts. Specifically, "throughout the DTV proceeding, the Commission has acknowledged that noncommercial licensees will face unique problems in the transition to DTV," particularly as applicable to "the unique financial difficulties faced by noncommercial stations."² Therefore, as the Commission noted in its *Fifth Report and Order* on digital television, "noncommercial stations need and warrant special relief" from time to time in order to address these difficulties.³ The Commission has gone as far as to state its intent to "grant such special treatment to noncommercial broadcasters [as] to afford them every opportunity to participate in the transition to digital television."⁴ The Commission has expressed a willingness to deal with requests for special relief on an individualized basis,⁵ and has stated that it will

² *Ancillary or Supplementary Use of Digital Television Capacity By Noncommercial Licensees*, Notice of Proposed Rulemaking, 14 FCC Rcd 537 (Released 1998) at ¶ 10.

³ *Fifth R&O* at 12847.

⁴ *Fifth R&O* at 12852.

⁵ *Id.*

continue to address the special needs of noncommercial stations on an ongoing basis as part of its DTV periodic reviews.⁶ SCETV contends that the grant of a waiver in this case would provide precisely the type of “special relief” for noncommercial stations that the Commission anticipated would be necessary during the DTV transition period.

SCETV, as a state institution and noncommercial educational licensee, must be a careful steward of its financial resources. Despite earlier legislative funding problems and technical setbacks, SCETV has, since 2002, sought to implement its directional antenna plans for the digital and analog facilities of WJWJ-TV/DT, WEBA-TV/DT and WNSC-TV/DT. (The analog directional plans result from the fact that the intended antennas are combination DTV/NTSC antennas).

These directional antennas are part and parcel of SCETV’s long term strategic plans and goals to provide the best, most cost-effective DTV coverage possible state-wide. Because SCETV was bound by state-mandated procurement policies, there was an unavoidable delay in its directional antenna plans for the Stations. Compliance with such state-mandated procurement policies is a unique – and unavoidable -- a factor applicable to noncommercial educational TV stations licensed to state government entities. The vast majority of TV stations, including commercial TV stations, do not suffer from bureaucratic delays associated with state procurement. This factor, alone, constituted extenuating circumstances.

Moreover, once SCETV received state procurement approval for its directional antenna plans, SCETV moved expeditiously to prepare the necessary FCC applications for minor modifications to the Stations’ facilities. In fact, SCETV disclosed the need for these applications in its DTV extension requests for WJWJ-DT and WEBA-DT in May 2004 (FCC File Nos. 20040601BGL and 20040601BGK). The WJWJ-TV/DT and WEBA-TV/DT applications were prepared, and ready to be filed, by June 2004 well in advance of the DTV Freeze. (The WNSC-TV/DT application was in process, but not ready for filing until August 4, 2004.) The delay in filing those applications before the DTV Freeze took effect resulted from an attempt to investigate and correct coordinate discrepancies, so that the FCC applications would be as complete and accurate as possible when filed. However, before the coordinate issues could be resolved, the DTV Freeze took effect, without warning or an opportunity for SCETV to “hurry up” and file its applications, despite the coordinate issues. Immediately after the freeze was instituted, SCETV, its consulting engineers and legal counsel began to discuss the impact of the DTV Freeze on SCETV’s plans and seek informal guidance from FCC staff about the issue. Based on those discussions with FCC staff, SCETV determined to seek a waiver of the DTV Freeze in order to permit its directional antenna applications to be processed and granted, and the attendant state investment (of public monies) in several years worth of planning and implementation to be fully realized. To date, SCETV has spent \$42,140 for engineering services related to these directional antennas including bid specifications, interference studies, coverage studies, and engineering filing data. In addition, SCETV has spent \$55,200 for tower structural studies and upgrade plans to enable the towers to hold the new directional antennas.

⁶ *In the Matter of Second Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, Notice of Proposed Rulemaking, FCC 03-8, ¶ 63 (Released Jan. 27, 2003).

Failure to grant this waiver request will also inevitably delay SCETV's DTV buildout for WJWJ-DT, WEBA-DT and WNSC-DT and inordinately complicate the DTV replication/maximization and channel election process for SCETV and nearby stations. SCETV had planned to order the DTV antennas for the stations immediately after grant of the FCC applications authorizing them, complete tower strengthening necessary for the combined directional NTSC/DTV antennas, schedule tower crews for installation, and commence operations by June 2005. The uncertainty about which antennas are authorized has brought the DTV buildout process for these stations to a complete halt. If the Commission denies the waiver, SCETV will be forced to rethink and rework its DTV buildout plans for these three stations and the remainder of its network, as the DTV network was re-designed in 2002 as a state-wide plan, not on a station-by-station basis. Forcing SCETV to rework many years worth of DTV plans, with multiple transition deadlines staring it in the face (and approaching in short order in a matter of weeks) is an unacceptable burden for a statewide broadcaster that is further complicated by state budget issues. Simply put, failure to grant a waiver would not serve the interests of the people of South Carolina, their state agency vested with public television service responsibilities, or the public interest overall.

WJWJ

At WJWJ in Beaufort, SCETV has found that a large part of its audience is located near Savannah, on the southern edge of its coverage area. However, carriage on Savannah cable systems has been denied on several occasions due to insufficient signal level at the cable head end sites. The WJWJ coverage area overlaps significantly the coverage area of another SCETV station, WITV in Charleston (see Exhibits 1 and 2). A directional antenna at WJWJ with the major lobe towards the southwest would decrease the wasted signal in the overlap area and provide a greater signal into the high population center of Savannah (See Exhibits 5 & 6).

Exhibit 13 is a detailed Longley-Rice interference study which was run to verify compliance with the FCC's de minimis standard and to determine the amount of interference the proposed WJWJ-DT digital facility would cause to other stations. All Longley-Rice interference studies prepared for SCETV were performed using a Sun Microsystems SPARC 5 computer work station loaded with the FCC's TV Interference and Spacing Analysis software. Therefore, the interference calculations presented herein match exactly with the interference calculations prepared by the FCC. According to the WJWJ-DT Longley-Rice interference study depicted in Exhibit 13, the proposed directional facility would actually reduce the overall interference by 0.7 percent and would not increase interference to any station in any azimuthal direction. Therefore, the proposed WJWJ-DT directional facility would improve the overall DTV service to the public, decrease coverage overlaps within the state and improve overall interference to other stations.

Exhibit 14 is a detailed Longley-Rice interference study depicting the predicted interference from the proposed WJWJ-TV analog facility to other stations. According to the interference study, the proposed directional facility would actually reduce the overall interference by 0.1 percent and would not increase interference to any station in any azimuthal direction. Therefore, the proposed WJWJ-TV directional facility would improve the overall

NTSC service to the public, decrease coverage overlaps within the state and improve overall interference to other stations.

WNSC

At WNSC in Rock Hill, SCETV has found a similar situation with a large part of its audience being on the edge of its coverage area near Charlotte to the north. The WNSC coverage area overlaps significantly the coverage areas of two other SCETV stations, WRLK in Columbia and WRET in Spartanburg (See Exhibits 1 and 2). A directional antenna at WNSC with the major lobe towards the north would decrease the overlap areas and provide a greater signal into the high population center of Charlotte (See Exhibits 7 and 8).

Exhibit 11 is a detailed Longley-Rice interference study depicting the predicted interference from the proposed WNSC-DT digital facility to other stations. According to the interference study, the proposed directional facility would actually reduce interference by 0.2 percent to the WPDE-TV Channel 15 Florence, SC co-channel facility. The interference study indicates that the proposed facility would increase interference to the WBRA-TV Channel 15 Roanoke, VA facility; however the increase would only be by 0.3% which is well below the 2.0% de minimis standard. Therefore, the proposed WNSC-DT directional facility would improve the overall DTV service to the public, decrease coverage overlaps within the state and improve existing interference with the WPDE-TV facility while causing just a slight amount of additional interference to the WBRA-TV facility.

Exhibit 12 is a detailed Longley-Rice interference study depicting the predicted interference from the proposed WNSC-TV analog facility to other stations. According to the interference study, the proposed directional facility would actually reduce interference by 7.3 percent to the WAGT-DT Channel 30 Augusta, GA co-channel facility. The interference study indicates that the proposed facility would increase interference to the WSLS-TV Channel 30 Roanoke, VA facility; however the increase would only be by 0.2% which is well below the 2.0% de minimis standard. Therefore, the proposed WNSC-TV directional facility would improve the overall NTSC service to the public, decrease coverage overlaps within the state and significantly improve existing interference with the WAGT-DT facility while causing just a slight amount of additional interference to the WSLS-TV facility.

SCETV has suffered over 40% reduction in its state operating appropriations over the past three years due to state budget deficits. One of the cornerstones of SCETV's strategic plan is to increase the level of viewer membership in the SCETV Endowment and to increase corporate underwriting. Providing a stronger signal into the major metropolitan areas of Charlotte and Savannah is key to significantly restoring SCETV's operating budget to make up the shortfall caused by state cutbacks.

WEBA

At WEBA, a directional antenna will serve to fill in areas of South Carolina not currently served by SCETV (see Exhibits 1 through 4).

Exhibit 9 is a detailed Longley-Rice interference study depicting the predicted interference from the proposed WEBA-DT digital facility to other stations. According to the interference study, the proposed directional facility would increase interference by only 0.3% which is well below the 2.0% de minimis standard. Therefore, the proposed WEBA-DT directional facility would improve the overall DTV service to the public, decrease coverage overlaps within the state while causing just a slight amount of additional interference to the WCLP-DT and WUNF-TV facilities.

Exhibit 10 is a detailed Longley-Rice interference study depicting the predicted interference from the proposed WEBA-TV analog facility to other stations. According to the interference study, the proposed directional facility would increase interference by only 0.1% which is well below the 2.0% de minimis standard. Therefore, the proposed WEBA-TV directional facility would improve the overall NTSC service to the public, decrease coverage overlaps within the state while causing just a slight amount of additional interference to the WBSC-DT facility.

Conclusion

SCETV regrets that it did not file the application before the DTV Freeze, despite the coordinate issues. However, in accordance with principles of state comity, and service to the public interest, SCETV respectfully requests that the FCC waive the DTV Freeze in this instance for its applications for WJWJ-DT, WETA-DT and WNSC-DT. Granting SCETV's rule waiver would be entirely in keeping with the Commission's commitment to the DTV transition, noncommercial broadcasting and the public interest standard.

Granting a waiver to SCETV, under this set of circumstances, will not unfairly prejudice other TV licensees. As shown in the attached material, overall DTV interference would be **decreased** as a result of SCETV's applications and the only new interference (analog or digital) would be in amounts of 0.3% (or less), substantially below the 2% de minimus standard.

For these reasons, SCETV respectfully requests a waiver of the Commission's DTV Freeze, so that SCETV can complete the directional DTV and analog facilities for the Stations.