

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In re Applications of

Educational Information Corporation BPED-840328CA

For Modification of Noncommercial  
Educational Station WCPE(FM)  
Raleigh, North Carolina

Campbell University, Inc. BPED-880810MA

For Modification of Noncommercial  
Educational Station WCCE(FM)  
Buies Creek, North Carolina

MEMORANDUM OPINION AND ORDER

Adopted: April 3, 1991;

Released: April 24, 1991

By the Commission:

1. The Commission has before it a petition for reconsideration filed March 3, 1989, on behalf of the Educational Information Corporation, licensee of WCPE(FM), Raleigh, North Carolina ("WCPE"). This petition seeks reconsideration of a staff action by letter dated February 1, 1989, which denied WCPE's request for waiver of 47 C.F.R. § 73.509 and dismissed its major-change application. In addition, the Commission has before it a major-change application filed by Campbell University, Inc., licensee of WCCE(FM), Buies Creek, North Carolina, on August 10, 1988 and its accompanying request for waiver of 47 C.F.R. § 73.509. The issues involved in both requests are interrelated, and they will be considered separately below.

2. These cases involve the Commission's current policy regarding second and third adjacent channel contour overlap for noncommercial, educational stations ("NCE-FM").<sup>1</sup> By way of background regarding this policy, 47 C.F.R. § 73.509 states in pertinent part: "An application for a new or modified NCE-FM station other than a Class D (secondary) station will not be accepted if the proposed operation would involve overlap of signal strength contours with any other station licensed by the Commission and operating in the reserved band ... [contour overlap standards are set forth in a chart included in the rule]." On July 16, 1981, the Commission, *en banc*, delegated authority to the Chief of the Broadcast Bureau (now the Mass Media Bureau) to waive this rule regarding interference received by NCE-FM applications, when warranted, provided such interference did not exceed roughly five percent of the proposed service area. A *Public Notice*, FCC 81-322, released July 17, 1981, entitled "Delegation of Authority to the Chief of the Broadcast Bureau to Waive Small Amounts of Interference Received by Non-Commercial Educational FM Proposals," 49 RR 2d 1524 ("Public

Notice") stated: "these waivers will only be granted when the applicant provides sufficient justification such as a lack of alternative transmitter sites and/or frequencies." As to interference caused by NCE-FM applicants, the Commission has historically adopted a much stricter approach and, consequently, has rarely in the past waived this type of interference. The cases before us present an opportunity to revisit the appropriate waiver standards to be applied in cases of second and third adjacent channel overlap, in light of the current reserved band environment.

3. *WCPE(FM)*. In its petition, WCPE contends that the Mass Media Bureau ("Bureau") erred in denying its request for waiver of 47 C.F.R. § 73.509 and dismissing its application for a construction permit. Specifically, the petitioner contends that the Bureau: (i) acted in contradiction of the Commission's policy of routinely authorizing the waiver of interference received by noncommercial educational FM ("NCE-FM") applicants when roughly 10 percent or less of the proposed service area (1mV/m contour) is affected<sup>2</sup>; (ii) improperly concluded that the applicant had failed to consider the use of alternate frequencies or transmitter sites that might alleviate the need for a waiver; and (iii) failed to consider the public interest benefits that would accompany a grant of its application and waiver request.

4. WCPE is currently licensed to operate with an effective radiated power (ERP) of 33 kilowatts and an antenna height above average terrain (HAAT) of 82 meters. On March 28, 1984, in an effort to improve its signal coverage in Durham, NC and Chapel Hill, NC, WCPE filed a major-change application to increase its ERP to 100 kilowatts, increase HAAT to 207 meters, and relocate its transmitter site 18.2 kilometers northeast. This proposal will extend WCPE's 1 mV/m coverage contour approximately 14 kilometers beyond its currently licensed 1 mV/m contour in the directions of second-adjacent channel stations WCCE(FM), Buies Creek, NC ("WCCE") and WXYC(FM), Chapel Hill, NC ("WXYC"). This expansion of WCPE's coverage contour will result in prohibited overlap for the first time between WCPE's 1 mV/m contour and WCCE's 10 mV/m contour contrary to the provisions of 47 C.F.R. § 73.509. The overlap with WCCE would be 58.9 sq. km (82 percent of WCCE's 10 mV/m contour). Likewise, the expansion of WCPE's coverage contour will increase the prohibited overlap between WCPE's 1 mV/m contour and WXYC's 10 mV/m contour from 36.2 sq. km (62 percent of WXYC's 10 mV/m contour) to 58.4 sq. km (100 percent of WXYC's 10 mV/m contour). Because its proposal did not comply with Section 73.509, WCPE requested a waiver of the rule. By staff letter dated February 1, 1989 the waiver request was denied.

5. In its petition for reconsideration, WCPE asserts that the grant of its application would result in WCPE receiving only minimal interference from the two second-adjacent channel stations, WXYC and WCCE. The area of overlap with WXYC would be 0.45 percent and the area of overlap with WCCE would be 0.39 percent - an aggregate amount totalling .84 percent of WCPE's service area which the petitioner maintains is *de minimis*. Furthermore, WCPE asserts that its proposed interfering contour would not cause overlap to the coverage contours of WXYC, WCCE or any other stations. WCPE contends that it is the Commission's policy to grant such waivers where the amount of overlap within its service area is less

than 10 percent and "the necessary factual predicate" has been demonstrated. Petition at 9. WCPE also contends that the staff's refusal to waive Section 73.509 in the instant case cannot be reconciled with either Commission policy or actions taken in previous cases.

6. WCPE contends throughout the petition that its application fully satisfies the Commission's established criteria for waiver of the rule prohibiting interference received. As authority for its contention, WCPE cites *Public Notice*, FCC 81-322, *supra*. WCPE states that, "[i]t is well-settled that waivers of Section 73.509 of the Rules will be granted when merited. Indeed, ... the Commission has given the staff delegated authority to grant waivers of received [overlap] of up to 10 percent where the applicant provides sufficient justification such as a lack of alternative transmitter sites and/or frequencies." Petition at 8. WCPE asserts that the staff assumed a "crabbed view" of its delegated authority in this case in order to pursue its goal of spectrum efficiency. WCPE has asserted that a waiver of 47 C.F.R. § 73.509 is in the public interest because the amount of interference to be received from WXYC and WCCE is minimal compared to the amount of new service WCPE would provide. WCPE also believes that the staff's decision fails to consider the public interest benefits which would be realized from the grant of its application, and fails to acknowledge the significant public demand for expansion, as evidenced by the large volume of correspondence received by the station.

7. As WCPE points out, the Commission has given the staff delegated authority to act on waivers of received overlap of up to 10 percent *where sufficient justification is provided*. We did not by the *Public Notice* nullify the longstanding prohibition against occurrences of harmful overlap, including overlap received. As we stated in *Board of Education of the City of Atlanta (WABE-FM)*, ("WABE") 82 FCC 2d 125 (1980), "[i]ncreased coverage alone is insufficient to warrant a waiver of the rule. Power increase proposals which increase overlap received are with rare exceptions, accompanied by increased coverage. However, when faced with a choice between increased coverage with increased interference received on one hand, and lesser but adequate coverage without prohibited interference on the other, the Commission favors the latter." *Id.* at 127. The mere granting of delegated authority did not overturn that position.

8. Although WCPE argues that it did provide additional support for the waiver, the documentation submitted by WCPE supporting its contention that no alternative frequency or transmitter site was available was conclusory, at best. WCPE merely presented a list of NCE-FM allocations in the Raleigh area and from that list deduced that no other possible frequency was available to the applicant. No analysis of preclusion was proffered. Furthermore, as to the availability of alternative sites, WCPE simply stated that the selection of a different site to avoid interference was impossible because the applicant desired to serve those markets in which the interfering stations are located. WCPE has, in effect, deliberately chosen to extend its signal into an area where prohibited overlap is inescapable. Therefore, the staff found that the waiver request was primarily grounded on the benefits of expanded service and properly found WCPE's justification insufficient for grant of the requested waiver. The staff did not err in dismissing WCPE's application.

9. However, we wish to take this opportunity to re-examine our waiver policy in the limited area of proposed second or third adjacent channel overlap of noncommercial educational stations. Overlap of co-channel or first adjacent channel signals is a more serious matter since the interference that may occur results in the loss of service over a wide area. Second or third adjacent channel overlap may result in the replacement of one signal by another (not the complete loss of service) and is confined to a very small area around the transmitter of the interfering station. In addition, the potential for such interference to occur depends to a great extent on the quality of the receivers used within the affected area.

10. The Commission has long recognized the unique characteristics of the noncommercial service and the need for flexibility to respond to the growing demand for such service.<sup>3</sup> We are also more sensitive today to the increasing limitations within the reserved band which reflect the increased demand for service over the last 30 years. For these reasons, we are now inclined to grant waivers of second or third adjacent channel overlap in circumstances such as WCPE's, where the benefit of increased noncommercial educational service so heavily outweighs the potential for interference in very small areas. However, because of the concern for the ability of the stations causing interference to make any future changes in their own facilities, as discussed below, we believe that the waiver of interference received must be granted with the acknowledgement that future modifications proposed by the affected licensees will not be construed as a *per se* modification of the waiver recipient's license.

11. Accordingly, we find that, for the reasons set out above, the public interest would be served by waiver of 47 C.F.R. § 73.509 and grant of WCPE's proposal.

12. *WCCE(FM)*. WCCE, Buies Creek, North Carolina, is currently licensed to operate with an ERP of 3 kilowatts and an HAAT of 32 meters. On August 10, 1988, WCCE filed a major-change application to increase its ERP to 22.5 kilowatts utilizing a directional antenna, increase HAAT to 140 meters, and relocate its transmitter 9.4 kilometers southeast. WCCE's proposal would increase the prohibited overlap area caused to WCPE's proposed 1 mV/m coverage contour by WCCE's 10 mV/m interfering contour from 58.9 sq. km (0.45 percent of WCPE's 1 mV/m contour) to 106.9 sq. km (0.8 percent of WCPE's 1 mV/m contour).<sup>4</sup> This contour overlap contravenes 47 C.F.R. § 73.509. WCCE is not mutually exclusive with WCPE's proposal as it was filed untimely with respect to WCPE's cut-off date of September 26, 1986. Accordingly, WCCE requests waiver of 47 C.F.R. § 73.509.

13. In its waiver request WCCE states that WCPE has agreed to receive the proposed increase in overlap and asserts several reasons why implementation of its proposal would be in the public interest. First, WCCE contends that the prohibited overlap will affect less than one percent of the population and area within WCPE's proposed 1 mV/m coverage contour. WCCE also asserts that its proposal will improve, rather than worsen, the WCCE/WCPE overlap problem because its proposal would relocate its transmitting location from within WCPE's proposed 1 mV/m coverage contour to outside it. Further, WCCE states that the area of proposed overlap, although larger, lies no closer to WCPE's transmitter site than the current area of overlap. Finally, the service area of WCCE will be increased by 2,308 square km, a 351 percent increase.

14. Whereas WCPE's proposal discussed above involved overlap received, WCCE's proposal involves overlap caused and therefore requires separate consideration. We note, however, that proposals such as WCCE's are the "other side of the coin." Where waivers are approved to allow stations to receive overlap, there is always a station causing it. Thereafter any increase or displacement in the facilities of the "causing" station will result in new overlap. To avoid perpetually restricting such stations to their current facilities, and in view of the limited nature of the interference potential of second or third adjacent channels discussed above, we are inclined to view waiver requests such as WCCE's favorably where there is clearly a public benefit.

15. In this case, significant additional service will be provided by expansion of WCCE, and the increase in area of overlap is very small. For these reasons, we find that the public interest will be served by waiver of 47 C.F.R. § 73.509 and grant of the WCCE proposal.

16. Accordingly, the Educational Information Corporation's "Petition for Reconsideration," filed March 3, 1989 IS HEREBY GRANTED to the extent indicated above; its application IS HEREBY REINSTATED *NUNC PRO TUNC*; the provisions of 47 C.F.R. § 73.509 ARE HEREBY WAIVED to the extent necessary to permit the second-adjacent channel overlap received; and application BPED-840328CA for WCPE(FM), Raleigh, North Carolina IS HEREBY GRANTED. Acceptance of the grant of this waiver will constitute an acknowledgement by WCPE that future modifications to the facilities of WCCE and WXYC will not constitute a *per se* modification of WCPE's license.

17. Further, Campbell University, Inc.'s request for waiver of 47 C.F.R. § 73.509 IS HEREBY GRANTED, and its application for upgrade in facilities for WCCE(FM), Buies Creek, North Carolina BPED-880810MA, IS HEREBY GRANTED.

#### FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy  
Secretary

#### FOOTNOTES

<sup>1</sup> Prohibited overlap occurs when a station's interference contour overlaps another station's service contour. The terms "overlap caused" and "overlap received" are used in reference to a specific station proposing a facility change. If Station A is proposing to expand its service contour and the new service contour will be overlapped by Station B's interference contour, Station A is said to receive overlap from B. If station B is proposing to increase its facilities so that its proposed interference contour would overlap Station A's service contour, Station B is said to cause overlap. Under some circumstances a proposal may both cause and receive overlap. These terms will be used throughout this document.

<sup>2</sup> In Paragraph 56 of the *Memorandum Opinion and Order* in BC Docket No. 20735, 50 Fed. Reg. 27954 (July 9, 1985), the Commission modified the Bureau's delegated authority to grant waivers to conform to a new method of calculating interference. The old method was based on the use of "undesired-to-desired"

field strength ratios. The new rule (47 C.F.R. § 73.509) prohibits the 1 mV/m coverage contour of a station to be overlapped by another station's interference contour. Specifically, such authority is now limited to 10 percent "overlap" received versus 5 percent "interference" received under the old policy. In its pleading, WCPE often incorrectly uses the term "interference" when referring to "overlap."

<sup>3</sup> Historically, both Congress and the Commission have recognized the special standing of the noncommercial educational service. Most notable is the spectrum reservation policy whereby noncommercial stations are afforded protected frequency allocations for their exclusive use. Twenty FM channels, 201 through 220 (88.1 through 91.9 MHz), are currently reserved for educational use. Separate technical standards have been applied to the noncommercial educational service as well. For example, the Commission's FM allocations scheme for the non-reserved band is predicated on a Table of Allotments which allots particular channels to particular communities and provides protection primarily in terms of mileage separation criteria between stations. This system was designed to anticipate future needs of new stations or enlargements in coverage of existing stations and to protect those needs against any possible encroachment. The Table provided the Commission with an overall nation-wide allocation plan. The reserved band, on the other hand, operates on a demand basis principle - a process where the applicant proposes a particular technical facility which must not involve interference with co-channel or adjacent channel stations based on protected and interfering contour criteria rather than a distance separation standard. Noncommercial educational stations are also subject to inherent limitations, such as the prohibition on their use of advertising, and the definitional requirement that they be non-profit, educational entities.

<sup>4</sup> 44.4 sq. km of the current overlap area would be eliminated, while 14.5 sq. km would remain. 92.4 sq. km of new overlap would be created.