

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

In the Matter of Application of )
CITY UNIVERSITY ) File No. BMAMDIH-20010129ADF
For Authority to Construct and Operate )
Instructional Television Fixed Service )
Two-Way Facilities on )
Channels B1-B4(WNC422) )
Olympia, Washington )

MEMORANDUM OPINION AND ORDER

Adopted: August 5, 2003

Released: August 7, 2003

By the Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau:

1. In this Memorandum Opinion and Order, we address City University's (CU) above-captioned application (FCC Form 331) to operate Instructional Television Fixed Service (ITFS) two-way stations on Channels B1 through B4 in Olympia, Washington. Additionally, we address the petition to deny filed by KCTS Television, Inc. (KCTS) against CU's application. For the reasons stated below, we grant KCTS's petition to deny.

2. Background. ITFS stations are intended primarily to provide a formal educational and cultural development in aural and visual form. ITFS licensees make use of the spectrum to provide formal classroom instruction, distance learning, and videoconference capability to a wide variety of users. In 1998, the Commission adopted technical rule changes designed to provide ITFS licensees flexibility to employ digital technology in delivering two-way communications services including high-speed and high-capacity data transmission and Internet service on a regular basis. Under the current rules, a two-way system typically consists of high-powered transmitters, one or more hub stations, which include transmitting and receiving antennas, and multiple return-path transceivers called response stations.

3. In preparing and filing two-way applications under the current rules, applicants are required to follow a Commission-prescribed methodology for predicting interference from response

1 The B Group channels are located at 2506-2612 MHz, 2518-2524 MHz, 2530-2536 MHz, and 2542-2648 MHz. See 47 C.F.R. § 74.902(a).

2 Petition to Deny filed by KCTS Television, Inc. (filed Apr. 4, 2001) (Petition).

3 47 C.F.R. § 74.931.

4 Id.

5 See Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket No. 97-217, Report and Order, 13 FCC Red 19112 (1998).

station transmitters and to response station hubs.<sup>6</sup> The methodology requires applicants to conduct four major steps in conducting a response station interference analysis.<sup>7</sup> First, the applicant must establish a grid of points that is statistically representative of the distribution of transmitters expected within the response service area, and determine the elevation of each point.<sup>8</sup> Second, the applicant must define any regions or classes of response stations.<sup>9</sup> Third, the system configuration must be analyzed in order to determine whether grid points can be eliminated from the analysis because of terrain blockage and to determine how to analyze the power radiating from the system.<sup>10</sup> Finally, the applicant must calculate the aggregate power from response station transmitters and use those values in its interference analysis.<sup>11</sup> The applicant is required to submit its analysis in a specified format and to provide copies of its analysis to all parties that are entitled to receive notice of the filing of its application.<sup>12</sup>

4. On June 30, 2000, the former Mass Media Bureau announced that there would be an initial filing window from August 14-18, 2000 for the filing of applications for two-way high-power signal booster stations, response station hubs and I channel<sup>13</sup> transmission licenses.<sup>14</sup> In response to that announcement, CU filed an application on August 18, 2000.<sup>15</sup> CU's application appeared on public notice as tendered for filing on November 29, 2000.<sup>16</sup> On January 29, 2001, CU filed a major amendment.<sup>17</sup> CU's application was accepted for filing on February 1, 2001.<sup>18</sup> On April 30, 2001, KCTS, licensee of ITFS Station WHR622 in the Seattle, Washington area,<sup>19</sup> filed the Petition against CU's application.<sup>20</sup> On April 16, 2001, CU filed the first of three consent motions for extension of time

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<sup>6</sup> See Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket No. 97-217, *Report and Order on Further Reconsideration and Further Notice of Proposed Rulemaking*, Appendix D ("Methods for Predicting Interference from Response Station Transmitters and to Response Station Hubs and for Supplying Data on Response Station Systems") 15 FCC Rcd 14566, 14510 (1998) (Appendix D).

<sup>7</sup> *Id.* at 14611 ¶ 2.

<sup>8</sup> *Id.* at 14611-15 ¶¶ 3-16.

<sup>9</sup> *Id.* at 14615-17 ¶¶ 17-24.

<sup>10</sup> *Id.* at 14617-19 ¶¶ 25-31.

<sup>11</sup> *Id.* at 14619-21 ¶¶ 32-39.

<sup>12</sup> *Id.* at 14630-48 ¶¶ 74-111.

<sup>13</sup> The I channels are channels in the 2686-2690 MHz band on which ITFS licensees may operate response stations. 47 C.F.R. §§ 74.939(j).

<sup>14</sup> Mass Media Bureau Provides Further Information on Application Filing Procedures and Announces Availability of Electronic Filing for Two-Way Multipoint Distribution Service and Instructional Television Fixed Service, *Public Notice*, 15 FCC Rcd 11466 (MMB 2000).

<sup>15</sup> File No. BPMDIH-20000818ADX.

<sup>16</sup> Mass Media Bureau Multipoint Distribution Service and Instructional Television Fixed Service Applications Tendered for Filing, *Public Notice*, Report No. 148 (rel. Nov. 29, 2000).

<sup>17</sup> File No. BMAMDIH-20010129ADF.

<sup>18</sup> Mass Media Bureau Multipoint Distribution Service and Instructional Television Fixed Service Applications Accepted for Filing, *Public Notice*, Report No. 164 (rel. Feb. 1, 2001).

<sup>19</sup> ITFS Station WHR622 operates on the B Group channels in Seattle, Washington. On December 15, 1986, KCTS was granted a construction permit for its facilities at a site in Seattle, Washington. File No. BPIF-19831128DC (granted Dec. 15, 1986). On March 13, 1998, KCTS was granted a renewal of its Seattle facilities. File No. BRIF-19960731EF (granted Mar. 13, 1998).

<sup>20</sup> Petition (filed Apr. 4, 2001).

to file an opposition to KCTS's Petition.<sup>21</sup> On May 11, 2001, CU filed an opposition to KCTS's Petition.<sup>22</sup> On May 18, 2001, KCTS filed the first of three motions for extension of time to file a reply to CU's opposition.<sup>23</sup> Finally, on June 22, 2001, KCTS filed a reply.<sup>24</sup>

5. *Discussion.* In the Petition, KCTS provided an engineering statement that purports to show that CU's proposed facilities will cause harmful interference to Station WHR622.<sup>25</sup> In its opposition, CU provides an engineering statement that claims CU's application will not cause new interference, or increase interference at any location experiencing interference.<sup>26</sup>

6. Section 74.939(d)(2)(iv) of the Commission's Rules requires an applicant to engineer its two-way system to provide at least 45 dB of co-channel interference protection within the protected service area (PSA) of all other authorized or previously proposed stations.<sup>27</sup> We conclude that KCTS's Petition alone does not prove that CU's application is defective. While the engineering statement attached to the Petition provides maps showing predicted interference, and it provides the results of the engineer's calculations, it fails to provide information concerning the data KCTS's engineering consultant used to make his calculations (*i.e.* the .DAT file submitted with CU's application). Without that information, we are unable to determine whether KCTS's engineering consultant accurately analyzed CU's proposal and assess the validity of the engineering statement.

7. Although the Petition may be of questionable sufficiency, we have the discretion to independently analyze and address the issues raised therein, particularly since they pertain to matters affecting the public interest – namely, avoidance of harmful interference. Because we were unable to resolve the interference issue solely on the engineering statements provided, the Division staff conducted an engineering analysis utilizing the information presented in the record before us to determine the application's compliance with the Commission's Rules. The analysis considered both the individual and aggregate signal strengths that would occur in the PSAs currently licensed to MDS Station WHR622 at Seattle, Washington. The staff also considered terrain obstructions and the standard 4/3 earth curvature. Based upon the staff's engineering analysis and our review of the record in this proceeding, we conclude that CU's application fails to comply with the Commission's Rules because it provides less than 45 dB of co-channel interference protection in parts of the PSA of Station WHR622. Specifically, the area where co-channel interference would exist is mainly in the area of the geographical overlap between WHR622's PSA and WNC422's PSA. Under the current rules, without mutual agreement between the licensees, the application is defective. Accordingly, we will grant KCTS's petition and direct the Public Safety and Private Wireless Division's Licensing and Technical Analysis Branch to dismiss CU's application.

8. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 309 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309, and Section 74.912 of the Commission's Rules, 47 C.F.R. § 74.912, that the Petition to Deny filed by KCTS Television, Inc. on April 4, 2001, against the above-captioned application IS GRANTED.

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<sup>21</sup> Consent Motions for Extension of Time (filed Apr. 16, 2001, Apr. 19, 2001, Apr. 24, 2001).

<sup>22</sup> Opposition to Petition to Deny (filed May. 11, 2001) (Opposition).

<sup>23</sup> Motions for Extension of Time (filed May 18, 2001, Jun. 1, 2001, Jun. 15, 2001,

<sup>24</sup> Reply (filed Jun. 22, 2001) (Reply).

<sup>25</sup> Petition, Engineering Statement of Larry J. Almaleh.

<sup>26</sup> Opposition, Engineering Statement of Bill Mundee in Support of Opposition to Petition to Deny Filed by KCTS Television, Inc.

<sup>27</sup> 47 C.F.R. §§ 74.939(d)(2)(iv).

9. IT IS FURTHER ORDERED, pursuant to Sections 4(i) and 309 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309, and Sections 74.903 and 74.912 of the Commission's Rules, 47 C.F.R. §§ 74.903, 74.912, that the Licensing and Technical Analysis Branch SHALL DISMISS the application filed by City University (File No. BMAMDIH-20010129ADF) consistent with this *Memorandum Opinion and Order*.

10. IT IS FURTHER ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i) and Sections 1.46 of the Commission's Rules, 47 C.F.R. § 1.46, that the Motions for Extension of Time filed by KCTS Television, Inc. ARE GRANTED.

11. IT IS FURTHER ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i) and Sections 1.46 of the Commission's Rules, 47 C.F.R. § 1.46, that the Motions for Extension of Time filed by City University ARE GRANTED..

12. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

D'wana R. Terry  
Chief, Public Safety and Private Wireless Division  
Wireless Telecommunications Bureau