ORIGINAL

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

In re	)	
	)	
Experimental Radio Station Construction	)	
Permit and License of	)	
National Public Radio, Inc.	)	FCC File No. 0538-EX-PL-2010
Experimental: WF2XQD	)	
	)	
	)	
	)	

FILED/ACCEPTED

MAY 23 2011

Federal Communications Commission
Office of the Secretary

To: Secretary, Federal Communications Commission
Attn: Office of Engineering and Technology, Experimental Licensing Branch

PETITION FOR RECONSIDERATION

Pursuant to Section 73.106 of the rules of the Federal Communications Commission ("FCC" or "Commission"),[1] ABC, Inc. ("ABC"), licensee of full-power commercial television station WPVI-TV, operating on channel 6 in Philadelphia, Pennsylvania ("WPVI"), by its attorneys, submits this petition to reconsider ("Petition") the FCC's grant of the above-captioned experimental license for station WF2XQD ("Experimental License").[2] The Experimental License authorizes the National Public Radio, Inc. ("NPR") to conduct experimental operations using television channel 6 (82-88 MHz) ("Facilities") on frequency 87.7 MHz in three locations:

[1] 47 C.F.R. § 1.106. ABC files the instant petition for reconsideration within 30 days of the FCC's release on April 21, 2011 of the public notice announcing the grant of the experimental license that is the subject of this petition (the 30th day fell on a Saturday and Monday May 23 is the next business day). Experimental applications do not appear on public notice when they are accepted for filing; such applications first appear on FCC public notice at the time the FCC announces grant of the experimental application, in this case on April 21, 2011. Accordingly, ABC did not have an opportunity to oppose the experimental license application prior to its appearance on the April 21 public notice. ABC would be adversely affected if OET's action is not overturned because WPVI will receive prohibitive interference from operation of the experimental license. As such, ABC has established good cause why it was not permitted to participate at an earlier stage of this proceeding. *See* 47 C.F. R. § 1.106(b)(1).

[2] *See* FCC File No. 0538-EX-PL-2010.

Lawrenceville, New Jersey, San Francisco, California, and Philadelphia, Pennsylvania. The FCC announced its grant of the Experimental License in a public notice that was released by the Office of Engineering and Technology ("OET"), Experimental Licensing Branch, on April 21, 2011.[3]

As further demonstrated below and in the attached engineering statement ("Engineering Statement"), the OET should reconsider its grant and rescind or cancel the Experimental License because operation of the Facilities contravenes the FCC's rules governing unlicensed devices in the channel 6 television band. In addition and importantly, the Experimental License should be cancelled because NPR's operation violates the two conditions for use set forth in the Experimental License, namely that (1) NPR coordinate with co-channel licensees in the geographic area, and (2) that NPR immediately shut down operation of the Facilities when such operation causes interference to co-channel licensees. For these reasons, ABC respectfully requests that the OET grant the Petition and rescind or cancel the Experimental License.

I. THE EXPERIMENTAL LICENSE CONTRAVENES SECTION 15.707(b) OF THE FCC'S RULES AND SHOULD BE CANCELLED BECAUSE THE EXPERIMENTAL LICENSE AUTHORIZES THE USE OF MOBILE DEVICES IN THE 76-88 MHZ BAND

The Experimental License should be rescinded and cancelled because operation of the Facilities is inconsistent with Section 15.707(b) of the FCC's rules.[4] Section 15.707(b) of the FCC's rules sets forth the type of unlicensed television band devices ("TVBDs") which are permitted to operate in the 76-88 MHz band ("Restricted Band") and lays out the technical parameters that OET should be using when determining the type of permissible unlicensed radio

[3] Office of Engineering and Technology, Experimental Licensing Branch of the FCC, *Public Notice* , Experimental Actions Report No. 433 (rel. Apr. 21, 2011).

[4] 47 C.F.R. §15.707(b); *see also* Engineering Statement at 2.

devices authorized in the Restricted Band.[5] According to Section 15.707(b) of the FCC's rules, operation in the Restricted Band is only permitted "by fixed TVBDs that communicate only with other fixed TVBDs."[6] The Experimental License authorizes the experimental use of unlicensed mobile devices on frequency 87.7 MHz in the Restricted Band.[7] Since the Experimental License authorizes the use of mobile devices—rather than fixed devices that communicate with other fixed devices--operation of the Experimental License contravenes Section 15.707(b) of the FCC rules.[8] As a result, the FCC should reconsider its grant and rescind or cancel the Experimental License.

II. THE EXPERIMENTAL LICENSE CONTRAVENES SECTION 15.712 OF THE FCC'S RULES AND SHOULD BE CANCELLED BECAUSE IT AUTHORIZES OPERATION WITHIN THE PREDICTED INTERFERENCE-FREE CONTOUR OF STATION WPVI

The Experimental License also should be rescinded because operation of the Facilities contravenes Section 15.712(a)(2) of the FCC's rules. According to Section 15.712(a)(2) of the Commission's Rules, TVBDs must be located outside the protected contours of both co-channel and adjacent channel television stations by defined minimum distances.[9] As depicted in the maps set forth in Exhibit 1A of the attached Engineering Statement, NPR is authorized to operate experimental devices within the protected contour of co-channel television station WPVI.[10] Specifically, two of the three authorized areas of experimental operation are located wholly within the protected service contour of WPVI.[11] For example, NPR is authorized to operate an

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[5] *See* Engineering Statement at p. 2-3.

[6] *Id.*

[7] *See* Experimental License.

[8] *See* Engineering Statement at p. 2-3.

[9] *See* 47 C.F.R. § 15.12(a)(2)*; see also* Engineering Statement at p. 2-3.

[10] *See id; see also* Exhibit 1A attached to the Engineering Statement.

[11] *See id.*

experimental radio transmitting facility within a 50 km radius centered near Lawrenceville, NJ.[12] As depicted in Exhibit 1A, this site is located wholly within WPVI's protected contour.[13] In addition, the second of the three Facilities authorized by the Experimental License is at WPVI's authorized channel 6 transmitter site.[14] As a result, operation of the Facilities is inconsistent with Section 15.12(a)(2) of the FCC's rules because two of the Facilities' transmitting sites are located squarely within the protected contour of station WPVI. Therefore, the Experimental License should be rescinded or cancelled.

III. OPERATION OF THE FACILITIES VIOLATES THE TWO CONDITIONS FOR USE OF THE EXPERIMENTAL LICENSE.

NPR's operation of the Experimental License violates the two conditions governing use because NPR did not coordinate the use of its devices with co-channel station WPVI and because such use is predicted to cause interference to WPVI's licensed digital television operations. When the FCC granted the Experimental License, it placed two conditions on NPR's operation of the Facilities.[15] NPR has not complied with either condition and as a result the Facilities should be "immediately shut down." The first condition for use requires NPR to coordinate with all co-channel licensees in the area of operation.[16] Station WPVI is a co-channel licensee that operates in the area of operation of the Facilities. Indeed, WPVI's authorized digital transmitter is located at the exact same site as one of the three locations authorized in NPR's Experimental License.[17] In addition, WPVI's protected service contour is located wholly within the 50

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[12] *See* Experimental License; *see also* Engineering Statement at p. 2 and Exhibit 1A.

[13] *See* Exhibit 1A attached to the Engineering Statement.

[14] *See id.*

[15] *See* Experimental License.

[16] *See* Experimental License.

[17] *See* Engineering Statement at p. 2-3.

kilometer service area of NPR's Lawrenceville site.[18] For these reasons, NPR was required to have coordinated its experimental operation with WPVI. NPR has made no effort to coordinate with WPVI and, in fact, as set forth above, WPVI did not even learn about the Experimental License until its grant appeared on FCC public notice on April 21. Accordingly, NPR's failure to coordinate with WPVI violates one of the Experimental License's pre-conditions for use.

Second, and importantly, the Facilities are predicted to interfere with WPVI's authorized operations on channel 6 throughout WPVI's protected service contour. The second condition for operation states that the "[l]icensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down."[19] As demonstrated more fully in the attached Engineering Statement and the related exhibits, the Facilities are predicted to cause prohibited interference throughout WPVI's predicted interference-free service area.[20] By way of example, the propagation studies set forth in the attached Engineering Statement show that the Facilities cause predicted prohibited interference to WPVI at three locations selected by WPVI for an interference analysis.[21] For example, in one location selected in Rahway, New Jersey, over 11,000 people within WPVI's over-the-air viewing area will receive prohibitive interference from NPR's Facilities.[22] In a second location selected by WPVI in Westfield, New Jersey, interference is predicted to be caused by the Experimental License to more than 3,000 persons.[23] Finally, to further illustrate the prevalence of the interference problem, WPVI determined that interference is predicted to be caused to more than 2,000 persons within WPVI's protected service area from

[18] *See* Engineering Statement at p. 2-3 and Exhibit 1A.

[19] *See Experimental.*

[20] *See* Engineering Statement at p. 4-5 and Exhibits 1-4.

[21] *See id; See also* 47 C.F.R. § 73.623(c)(2).

[22] *See* Engineering Statement at p. 4 and Exhibit 2.

[23] *See* Engineering Statement at p. 4 and Exhibit 3.

a site in South Plainfield, New Jersey.[24] Accordingly, based on the interference analyses set forth in the Engineering Statement, the Facilities are predicted to cause prohibitive interference to WPVI in violation of the second condition for use of the Experimental License and in violation of the FCC's interference protection rules.[25] Thus, the FCC should rescind or cancel the Experimental License and require NPR to "immediately shut down" the Facilities' operations.

IV. CONCLUSION

Based on the foregoing and the attached Engineering Statement, ABC respectfully requests that OET grant the Petition and rescind or cancel the Experimental License because NPR has violated both conditions for use of the Experimental License by failing to coordinate with co-channel licensee, WPVI, and because operation of the Facilities will cause prohibited interference to the television station WPVI. The FCC should also rescind the Experimental License because operation of the Facilities is contrary to the FCC's Part 15 rules regarding permissible operations in the Restricted Band.

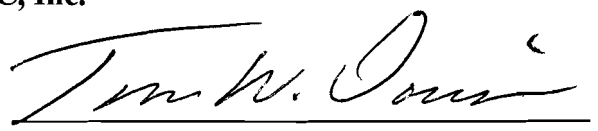
[Signature page to follow]

[24] *See* Engineering Statement at p. 4 and Exhibit 4.

[25] *See generally* Engineering Statement p. 4-5 and Exhibits 1-4; *see* 47 C.F.R. § 73.623(c)(2); *see also* 47 C.F.R. §5.83(c) stating that "Frequency assignments [for experimentation] will be made only on the condition that harmful interference will not be caused to any station operating in accordance with the Table of Frequency Allocation of Part 2 of this chapter."

Respectfully submitted,

ABC, Inc.

By: 

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May 23, 2011

Its Attorneys

Consulting Engineers
CTJC
CARL T. JONES CORPORATION

ORIGINAL

STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF A PETITION FOR RECONSIDERATION
OF THE GRANT OF AN EXPERIMENTAL
CONSTRUCTION PERMIT AND LICENSE,
NO. 0538-EX-PL-2010 - WF2XQD
WPVI-TV - PHILADELPHIA, PENNSYLVANIA
CH. 6 - 30.2 kW - 332 meters HAAT

Prepared for: ABC, INC.

I am a Consulting Engineer, and employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, License No. 7418, and in the State of New York, License No. 63418.

GENERAL

This office has been authorized by ABC, INC., Licensee of WPVI-TV, channel 6, Philadelphia, Pennsylvania, to prepare this statement, and the associated exhibits, in support of a Petition for Reconsideration. The Commission has granted an experimental construction permit and license to National Public Radio, Inc. to conduct experimental operations using television channel 6 (82-88 mHz). Two of the three authorized areas of experimental operation are located wholly within the protected service contour of WPVI-TV, which is authorized to operate a full-service digital television broadcast station on channel 6, serving Philadelphia, Pennsylvania. Indeed, one of the areas, each of which is defined by a radius of 50 kilometers, is centered at WPVI-TV's authorized transmitter site. Another is centered near Lawrenceville, NJ, wholly within WPVI-TV's predicted service area.

EXPERIMENTAL AUTHORIZATION IS INCOMPATIBLE WITH BROADCASTING

Part 5 of the Commission's Rules prescribes the manner in which parts of the radio frequency spectrum may be made available for experimentation. Section 5.3 defines the scope of service. The subject authorization is granted in accordance with Section 5.3(d), which permits "technical demonstrations of equipment or techniques." Section 5.85 sets forth frequencies and policy governing their assignment. Section 5.85(a) permits the assignment of any frequency designated in the Table of Frequency Allocations set forth in Part 2 of the Commission's Rules. However, Section 5.83(c) states that: "Frequency assignments will be made only on the condition that harmful interference will not be caused to any station operating in accordance with the Table of Frequency Allocation of Part 2 of this chapter." The subject authorization contains two special conditions: (1) "Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down." and (2) "NPR shall coordinate with all co-channel licensees in the area of operation."

The authorization's assigned frequency is 87.7 mHz, which is close to the frequency that was formerly assigned to be the aural carrier frequency for analog television channel 6 (82-88 mHz). Two of the three areas of operation defined in NPR's experimental assignment are located wholly within the protected service area of WPVI-TV's current authorization to operate its digital television broadcast station on channel 6, serving Philadelphia, Pennsylvania. Any operation using the frequency of 87.7 mHz that occurs

within the area where the public expects to be able to receive over-the-air television service from WPVI-TV on channel 6 will be capable of causing, and most likely will cause harmful interference. Therefore, NPR's experimental operation clearly is incompatible with WPVI-TV's existing licensed digital television operation on channel 6, and, pursuant to condition 2 in its authorization, NPR was required to notify WPVI-TV of its proposed operation and coordinate with WPVI-TV prior to initiation of service. NPR did not notify or coordinate with WPVI as required by its experimental authorization prior to initiation of its experimental operation. As such, NPR is required to immediately cease operation until acceptable coordination with WPVI has been accomplished.

EXPERIMENTAL AUTHORIZATION IS INCOMPATIBLE WITH PART 15

Applicants for experimental authorizations, when selecting frequencies, should become familiar with existing operations that are located within their desired areas of proposed operations. Part 15 of the Commission's Rules provides an excellent guide for those seeking experimental authorizations. For example, the frequency band assigned to over-the-air FM radio broadcasting (88-108 mHz) can be used by un-licensed devices, as regulated in Section 15.239. The frequency bands assigned to television broadcasting can be used by un-licensed devices, as permitted by the terms contained in Subpart H of Part 15.

For Television Band Devices (TVBDs), the permissible channels of operation in the television bands, and some restrictions for their use, are set forth in Section 15.707. According to Section 15.707(b) the only TVBDs permitted to use channel 6 are fixed

TVBDs that communicate only with other fixed TVBDs. NPR's experimental authorization is for mobile communications on channel 6, not fixed to fixed. Protection from interference is provided in Section 15.712. According to Section 15.712(a)(2) TVDBs must be located outside the protected contours of both co-channel and adjacent channel television stations by defined minimum distances. The operative word is: "OUTSIDE".

PREDICTED INTERFERENCE TO WPVI-TV FROM WF2XQD

In order to demonstrate the experimental authorization's incompatibility with WPVI-TV's authorized operation on channel 6, several propagation studies were performed, the results of which are shown herein. Three potential sites for reception of WPVI-TV over-the-air were selected. These are located within one of the experimental areas of operation defined in the experimental authorization. That area is centered at Lawrenceville, New Jersey with a radius of 50 kilometers from NL 40-16-58, WL 74-41-10, which is located wholly within WPVI-TV's protected contour. According to Section 15.712(a)(2) that area should be located wholly outside WPVI-TV's protected contour.

Exhibit 1 shows the locations of the three selected receive sites that are located at distances that are less than 50 km from the area's center, and shows their proximity to the outer boundary of WPVI-TV's protected service area. A site in Rahway, NJ is shown in Exhibit 2. A hypothetical device positioned at a height of 2 meters above the ground and radiating on 87.7 mHz using an Effective Radiated Power (ERP) of 20 micro-watts, as authorized, is predicted, using Longley/Rice methodology, to exceed the required Desired-to-Undesired signal ratio defined for interference protection to digital television stations over

an area containing in excess of 11 thousand persons. Clearly, the experimental device should not be permitted to operate within the protected service area of WPVI-TV.

Exhibit 3 shows the results of a similar study for a site in Westfield, NJ, in which the hypothetical experimental device is predicted to cause interference to more than 3 thousand persons. Exhibit 4 shows the study results for a site in South Plainfield, NJ. The proposed device is predicted to cause interference to more than 2 thousand persons.

The results of these studies clearly demonstrate that no un-licensed device should be permitted to radiate RF energy, on any co-channel frequency, at any location that is within the protected service area of any authorized television station.

SUMMARY

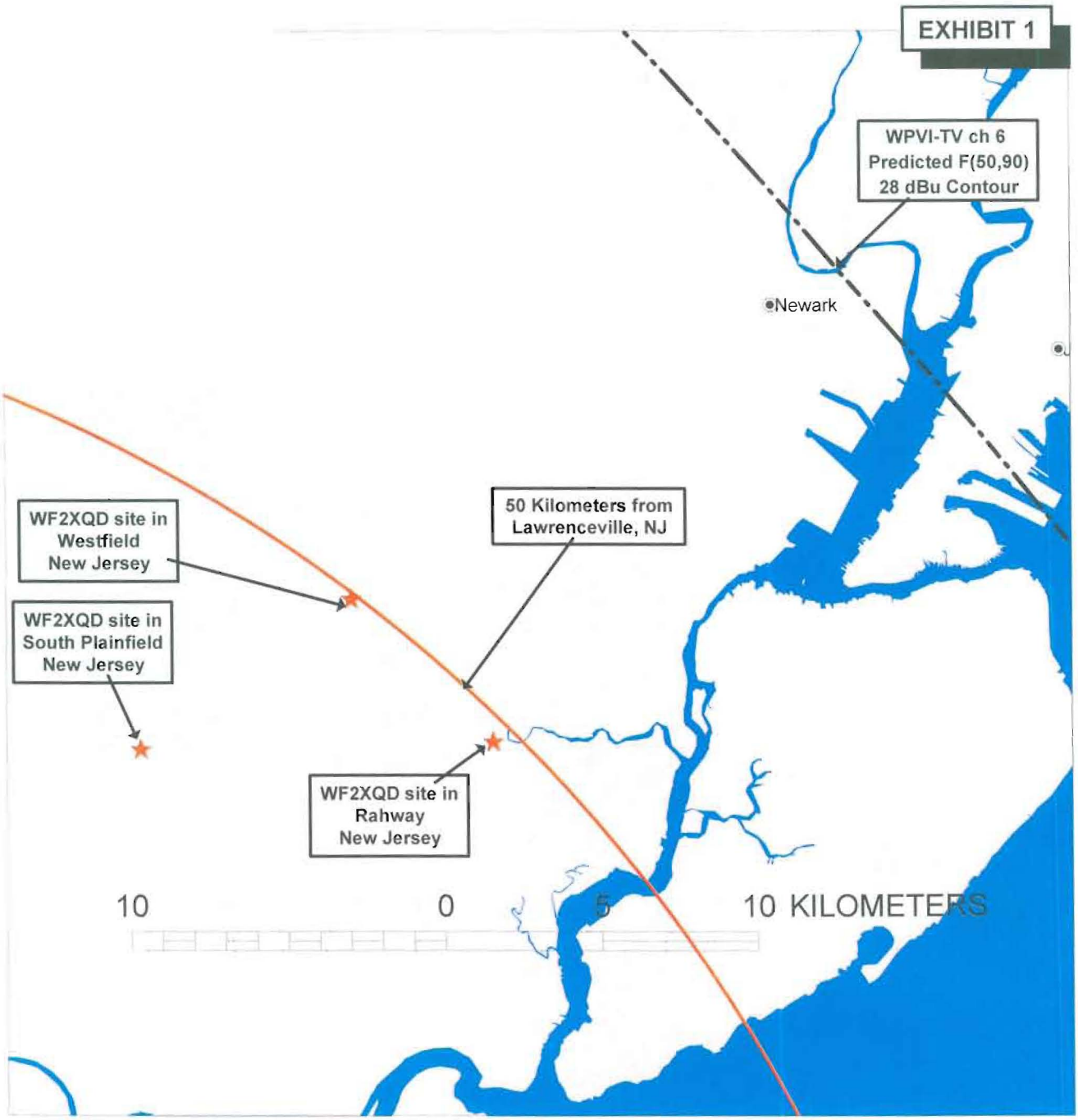
It is submitted that the studies shown herein demonstrate the necessity for the immediate termination of NPR's experimental authorization WF2XQD. This statement, and the attached exhibits were prepared by me, and are true and correct to the best of my knowledge and belief.

DATED: May 23, 2011

John E. Hidle, P.E.

COMMONWEALTH OF VIRGINIA
J E HIDLE
Lic. No. 007418
PROFESSIONAL ENGINEER

EXHIBIT 1



WPVI-TV's PREDICTED PROTECTED COVERAGE CONTOUR & LOCATIONS OF POTENTIAL INTERFERENCE FROM WF2XQD

WPVI-TV, PHILADELPHIA, PENNSYLVANIA

DTV - CH. 6 - 30.2 kW - 332.0 m HAAT

Boundary of Area located within 50 km of Lawrenceville, New Jersey

Predicted Noise Limited Contour
F(50,90) - 28 dBu
Area = 47,020 sq km
Population = 13,343,749

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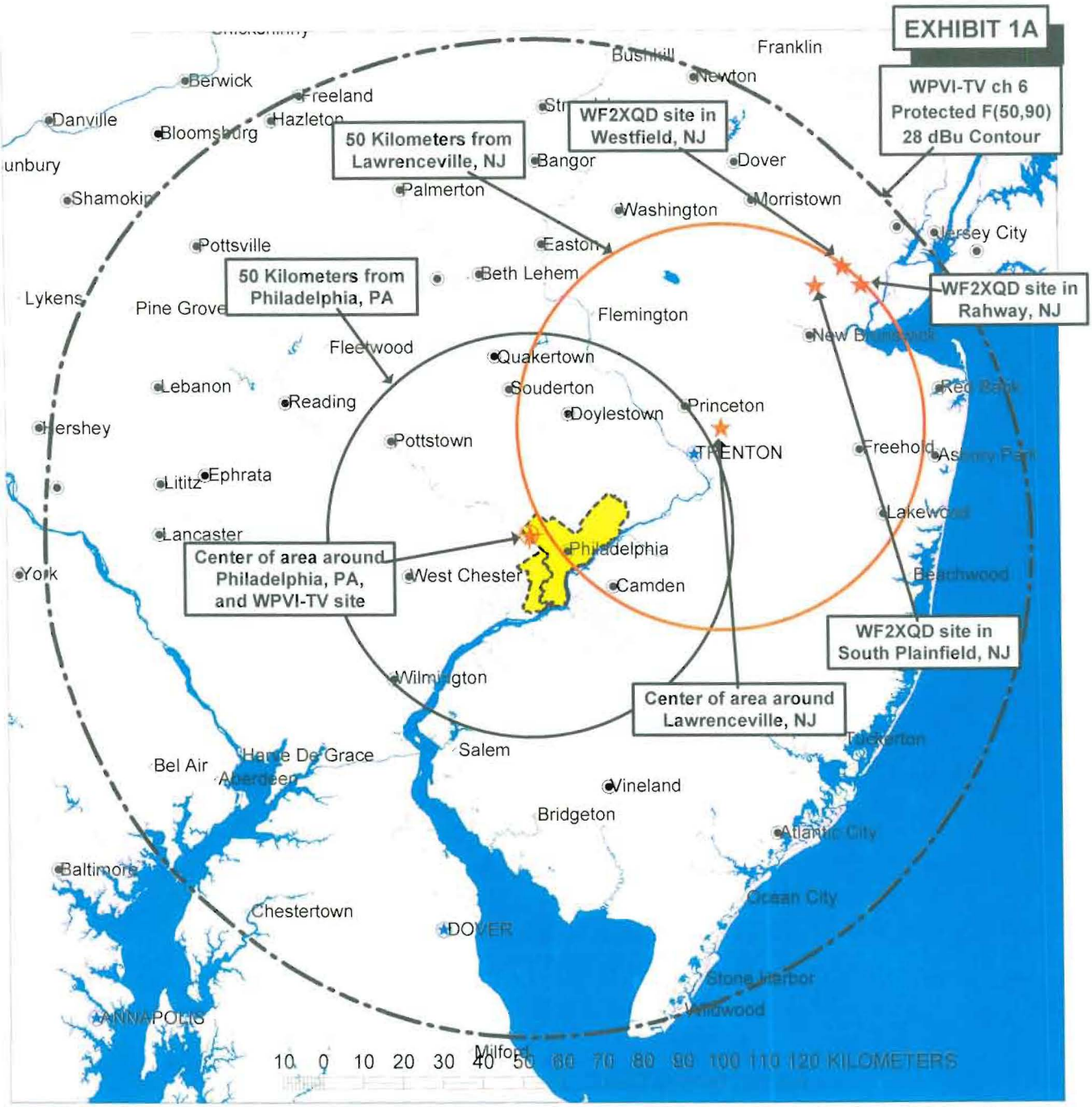


WPVI-TV's PREDICTED PROTECTED COVERAGE CONTOUR, AREAS OF WF2XQD EXPERIMENTAL OPERATION & SOME LOCATIONS OF POTENTIAL INTERFERENCE FROM WF2XQD

WPVI-TV, PHILADELPHIA, PENNSYLVANIA

DTV - CH. 6 - 30.2 kW - 332.0 m HAAT

Boundary of Area located within 50 km of Lawrenceville, New Jersey

Boundary of Area located within 50 km of Philadelphia, Pennsylvania

Predicted Noise Limited Contour
F(50,90) - 28 dBu
Area = 47,020 sq km
Population = 13,343,749

MAY 2011

CTJC

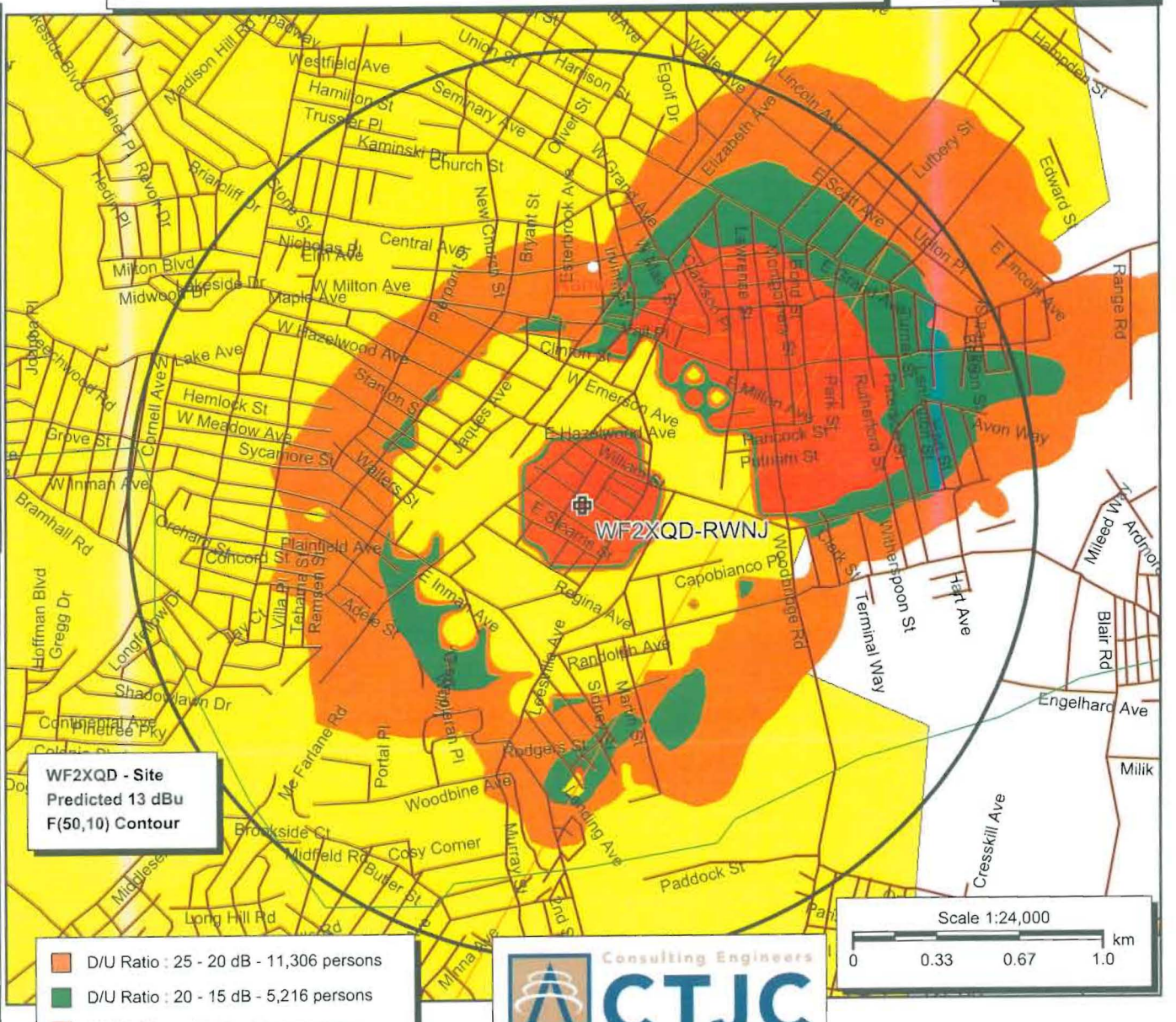
WF2XQD - site at Rahway, within 50 km of Lawrenceville, NJ

Exhibit 2

WPVI-TV
BPCDT20090617ADQ
Latitude: 40-02-39 N
Longitude: 075-14-26 W
ERP: 30.20 kW
Channel: 6
Frequency: 85.0 MHz
AMSL Height: 404.0 m
Elevation: 76.9 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 0.0
Prop Model: Longley/Rice
Climate: Mar temp land
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

WF2XQD-RWNJ

Latitude: 40-35-58 N
Longitude: 074-16-43 W
ERP: 0.00 kW
Channel: ???
Frequency: 87.7 MHz
AMSL Height: 28.1 m
Elevation: 26.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Mar temp land
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast



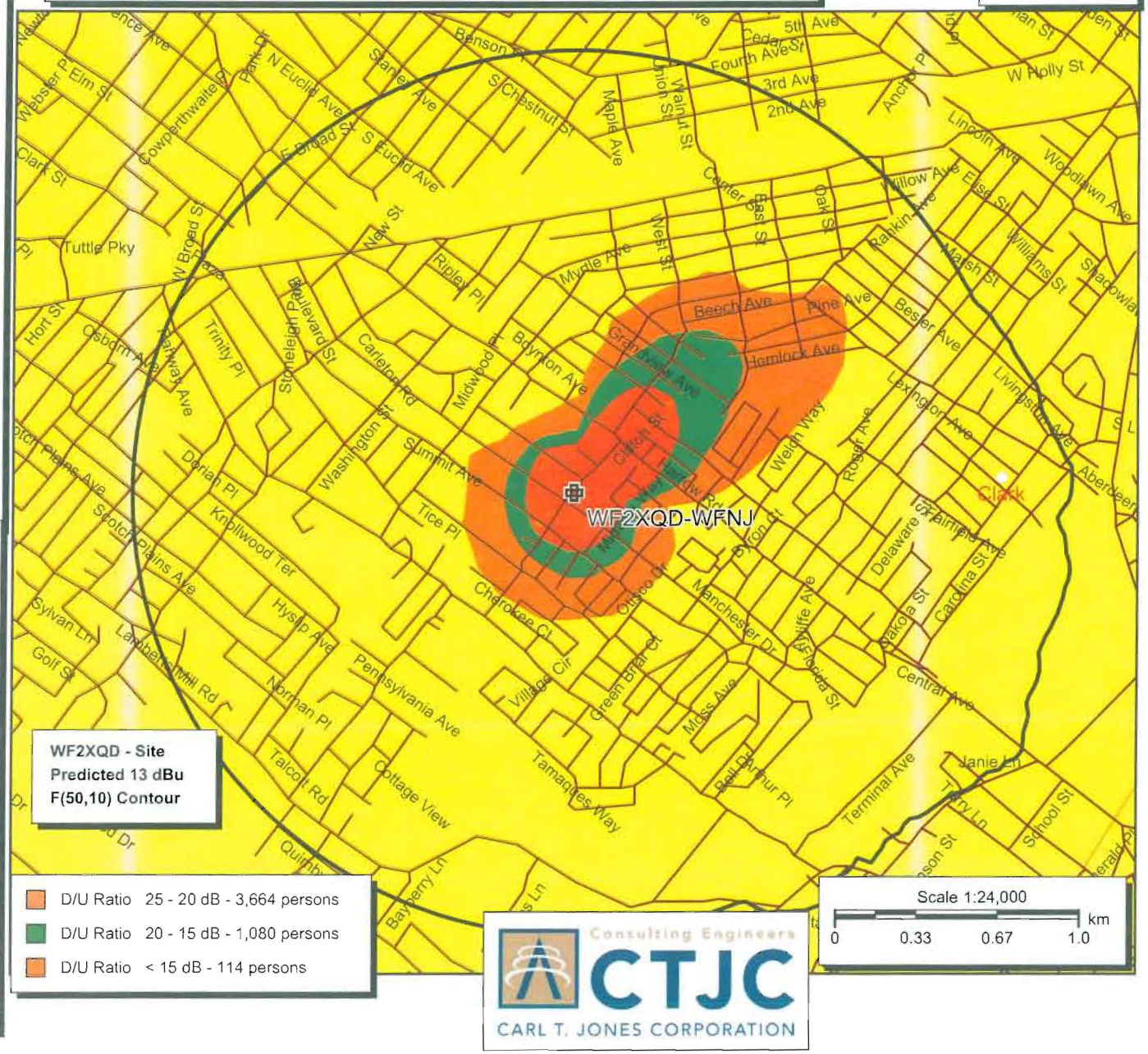
WF2XQD - site at Westfield, within 50 km of Lawrenceville, NJ

Exhibit 3

WPVI-TV
BPCDT20090617ADQ
Latitude: 40-02-39 N
Longitude: 075-14-26 W
ERP: 30.20 kW
Channel: 6
Frequency: 85.0 MHz
AMSL Height: 404.0 m
Elevation: 76.9 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 0.0
Prop Model: Longley/Rice
Climate: Mar temp land
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

WF2XQD-WFNJ

Latitude: 40-38-25 N
Longitude: 074-19-55 W
ERP: 0.00 kW
Channel: ???
Frequency: 87.7 MHz
AMSL Height: 44.6 m
Elevation: 42.5 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Mar temp land
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast



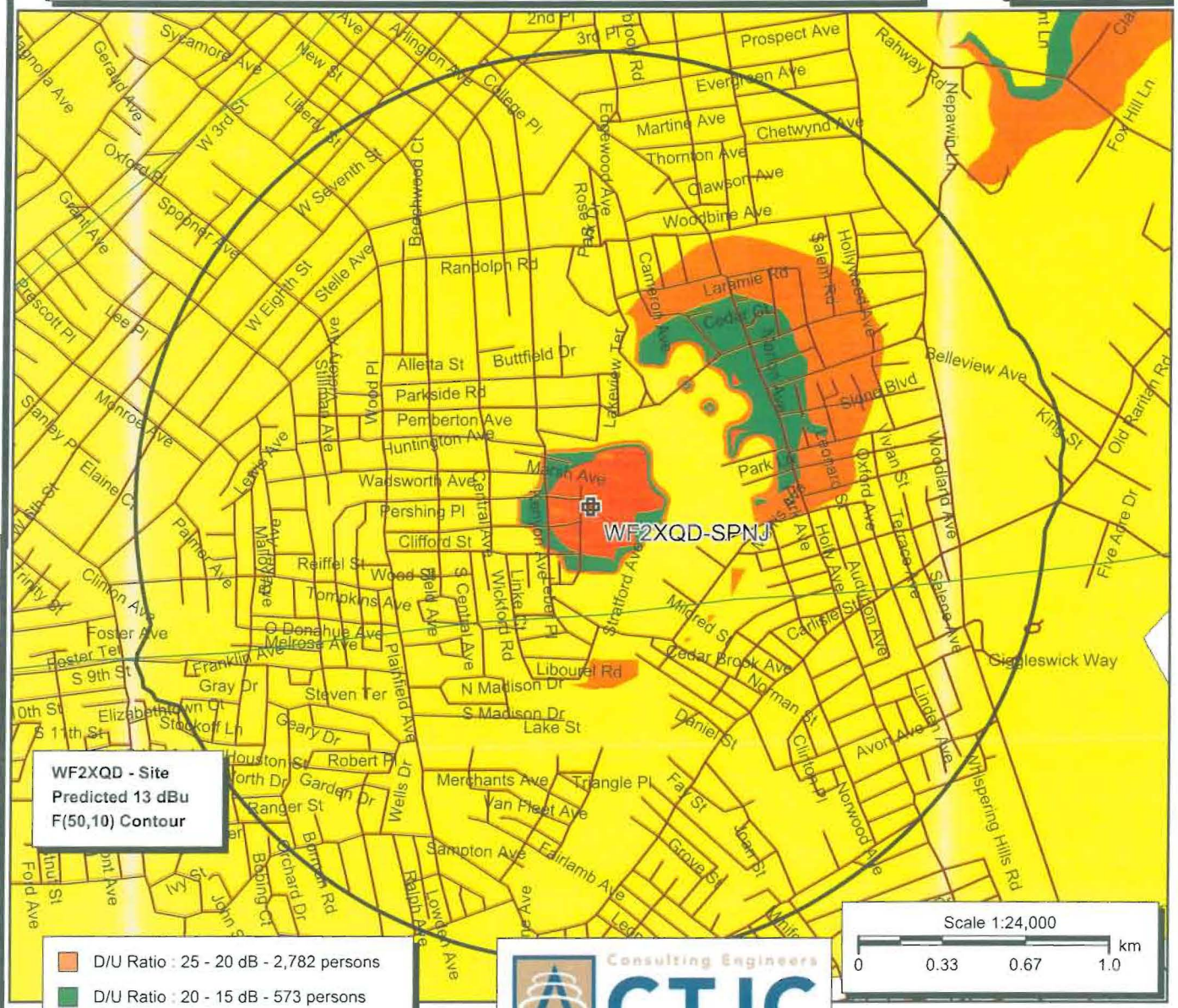
WF2XQD - site at South Plainfield, within 50 km of Lawrenceville, NJ

Exhibit 4

WPVI-TV
BPCDT20090617ADQ
Latitude: 40-02-39 N
Longitude: 075-14-26 W
ERP: 30.20 kW
Channel: 6
Frequency: 85.0 MHz
AMSL Height: 404.0 m
Elevation: 76.9 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 0.0
Prop Model: Longley/Rice
Climate: Mar temp land
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

WF2XQD-SPNJ

Latitude: 40-35-50 N
Longitude: 074-24-40 W
ERP: 0.00 kW
Channel: ???
Frequency: 87.7 MHz
AMSL Height: 46.6 m
Elevation: 44.5 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Mar temp land
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast



CERTIFICATE OF SERVICE

I, Dayle Jones, of Akin Gump Strauss Hauer & Feld, LLP, certify that a copy of the foregoing Petition for Reconsideration, filed on behalf of ABC, Inc., was served via first-class mail on this 23th day of May 2011, upon the following:

Michael Starling
National Public Radio, Inc.
635 Massachusetts Avenue, NW
Washington, DC 20001-3753

Dayle Jones

Dayle Jones