

Sullivan Broadcasting Company, Inc.
Supplement to Petition for Reconsideration
MM Docket 87-268
August 22, 1997

EXHIBIT 4

**ENGINEERING STATEMENT
WUTV(TV), BUFFALO, NEW YORK**

AUGUST 1997

**COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.**

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

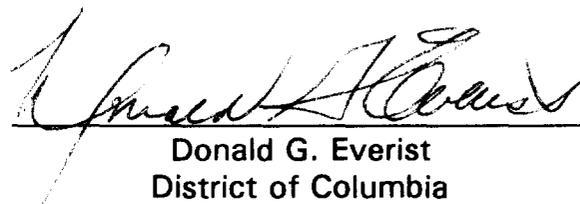
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

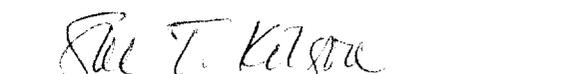
That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.


Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 22^d day of August, 1997.


Notary Public

My Commission Expires: _____
SUE T. KILGORE
NOTARY PUBLIC DISTRICT OF COLUMBIA
My Commission Expires December 14, 2001

This engineering statement has been prepared on behalf of Sullivan Broadcasting License Corp., licensee of WUTV(TV), Buffalo, New York.

Allotment

	<u>NTSC</u>	<u>DTV</u>
Channel	29	14
ERP	1260 kW	50 kW
HAAT	280 M	280 M

WUTV(TV) has an application on file to increase its power to 5000 kW Max-DA and increase its HAAT to 329 meters.

It is anticipated that future terrestrial broadcasting will need to be complete in a multimedia environment. This will dictate the need to have a sufficient DTV signal to permit reception to second and third sets in the home that are not connected to a master antenna or cable.

Our office has analyzed the WUHF(TV) DTV service contour and based on our experience, it is our opinion that in certain areas it is unlikely sufficient signal will be received by indoor loop antennas. This will be particularly the case in urban areas with large buildings causing excessive attenuation and multipath. Thus, with its allocated ERP of 50 kW, it is unlikely that the WUTV(TV) DTV signal will in fact replicate its NTSC service area.

The nearest co-channel NTSC allotment is Channel 14 in Bath, New York, for which there is a pending application (BPCT-870331LW). This application has been

on file for over 10 years without any action by the FCC. The FCC has not formally recognized applications in the DTV proceedings.

There is a short-spacing with CICA-TV, Channel 19, Toronto, Ontario, of only 2.5 km.

A 500 kW DTV operation on Channel 14 with 329 meters HAAT will not cause interference to CICA-TV as the spacings are predicated on the maximum allowable ERP and antenna height set forth in the table in Section 73.622(a)(6) of the new rules. In that table, a station with an antenna HAAT of 365 meters is permitted an ERP of 1000 kW. The WUTV(TV) assumed 500 kW operation will be less than one-half of the maximum of 1000 kW with a HAAT of 329 meters which is less than 365 meters permitted.

Thus, a 500 kW DTV operation for WUTV(TV) will be able to provide comparable service to its proposed NTSC operation.

Sullivan Broadcasting Company, Inc.
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EXHIBIT 5

**ENGINEERING STATEMENT
WUHF(TV), ROCHESTER, NEW YORK**

AUGUST 1997

**COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.**

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

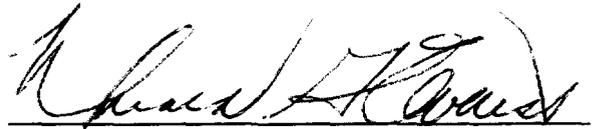
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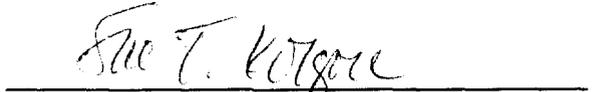
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 22nd day of August, 1997.



Notary Public

My Commission Expires: _____

SUE T. KILGORE
NOTARY PUBLIC DISTRICT OF COLUMBIA
My Commission Expires December 14, 2001

This engineering statement has been prepared on behalf of Sullivan Broadcasting License Corp., licensee of WUHF(TV), Rochester, New York.

Allotment

	<u>NTSC</u>	<u>DTV</u>
Channel	31	28
ERP	1200 kW	50 kW
HAAT	152 M	152 M

WUHF(TV) has an application on file to increase its power to 5000 kW DA Max. at 152 meters HAAT.

It is anticipated that future terrestrial broadcasting will need to be complete in a multimedia environment. This will dictate the need to have a sufficient DTV signal to permit reception to second and third sets in the home that are not connected to a master antenna or cable.

Our office has analyzed the WUHF(TV) DTV service contour and it is our opinion that in certain areas it is unlikely sufficient signal will be received by indoor loop antennas. This will be particularly the case in urban areas with large building causing excessive attenuation and multipath. Thus with allocated ERP of 50 kW, it is unlikely that the WUHF(TV) DTV signal will in fact replicate its NTSC service area.

The nearest co-channel NTSC station is WBRE-TV, Wilkes-Barre, Pennsylvania, with an ERP of 3020 kW at 509 meters HAAT. The spacing between WUHF(TV) DTV

Channel 28 and the WBRE-TV NTSC Channel 28 is 259.1 km. Section 73.623 of the new rules requires a separation of 217.3 km.

Based on a TA Services CSPM study (see Table I), WBRE-TV serves a total of 564,000 homes. The prescribed 50 kW WUHF(TV) DTV Channel 28 will cause interference to 350 homes within the WBRE-TV service area. An assumed DTV operation of 500 kW for WUHF(TV) will cause interference to 9000 homes, 1.6% of the WBRE-TV homes served, a de minimis increase.

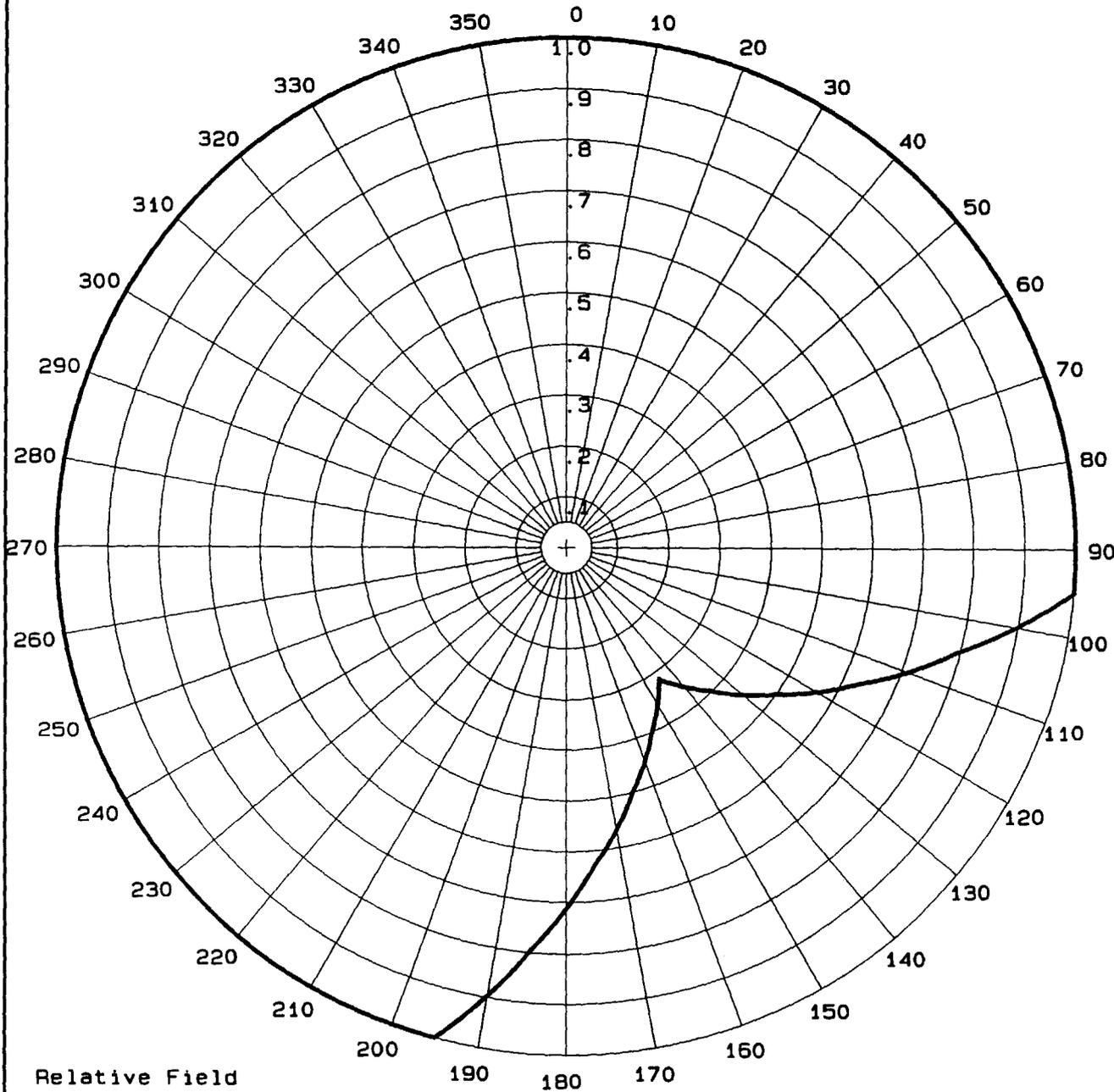
It is also possible though more expensive to install a directional antenna for the assumed 500 kW DTV operation which would avoid the de minimis increase in interference. Attached hereto as Figure 1 is pattern DWUHF2.PAT, an assumed pattern for the 5000 kW Max. DA operation for DTV Channel 28. The pattern will hold the ERP to 50 kW on a direct bearing toward WBRE-TV and increase its radiation by 2 dB every ± 10 degrees. This assumed pattern will limit any increase in interference to WBRE-TV to a negligible amount.

COHEN, DIPPELL AND EVERIST, P. C.

TABLE I
POPULATION AND AREA DATA
RE INTERFERENCE TO
WBRE-TV, WILKES-BARRE, PENNSYLVANIA
FROM WUHF(TV), ROCHESTER, NEW YORK
AUGUST 1997

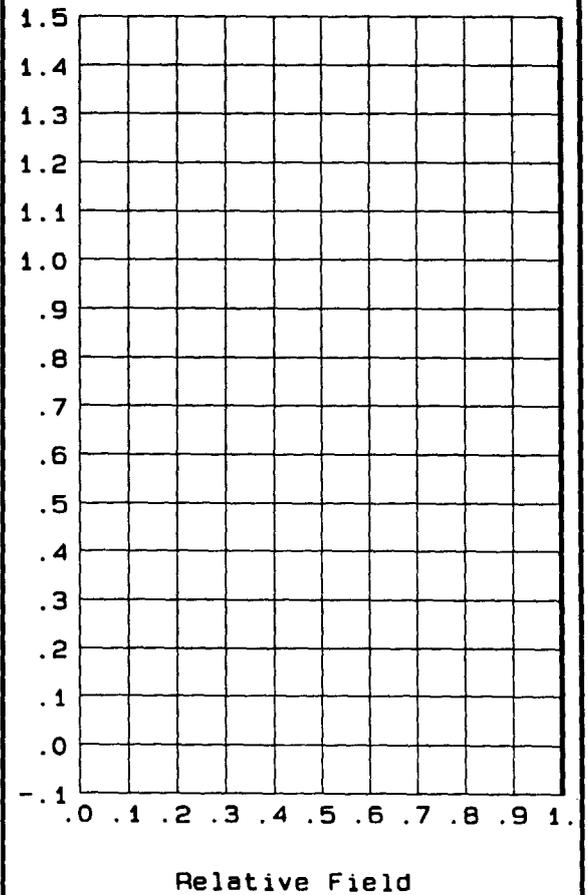
<u>Station</u>	<u>NTSC Service</u>		
	<u>Population</u>	<u>Households</u>	<u>Area</u> <u>sq.km</u>
WBRE-TV	1,501,000	564,000	17,620
Interference from WUHF(TV) 50 kW	1,000	350	40
Interference from WUHF(TV) 500 kW DA-Max	27,000	5,000	760
Percent of WBRE-TV Service Area	1.8	0.9	4.3

HORIZONTAL PLANE PATTERN



VERTICAL PLANE PATTERN

Azimuth: .0



Pattern file: dwuhf2.pat

FIGURE 1

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS WASHINGTON, D.C.

Sullivan Broadcasting Company, Inc.
Supplement to Petition for Reconsideration
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August 22, 1997

EXHIBIT 6

**ENGINEERING STATEMENT
WZTV(TV), NASHVILLE, TENNESSEE**

AUGUST 1997

**COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.**

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

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That his qualifications are a matter of record in the Federal Communications Commission;

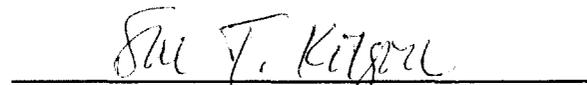
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 22d day of August, 1997.



Notary Public

My Commission Expires: _____

SUE T. KILGORE
NOTARY PUBLIC DISTRICT OF COLUMBIA
My Commission Expires December 14, 2001

This engineering statement has been prepared on behalf of Sullivan Broadcasting License Corp., licensee of WZTV(TV), Nashville, Tennessee.

Allotment

	<u>NTSC</u>	<u>DTV</u>
Channel	17	15
ERP	3240 kW	116.6 kW
HAAT	354 M	354 M

WZTV(TV) has an application on file to increase its power to 5000 kW (BPCT-960709KI).

It is anticipated that future terrestrial broadcasting will need to be complete in a multimedia environment. This will dictate the need to have a sufficient DTV signal to permit reception to second and third sets in the home that are not connected to a master antenna or cable.

Our office has analyzed the WZTV(TV) service contour and based on our experience, it is our opinion that in certain areas it is unlikely sufficient signal will be received by indoor loop antennas. This will be particularly in the case of urban areas with large building causing excessive attenuation and multipath. Thus, with allocated ERP of 50 kW, it is unlikely that the WZTV(TV) DTV signal will in fact replicate its NTSC service area.

The nearest co-channel NTSC station is WOWL-TV, Florence, Alabama, with an ERP of 1700 kW at 223 meters HAAT. The spacing between WZTV(TV) DTV

Channel 15 and the WOWL-TV NTSC Channel 15 is 206 km. Section 73.623 of the new rules requires a separation of 244.6 km.

Based on a TA Services CSPM study (see Table I), WOWL-TV serves a total of 193,000 households. The prescribed 116.6 kW WZTV(TV) DTV Channel 15 will cause interference to 50,000 households. An assumed 500 kW DTV directional operation (see Figure 1) for WZTV(TV) will increase this interference by 2,000 households, an increase of 4%.

The 116.6 kW DTV operation of WZTV(TV) provides service to a population of 1,569,000 within 587,000 households and 32,100 sq. km. The assumed 500 kW max. DA DTV operation will provide service to a population of 1,722,000 within 645,000 households and 37,630 sq. km.

Thus, the use of a directional 500 kW DTV operation by WZTV(TV) will provide to a population of 1,722,000 an increase of 9.8% over that served by the allocated power of 116.6 kW (see Table II).

COHEN, DIPPELL AND EVERIST, P. C.

TABLE I
POPULATION AND AREA DATA
RE INTERFERENCE TO
WOWL(TV), FLORENCE, ALABAMA
FROM THE OPERATION OF
WZTV(TV), NASHVILLE, TENNESSEE
AUGUST 1997

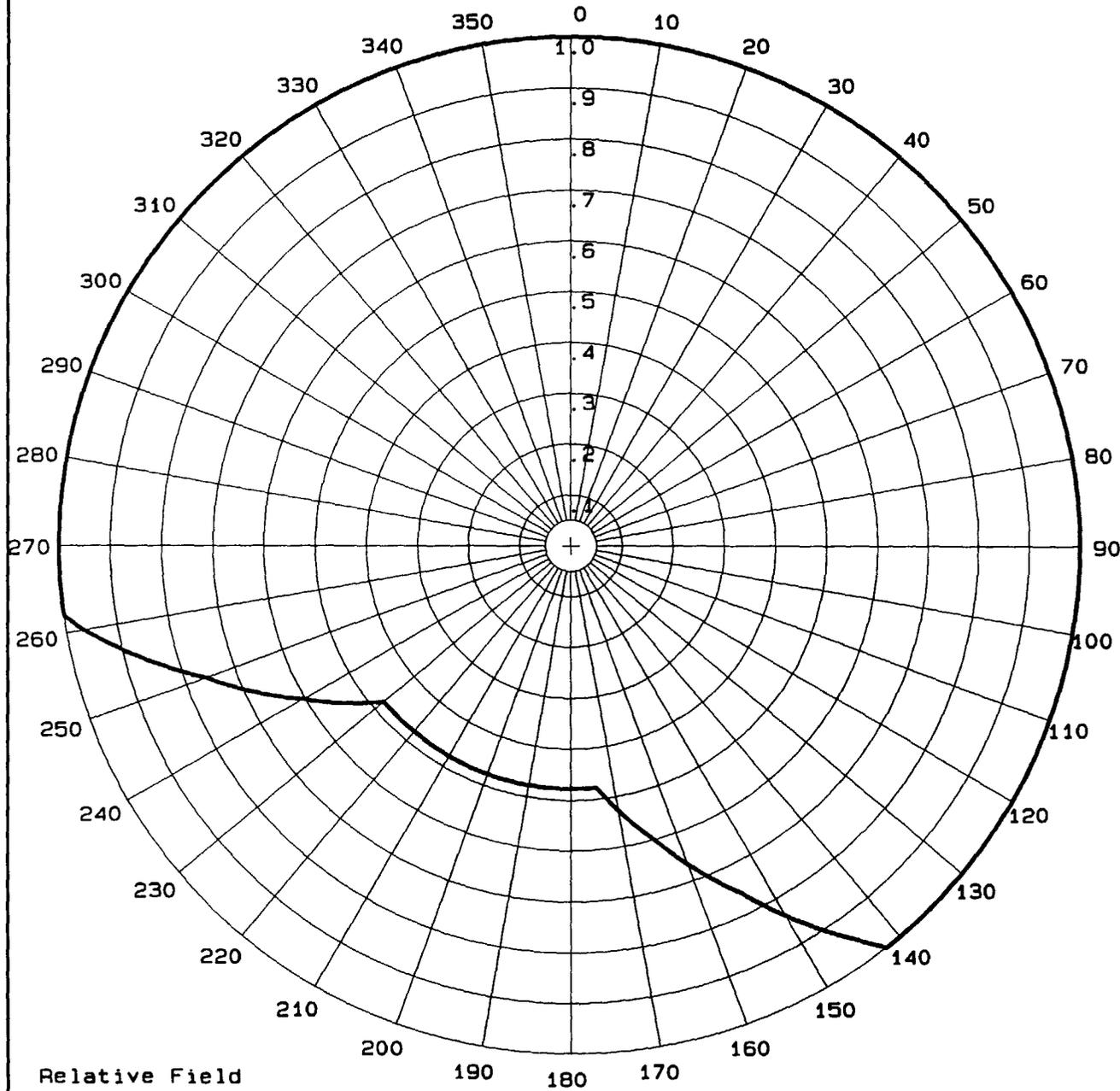
<u>Station</u>	<u>NTSC Service</u>		<u>Area</u> sq.km
	<u>Population</u>	<u>Households</u>	
WOWL(TV)	512,000	193,000	19,390
Interference from WZTV(TV) 116.6 kW	132,000	50,000	3,630
Interference from WZTV(TV) 500 kW max. DA	138,000	52,000	3,800
Percent of Increase in Interference	4.5	4.0	4.7

COHEN, DIPPELL AND EVERIST, P. C.

TABLE II
POPULATION AND AREA DATA
FOR THE DTV OPERATION OF
WZTV(TV), NASHVILLE, TENNESSEE
AUGUST 1997

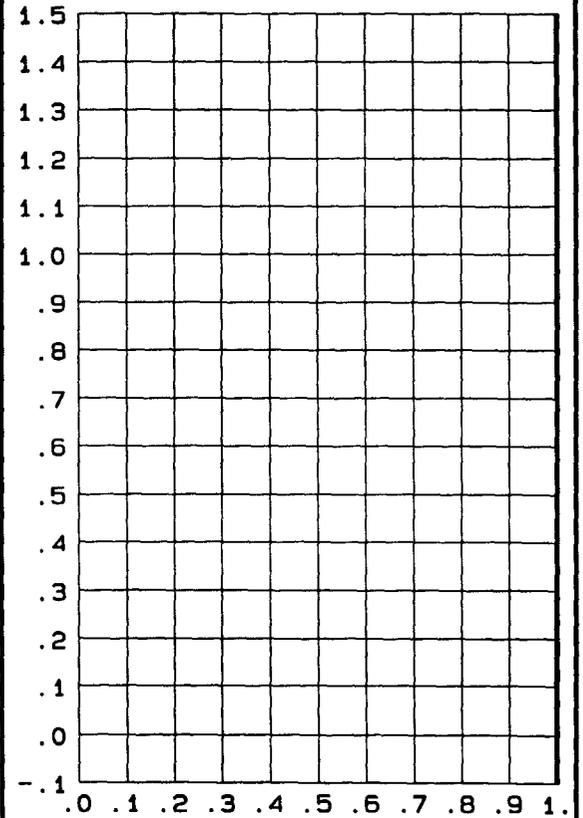
<u>Station</u>	<u>DTV Service</u>		
	<u>Population</u>	<u>Households</u>	<u>Area</u> <u>sq.km</u>
WZTV(TV) 116.6 kW	1,569,000	587,000	32,100
WZTV(TV) 500 kW DA Max.	1,722,000	645,000	37,630

HORIZONTAL PLANE PATTERN



VERTICAL PLANE PATTERN

Azimuth: .0



Relative Field

Pattern file: DWZTV500.PAT

FIGURE 1

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS WASHINGTON, D.C.

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August 22, 1997

EXHIBIT 7



11 BROADCAST PLAZA • HURRICANE, WV 25526
(304) 757-0011 • (304) 529-0011 • FAX: 757-7533

WVAH-TV, CHARLESTON, WEST VIRGINIA

Page 1

This engineering statement has been prepared on behalf of Sullivan Broadcasting License Corp., licensee of WVAH-TV, Charleston, West Virginia.

WVAH-TV has been assigned DTV Channel 19, 68.3 kW, and 525 meters HAAT in the Sixth Report and Order.

Based on Section 73.622(a)(6) of the new rules, WVAH-TV may increase to an ERP of at least 460 kW based on its licensed HAAT of 525 meters.

Due to the mountainous terrain, it is believed that the assigned ERP of 68.3 kW will not provide the same service as its licensed Channel 11 operation, thus, it is requested that an ERP of 460 kW be assigned to the WVAH-TV DTV allotment.

A study has been made of the minor increase of interference to various co-channel and adjacent-channel NTSC and DTV stations. It shows that none of the increase will exceed 5% of the populations of those stations.


George Parnicza
Corporate Chief Engineer

A SULLIVAN BROADCASTING STATION

Received Time

Aug. 22, 10:52AM

Print Time

Aug. 22, 10:53AM