

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

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

DOCKET FILE COPY ORIGINAL

Amendment of Section 73.622
of the Commission's Rules
Digital Television Table of Allotments
(Dozier, Alabama)

RM No. _____

MM Docket No. _____

To: The Chief, Allocations Branch

PETITION FOR RULEMAKING

Alabama Educational Television Commission ("AETC"), licensee of noncommercial television station WDIQ-TV, NTSC Channel 2, Dozier, Alabama, by its attorneys, hereby respectfully petitions the Commission for a rulemaking to modify Commission's Digital Television Table of Allotments, as described in Section 73.622 of the Commission's Rules. Specifically, AETC requests that the Commission substitute Channel 11, Dozier, Alabama, for Channel 59, Dozier, Alabama, as the noncommercial digital television allotment to be used by the digital television station WDIQ-DT, and to take any other steps necessary to enable WDIQ-DT to apply to construct and ultimately operate its facilities on Channel 11, as described in the attached Engineering Statement (the "Proposal").

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In a series of orders, the Commission has specified Channels 2-51 as digital television core spectrum (the “Core Spectrum”). 1/ Television stations may operate outside the Core Spectrum during the period in which such stations are transitioning to digital broadcasts (the “Transition Period”). After the Transition Period, however, television stations broadcasting on channels outside the Core Spectrum must surrender their licenses for such channels and commence digital broadcast operations on some channel within the Core Spectrum. 2/ Accordingly, any station with a digital allotment outside the Core Spectrum would, in most cases, have to construct two digital facilities -- one to be used on the non-core channel during the Transition Period, and one to be used on a core channel after the Transition Period. *See id.*

In the *Reconsideration Order*, the Commission “recognize[d] the additional burden placed on licensees with out-of-core DTV allotments.” *Id.* at 7440. Moreover, the Commission emphasized that “the allotment of out-of-core channels may present a particular burden to noncommercial . . . licensees.” *Id.* at 7441. The Commission promised that “to the extent that in-core channels [are] available during the transition, [it] will attempt to further reduce the number of out-of-core allotments” through “future amendments to the Table.” *Id.* at 7440-41.

1/ See, e.g., *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, 13 FCC Rcd 7418, 7435-37 (1998) (“*Reconsideration Order*”); *Sixth Report and Order*, 12 FCC Rcd 14588 (1997) (“*Sixth Report and Order*”).

2/ See, e.g., *Reconsideration Order*, 13 FCC Rcd at 7439-42.

Adoption of the Proposal would enable the Commission to mitigate the burdens of the digital transition to one such noncommercial licensee. AETC is a public agency that provides noncommercial educational programs to residents throughout Alabama. It has a limited budget. Any funding that must be spent on technical matters is funding that AETC cannot dedicate to public programming. If the Commission adopts the Proposal, which would substitute a Core Spectrum digital allotment for WDIQ-DT for the current, non-core allotment, AETC would need to design and construct only one set of digital transmission facilities. Accordingly, the Proposal would reduce the construction costs AETC will incur in making WDIQ-TV's digital transition, which would enable more of AETC's limited funds to continue to be used to maintain and improve other aspects of its services.

A Technical Statement, attached as Exhibit 1 and incorporated by reference in this Petition, confirms that the proposed allotment change is consistent with the Commission's technical rules. *See* 47 C.F.R. § 73.623. For the convenience of the Commission, the Technical Statement includes all the information that would be necessary for AETC to apply for a construction permit for WDIQ-DT on Channel 11, as well as demonstrating that the proposed allotment change would not result in inappropriate levels of interference. A statement from AETC affirming that it will apply for the allotment if changed as proposed is also attached.

For all the foregoing reasons, the Commission should adopt the Petition, approve the proposed modification in WDIQ-DT's channel allotment, and make all other changes necessary and appropriate to enable AETC to apply to construct WDIQ-DT's transmission facilities on Channel 11.

Respectfully submitted,

ALABAMA EDUCATIONAL
TELEVISION COMMISSION

By: *F. William LeBeau*
Marissa G. Repp
F. William LeBeau

HOGAN & HARTSON L.L.P.
555 13th Street, N.W.
Washington, DC 20004-1106
(202) 637-5600
Its Attorneys

February 17, 1999

EXHIBIT 1

(Technical Statement)

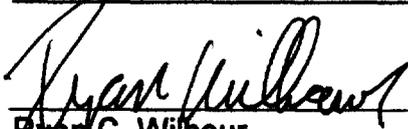
**ENGINEERING STATEMENT OF
RYAN WILHOUR
ON BEHALF OF
ALABAMA EDUCATIONAL TELEVISION COMMISSION
LICENSEE OF TV BROADCAST STATION
WDIQ-TV, DOZIER, AL**

The Alabama Educational Television Commission is licensed to operate WDIQ-TV on channel 2 with an ERP of 100 kW at an antenna height of 297 meters above mean sea level ("AMSL"). The FCC allocated channel 59 for DTV service using an ERP of 1,000 kW at an antenna height of 210 meters above average terrain ("AAT") to replicate the licensed channel 2 Grade B coverage contour. This will require the purchase of a new transmitting plant consisting of a high power UHF DTV transmitter, large coaxial transmission line or waveguide, and a medium gain transmitting antenna. The UHF DTV will consume substantially more power than the present VHF transmitter. Furthermore, DTV channel 59 is not within the "core" channels planned for television broadcasting after the transition from NTSC to DTV is complete. Therefore, at the end of the transition period WDIQ-TV would change to channel 2 for its permanent DTV operation requiring the purchase of another new DTV transmitter. At that time The Alabama Educational Television commission would be left with a relatively new UHF DTV transmitting plant which would be very costly to decommission, and for which it has absolutely no use.

As an alternative, I have completed studies that indicate that channel 11 with an ERP of 30 kW at an antenna effective height of 393 meters above average terrain could be used to achieve a larger coverage area than the current DTV allocation and NTSC operation and would also eliminate the need for a future modification. Refer to Figure 1 for a comparison of coverage areas. Attached to this document is a sample application and engineering studies. The studies show that channel 11 can be allocated to Dozier while meeting all of the interference criteria used in generating the DTV table included with the Sixth Report and Order. Therefore, it is respectfully requested that the DTV channel allotted to WDIQ-TV, Dozier be changed from channel 59 to channel 11.

This engineering statement has been prepared by Ryan C. Wilhour who is a graduate of the University of Florida with a Bachelor of Science degree in electrical engineering, and is an associate of Kessler and Gehman Associates, Inc., with offices in Gainesville, Florida.

KESSLER AND GEHMAN ASSOCIATES, INC.



Ryan C. Wilhour
Engineering consultant
December 30, 1998

SIGNAL™: WDIQ CH 11 TO WFSU.map

Prop. model: Longley-Rice v1.2.2
 Time: 50.0% Loc.: 50.0%
 Prediction Confidence Margin: 0.0dB
 Climate: Continental Temperate
 Groundcover: none
 Atmospheric Abs.: none
 K Factor: 1.333
 RX Antenna - Type: DA
 Height: 9.1 m AGL Gain: 0.00 dB
 C/I ratio group 1 TXs to group 2 TXs

□ > 34.0 dB
 + < 34.0 dB

Min. receiver threshold level: -65.1 dBmW

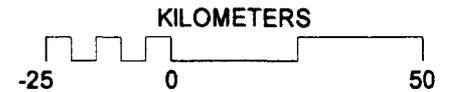
Site	Ant. Elev. AMSL (m)	ERPd (dBW)	Ant. Type/Orient.	Coordinates
WDIQ	487.0	44.77	DA-H	N31°33'16.00"
group: 2	201.0000	MHz	0.0	W86°23'32.00"
WFSUCP	262.0	55.00	DA-H	N30°21'29.00"
group: 1	201.0000	MHz	0.0	W84°36'39.00"

Notes

POPULATION WITHIN THE WFSU 56 F(50,50) FCC CONTOUR: 429,296 PEOPLE

POPULATION WITHIN THE WFSU 56 F(50,50) FCC CONTOUR THAT WOULD RECEIVE INTERFERENCE FROM WDIQ: 7,511 PEOPLE

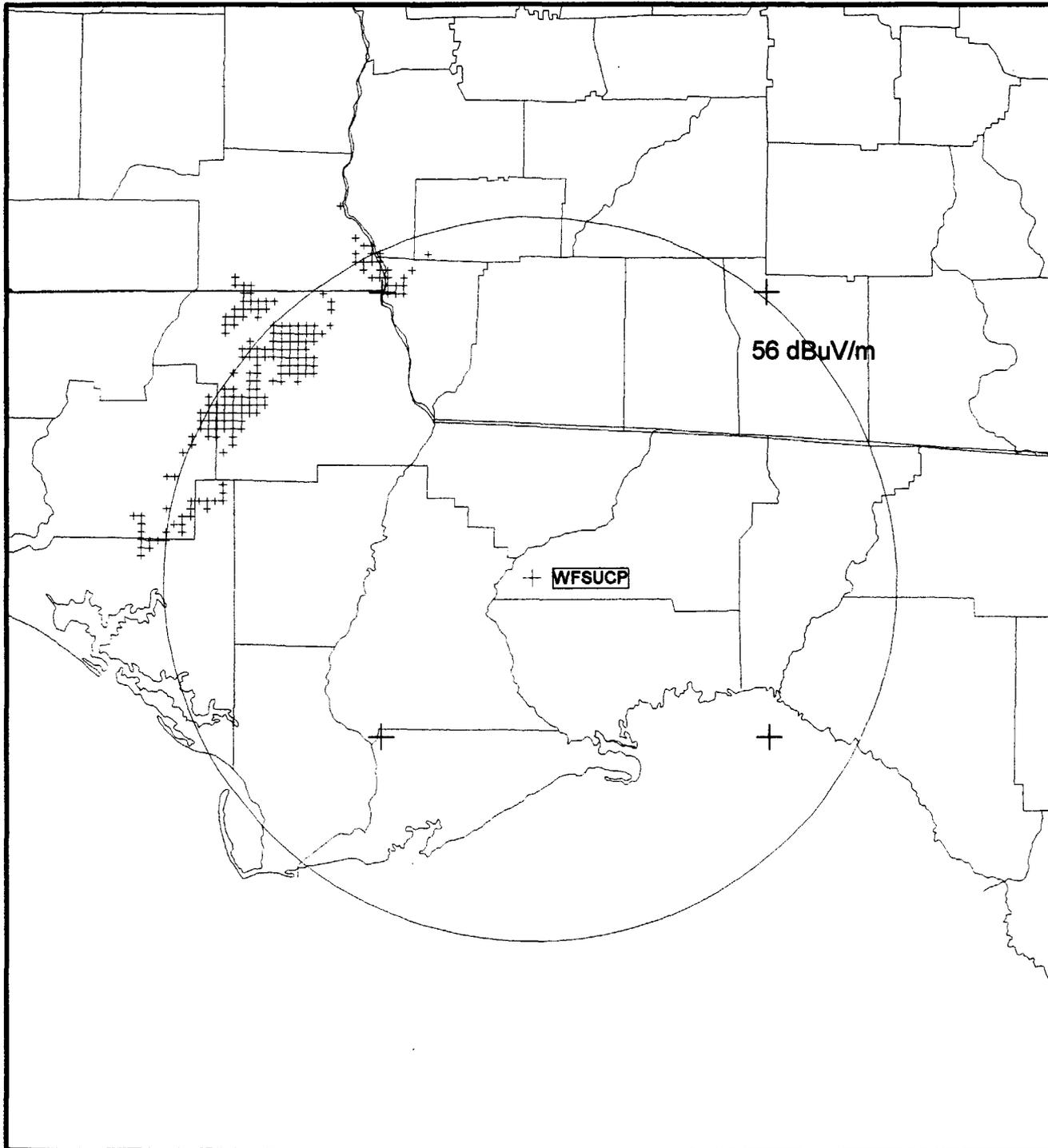
PERCENT POPULATION SUBJECT TO NEW INTERFERNECE FROM WDIQ: 1.75%



WDIQ

CO-CHANNEL INTERFERENCE TO WFSU
 EXHIBIT 7A 981221

KESSLER & GEHMAN
 TELECOMMUNICATIONS CONSULTING ENGINEERS
 507 N.W. 60th Street Suite C
 Gainesville, Florida 32607



SIGNAL™: WDIQ CH 11 TO WXIA.map

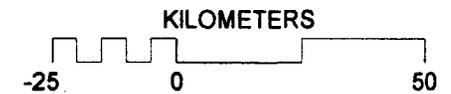
Prop. model: Longley-Rice v1.2.2
Time: 50.0% Loc.: 50.0%
Prediction Confidence Margin: 0.0dB
Climate: Continental Temperate
Groundcover: none
Atmospheric Abs.: none
K Factor: 1.333
RX Antenna - Type: DA
Height: 9.1 m AGL Gain: 0.00 dBd
C/I ratio group 1 TXs to group 2 TXs

□ > 34.0 dB
⊕ < 34.0 dB

Min. receiver threshold level: -65.1 dBmW

Site	Ant. Elev. AMSL (m)	ERPd (dBW)	Ant. Orient.	Ant. Type	Coordinates
WXIA	613.0	55.00	DA-H		N33°45'24.00"
group: 1	201.0000 MHz	0.0			W84°19'55.00"
WDIQ	487.0	44.77	DA-H		N31°33'16.00"
group: 2	201.0000 MHz	0.0			W86°23'32.00"

Notes



WDIQ
CO-CHANNEL INTERFERERCE TO WXIA
EXHIBIT 7B 981221

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507 N.W. 60th Street Suite C
Gainesville, Florida 32607

56 dBuV/m

WXIA

SIGNAL™: WDIQ CH 11 TO WTOK.map

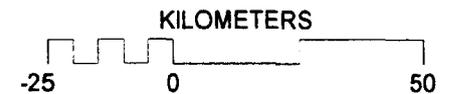
Prop. model: Longley-Rice v1.2.2
Time: 50.0% Loc.: 50.0%
Prediction Confidence Margin: 0.0dB
Climate: Continental Temperate
Groundcover: none
Atmospheric Abs.: none
K Factor: 1.333
RX Antenna - Type: DA
Height: 9.1 m AGL Gain: 0.00 dBd
C/I ratio group 1 TXs to group 2 TXs

□ > 34.0 dB
⊕ < 34.0 dB

Min. receiver threshold level: -65.1 dBmW

Site	Ant. Elev. AMSL (m)	ERPd (dBW)	Ant. Type/Orient.	Coordinates
WDIQ	487.0	44.77	DA-H	N31°33'16.00"
group: 2	201.0000	MHz	0.0	W86°23'32.00"
WTOK	288.0	55.00	DA-H	N32°19'38.00"
group: 1	201.0000	MHz	0.0	W88°41'28.00"

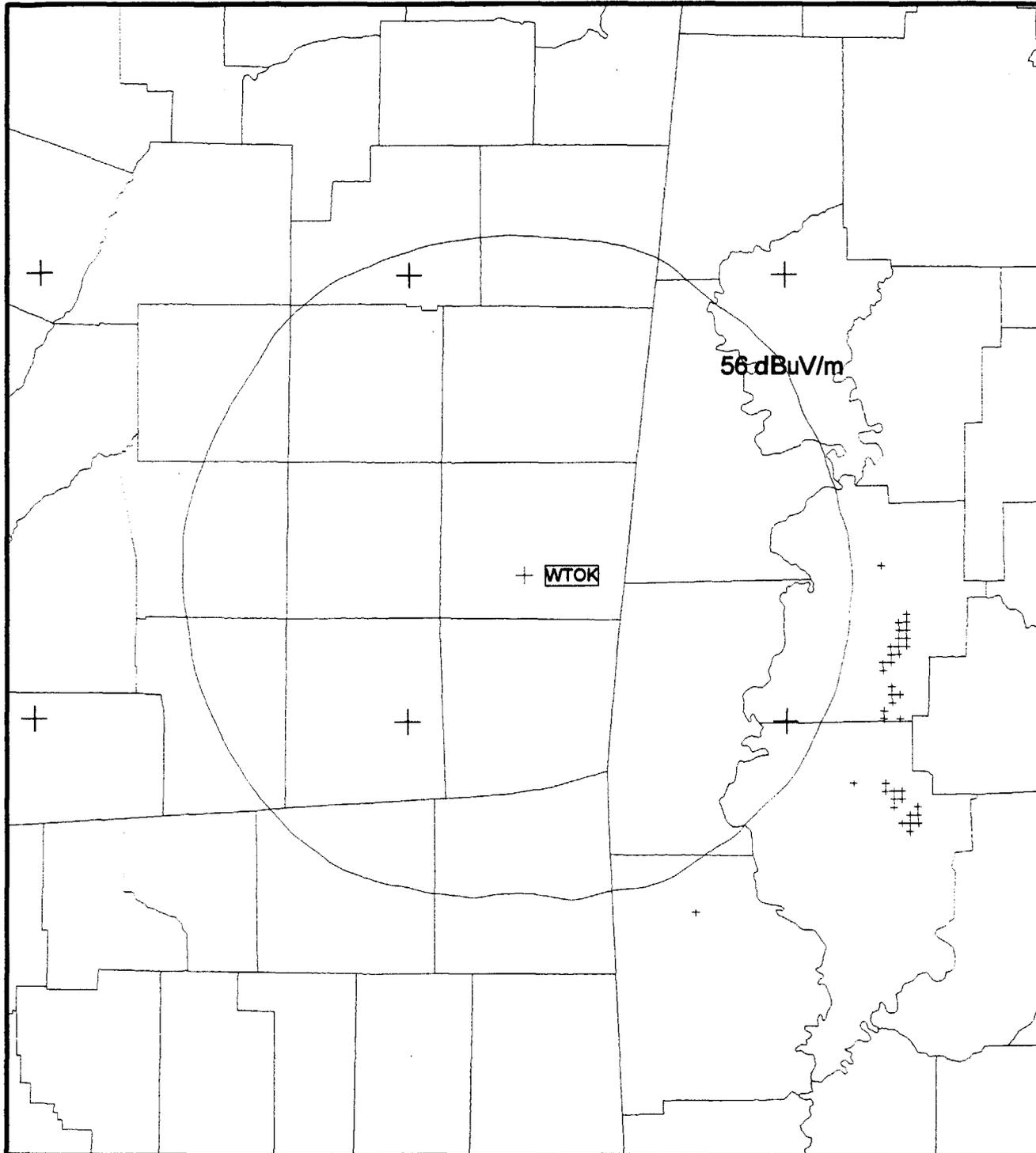
Notes



WDIQ

CO-CHANNEL INTERFERERANCE TO WTOK
EXHIBIT 7C 981221

KESSLER & GEHMAN
TELECOMMUNICATIONS CONSULTING ENGINEERS
507 N.W. 60th Street Suite C
Gainesville, Florida 32607



SIGNAL™: WDIQ CH 11 ADJACENT CHANNEL.map

Prop. model: Longley-Rice v1.2.2
 Time: 50.0% Loc.: 50.0%
 Prediction Confidence Margin: 0.0dB
 Climate: Continental Temperate
 Groundcover: none
 Atmospheric Abs.: none
 K Factor: 1.333
 RX Antenna - Type: DA
 Height: 9.1 m AGL Gain: 0.00 dB
 C/I ratio group 1 TXs to group 2 TXs

> -14.0 dB
 < -14.0 dB
 Min. receiver threshold level: -65.4 dBmW

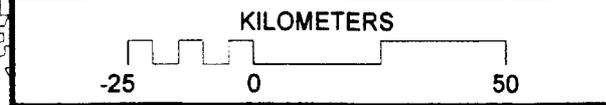
Site	Ant. AMSL (m)	Elev. (dBW)	ERPd (dBW)/Orient.	Ant. Type	Coordinates
WDIQ	487.0	44.77	DA-H		N31°33'16.00" W86°23'32.00"
group: 2	201.0000	MHz	0.0		
WFSA	739.0	55.00	DA-H		N31°58'32.00" W86°09'46.00"
group: 1	207.0000	MHz	0.0		

Notes

POPULATION WITHIN WFSA 56 F(50,50)
 FCC CONTOUR: 925,460

POPULATION WITHIN WFSA 56 F(50,50)
 FCC CONTOUR THAT WOULD RECEIVE
 INTERFERENCE FROM WDIQ: 82 PEOPLE

PERCENT POPULATION SUBJECT TO
 NEW INTERFERECE FROM WDIQ: 0.009%



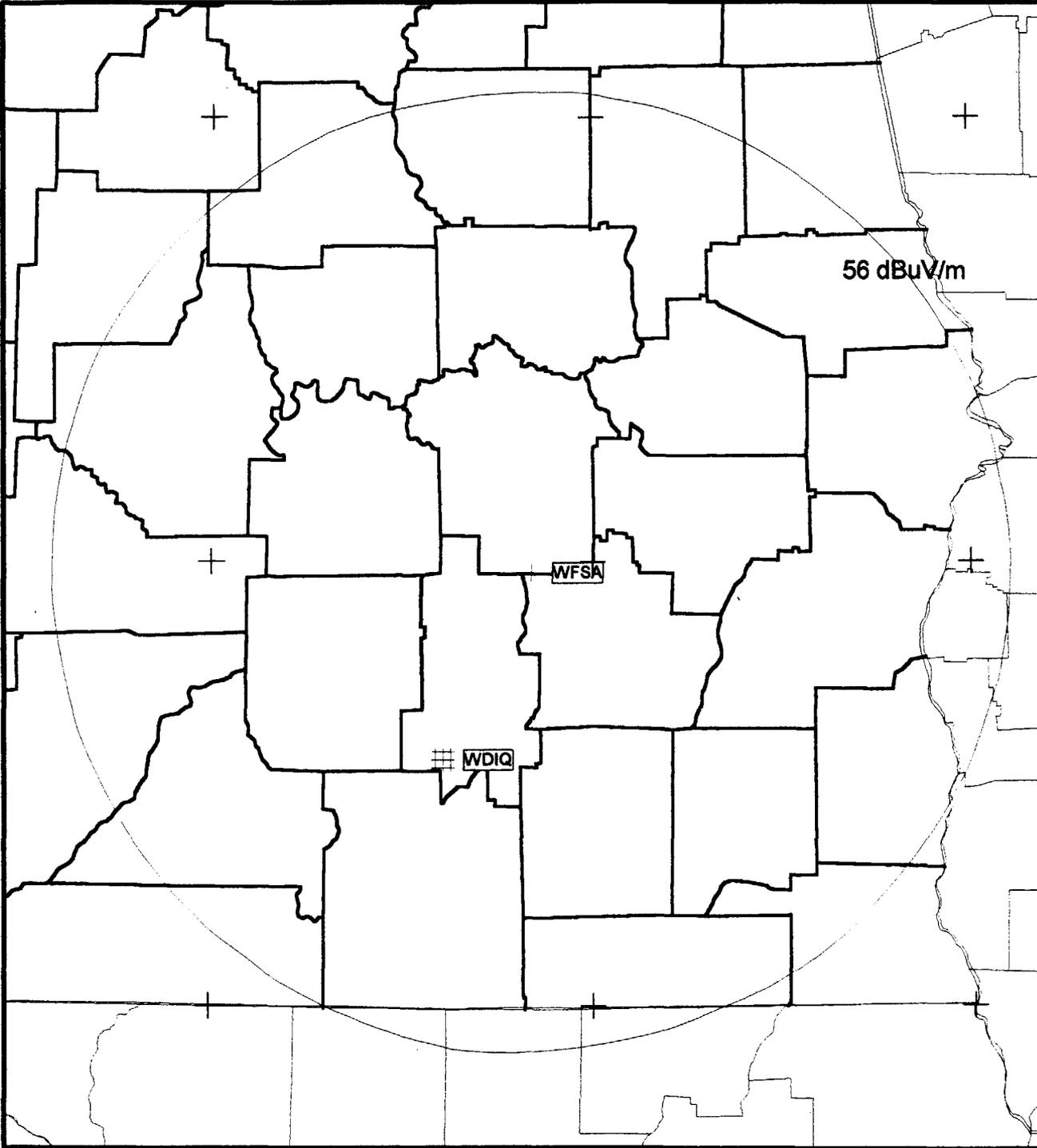
WDIQ

ADJACENT CHANNEL INT. TO WFSA

EXHIBIT 7D 981221

KESSLER & GEHMAN

TELECOMMUNICATIONS CONSULTING ENGINEERS
 507 N.W. 60th Street Suite C
 Gainesville, Florida 32607



SIGNAL™: wdiq dtv channel 11 vs allotted channel 59.m

KILOMETERS

-25 0 50

DTV COVERAGE CONTOUR

ALLOTTED - VS - PROPOSED - VS - NTSC

FIGURE 1

981221

36 dBuV/m

47 dBuV/m

41 dBuV/m

WDIQ

NOTES

- OUTER MOST CONTOUR IS THE PROPOSED CHANNEL 11 DTV CONTOUR.
- THE MIDDLE CONTOUR IS THE EXISTING CHANNEL 2 NTSC CONTOUR
- THE INNERMOST CONTOUR IS THE ALLOTTED CHANNEL 59 DTV CONTOUR

KESSLER & GEHMAN

TELECOMMUNICATIONS CONSULTING ENGINEERS

507 N.W. 60th Street Suite C

Gainesville, Florida 32607

**APPLICATION FOR CONSTRUCTION PERMIT
TELEVISION BROADCAST STATION WDIQ
DTV CHANNEL 11 ERP 30 KW AT 393
METERS ABOVE AVERAGE TERRAIN
ALABAMA EDUCATIONAL TELEVISION
COMMISSION
DOZIER, ALABAMA**

KESSLER AND GEHMAN ASSOCIATES, INC.
TELECOMMUNICATIONS CONSULTING ENGINEERS

KG&A

507 NW 60th Street, Suite C
Gainesville, Florida 32607

SECTION V-D - DTV BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ SSB Referral Date _____ Referred By _____
Name of Applicant ALABAMA EDUCATIONAL TELEVISION COMMISSION	Call Letters (if issued) WDIQ

Complete Questions 1-5 of the Certification Checklist and provide all data and information for the proposed facility, as requested in Items 1-22, below. If an item is not applicable, enter N/A.

Certification Checklist: A correct answer of "Yes" to all of the questions below will ensure an expeditious grant of a construction permit. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

1 The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:

- (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622. Yes No
- (b) It will operate from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622. Yes No
- (c) It will operate with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622. Yes No
- 2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. Yes No
- 3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community. Yes No
- 4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable. Yes No
- 5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7. Yes No

Application Data:

- 1. Channel
 - (a) DTV Channel No. 11
 - (b) Associated analog TV station channel no., if any 2

2. Principal community to be served:

City or Town DOZIER	State AL
-------------------------------	--------------------

- 3. Effective radiated power (average power): *(in the main lobe of radiation, if directional)* 30.0 kw
- 4. Height of antenna radiation center above average terrain (HAAT): *(to the nearest meter)* 393 meters

5. Purpose of Application: (check appropriate boxes)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Construct a new (main) facility | <input type="checkbox"/> Construct a new auxiliary facility |
| <input type="checkbox"/> Modify construction permit for main facility | <input type="checkbox"/> Modify construction permit for auxiliary antenna |
| <input type="checkbox"/> Modify licensed main facility | <input type="checkbox"/> Modify licensed auxiliary antenna |

If purpose is to modify, indicate the nature of change(s) by checking appropriate box(es) and specify the file number(s) of the authorizations affected.

- | | |
|---|---|
| <input type="checkbox"/> Antenna supporting structure height | <input type="checkbox"/> Effective radiated power |
| <input type="checkbox"/> Antenna height above average terrain | <input type="checkbox"/> Channel |
| <input type="checkbox"/> Antenna location | <input type="checkbox"/> Antenna system |
| <input type="checkbox"/> Other (summarize) | |

File Number(s) _____

6. Exact location of transmitting antenna

(a) Give address, city/state or if no address, specify distance and bearing relative to the nearest town or landmark.

**MERVILLIS MILL ROAD (LEON FIRE TOWER)
CRENSHAW COUNTY
DOZIER, ALABAMA**

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates or center of array. Otherwise, specify tower location. Specify South Latitude and East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed. (The Commission requires coordinates based on NAD 27.)

Latitude	31	0	33	'	16	"	Longitude	86	0	23	'	32	"
----------	----	---	----	---	----	---	-----------	----	---	----	---	----	---

7. (a) Elevation (to the nearest meter)

- | | |
|---|------------|
| (1) of site above mean sea level; | 154 meters |
| (2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and | 354 meters |
| (3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)]. | 508 meters |

(b) Height of radiation center: (to the nearest meter)

- | | |
|---|------------|
| (1) above ground; and | 333 meters |
| (2) above mean sea level [(a)(1) + (b)(1)]; | 487 meters |

8. Attach as an Exhibit sketch(es) of the supporting structure, labeling all elevations required in item 7 above. If mounted on an AM directional array element, specify heights and orientations of all array towers, as well as location of any FM radiator. * SEE ATTACHED ENGINEERING STATMENT

Exhibit No. EXHIBIT 2*

Section V-D -D TV BROADCAST ENGINEERING DATA (Page 3)

9. Antenna

(a) Manufacturer DIELECTRIC (b) Model No. TW-7B11-R

(c) Is a directional antenna proposed? Yes No

If Yes, specify major lobe azimuth(s) N/A degrees True and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No. N/A

(d) Is electrical beam tilt proposed? Yes No

If Yes, specify 0.8 degrees electrical beam tilt and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No. Exhibit 3*

(e) Is mechanical beam tilt proposed? Yes No

If Yes, specify N/A degrees mechanical beam tilt toward azimuth N/A True and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No. N/A

(f) The proposed antenna is: (check only one box)

Horizontally polarized Circularly polarized Elliptically polarized Other: N/A

10. Will the antenna be mounted on an antenna structure which has been registered with the Commission, to include the proposed antenna installation? Yes No

If Yes, provide the seven digit registration number and, unless item 11 also applies, proceed to item 15.

N/A

11. Has the owner of the antenna structure filed an application for registration with the Commission that will include the proposed facility? Yes No

If yes, provide the date FCC Form 854 was filed and proceed to item 15.

N/A

12. (if applicable) If the antenna structure is not yet registered but will be under the Commission's phased registration plan, has the FAA previously determined that the structure would not adversely affect safety in air navigation? Yes No

If Yes, proceed to item 15.

13. Antenna structure will be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town or settlement where it is evident beyond all reasonable doubt that the structure is so shielded that it will not adversely affect safety in air navigation. and therefore does not require registration. Yes No

If yes, submit as an Exhibit a detailed explanation and/or diagram to support your claim and skip to item 15.

Exhibit No. N/A

* SEE ATTACHED ENGINEERING STATMENT

Section V-D -D TV BROADCAST ENGINEERING DATA (Page 4)

14. Antenna structure does not otherwise meet FAA Notification criteria as defined under 47 C.F.R. Section 17.7 and therefore does not require registration. Yes No

If Yes, give reason below.

15. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? Yes No

If Yes, give call letter(s) or file number(s) or both, N/A

16 Does the application propose to correct previous site coordinates? Yes No

If Yes, list old coordinates.

Latitude	N/A	°	N/A	'	N/A	"	Longitude	N/A	°	N/A	'	N/A	"
----------	-----	---	-----	---	-----	---	-----------	-----	---	-----	---	-----	---

17. Attach as an Exhibit a topographic map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the provisions of 47 C.F.R. Section 73.625(b). The map must further display clearly and legibly the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.
EXHIBIT 5*

18. Attach as an Exhibit a map (*Sectional Aeronautical Chart or equivalent*) which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
EXHIBIT 6*

- (a) the proposed transmitting location, and the radials along which profile graphs have been prepared;
- (b) the DTV coverage contour as established in 47 C.F.R. Section 73.625(b); and
- (c) the legal boundaries of the principal community to be served.

19. Terrain and coverage data (to be calculated in accordance with 47 C.F.R. Section 73.625(b))

Source of terrain data: (*check only one box below*)

Linearly interpolated 30-second database (Source: _____)

Linearly interpolated 3-second database (Source: DEFENSE MAPING INDUSTRY)

7.5 minute topographic map

Other (*briefly summarize*)

*** SEE ATTACHED ENGINEERING STATEMENT**

Section V-D -D TV BROADCAST ENGINEERING DATA (Page 5)

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted distance to the DTV Coverage Contour (kilometers)
*		
0	382	71.2
45	359	69.7
90	383	72.2
135	378	71.6
180	358	72.4
225	360	69.8
270	383	72.2
315	380	71.8

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of I MAT.

20. Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if Certification Checklist items I (a), (b), or (c) are answered "No.") Yes No

If No, attach as an Exhibit justification therefore, including a summary of any related previously granted waivers.

Exhibit No.
N/A

21. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if Certification Checklist item 3 is answered

Exhibit No.
N/A

22. Environmental Statement. (See 47CF.R. Section 1.1301 et seq.)

- (a) If a Commission grant of this application comes within 47 C.F.R. Section 1.1307, such that it may have a significant environmental impact, submit as an Exhibit an Environmental Assessment required by 47 C.F.R. Section 1.1311.

Exhibit No.
N/A

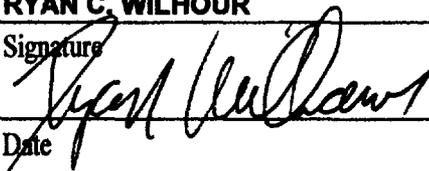
- (b) If No, explain briefly why not. **THE PROPOSED CONSTRUCTION WOULD HAVE NO SIGNIFICANT ENVIRONMENTAL IMPACT AS DEFINED IN §1.1307 OF THE FCC RULES. ***

- (c) Pursuant to OST Bulletin No. 65, the applicant must explain in an Exhibit what steps will be taken to limit the RF radiation exposure to the public and to persons authorized access to the tower site. In addition, where there are multiple contributors to radio frequency radiation, you must certify that the established RF radiation exposure procedures will be coordinated with all stations. *

***SEE ATTACHED ENGINEERING STATEMENT.**

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed) RYAN C. WILHOUR	Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER
Signature 	Address (include ZIP Code) 507 NW 60TH ST. SUITE C GAINESVILLE FL 32605
Date DECEMBER 21, 1998	Telephone No. (include Area Code) 352-332-3157

It is proposed to top mount the horizontally polarized antenna at 325 meters above ground on the tower as demonstrated in Exhibit 2. The maximum power density at ground level located 1 foot from the tower would be less than 0.004 mW/cm² considering that the maximum lobe of radiation is radiating at 90 degrees below the horizon. This is well below the maximum controlled and uncontrolled exposure of 0.2 mW/cm² and 1.0 mW/cm² respectively. The applicant will cooperate with any other users of the tower by reducing the power to the antenna or if necessary completely cutting it off in order to protect maintenance workers on the tower. In addition the applicant will erect a fence and install warning signs to keep trespassers away from the tower.

The applicant accepts full responsibility for the elimination of any objectionable interference including that caused by intermodulation to facilities in existence or authorized prior to the grant of this application.

WDIQ was initially allotted an ERP of 1000.0 kW on channel 59 at an antenna HAAT of 210 M. Channel 59 is not in the final DTV core spectrum (channels 2 - 51) and thus would require modification before December 31, 2006. As an alternative this application proposes to use channel 11 with a reduced ERP to achieve a similar coverage area.

The maps depicted in Exhibit 7 demonstrate the areas of interference based on Longley - Rice version 1.2.2 to DTV/NTSC stations within the limits specified by the FCC. The ERP of this station is limited to 30.0 kW due to potential interference caused to WFSU and WFSA. Exhibit 7A demonstrates interference denoted by the "+" signs that are within the WFSU 56 dBuV/m contour. The interference areas constitute 1.75% of the total population within WFSU's coverage contour. Exhibit 7D demonstrates interference denoted by the "+" signs that are within the WFSA 56 dBuV/m contour. The interference areas constitute 0.009% of the total population within WFSA's coverage contour. As per §73.623(C)(2), the proposed station Exhibit 7A and 7D demonstrate that the requested change would not result in more than an additional 2 percent the population served by another station being subject to interference. It is noted that interference received from surrounding stations of WFSU and WFSA do not exceed 10% of the total population within their 56 dBuV/m contour with the inclusion of the proposed station parameters. Exhibit 7B and 7C demonstrate that no harmful interference is predicted to be caused by the proposed WDIQ channel 11 facilities to WXIA and WTOK respectively

KESSLER AND GEHMAN ASSOCIATES, INC.



RYAN C. WILHOUR
Engineering Consultant

ENGINEERING STATEMENT OF RYAN C. WILHOUR OF THE FIRM OF KESSLER AND GEHMAN ASSOCIATES, INC., CONSULTING ENGINEERS IN CONNECTION WITH AN APPLICATION FOR THE ALABAMA EDUCATIONAL TELEVISION COMMISSION FOR A CONSTRUCTION PERMIT FOR TELEVISION BROADCAST STATION WDIQ-TV WHICH WOULD OPERATE ON DTV CHANNEL 11 WITH A MAXIMUM EFFECTIVE RADIATED POWER OF 30 KILOWATTS HORIZONTALLY POLARIZED AT AN EFFECTIVE ANTENNA HEIGHT OF 393 METERS ABOVE AVERAGE TERRAIN IN THE VICINITY OF DOZIER, ALABAMA

I, Ryan C. Wilhour, am an associate of Kessler and Gehman Associates, Inc. with offices in Gainesville, Florida. I am a graduate of the University of Florida with a Bachelor of Science Degree in electrical engineering.

This firm has been employed by the Alabama Educational Television Commission to make engineering studies and to prepare the engineering portion for construction permit for television broadcast station WDIQ-TV to operate on DTV channel 11 with a maximum effective radiated power of 30 kilowatts horizontally polarized at an effective antenna height of 393 meters above average terrain in the vicinity of Dozier, Alabama.

The Alabama Educational Television Commission is the licensee, File No. BLET406, of the television broadcast station WDIQ-TV that operates on NTSC channel 2 with an effective radiated power of 100.0 kW horizontally polarized at 210 meters above average terrain.

ATTACHED FIGURES

In carrying out the engineering studies the following attached figures were prepared by me or under my supervision:

1. Proposed engineering specifications (Exhibit 1)
2. Elevation drawing of the antenna system (Exhibit 2)
3. Antenna Elevation Pattern (Exhibit 3)
4. USGS 7.5 minute topographic quadrangle showing the proposed transmitter location and coordinate lines (Exhibit 5)
5. Map showing the predicted DTV coverage contour (Exhibit 6)
6. Maps showing the proposed de minimis interference to co-channel and adjacent channel TV stations (Exhibit 6A - Exhibit 6D)

TRANSMITTER LOCATION

It is proposed to erect a new tower and support structure extending 325 meters above ground upon which the proposed Dielectric TW-7B11-R horizontally polarized non-directional antenna will extend to an overall height of 508 meters AMSL or 354 meters AGL. The proposed construction would have no significant environmental impact as defined in §1.1307 of the FCC Rules.

**WDIQ
DOZIER, ALABAMA**

ENGINEERING SPECIFICATIONS

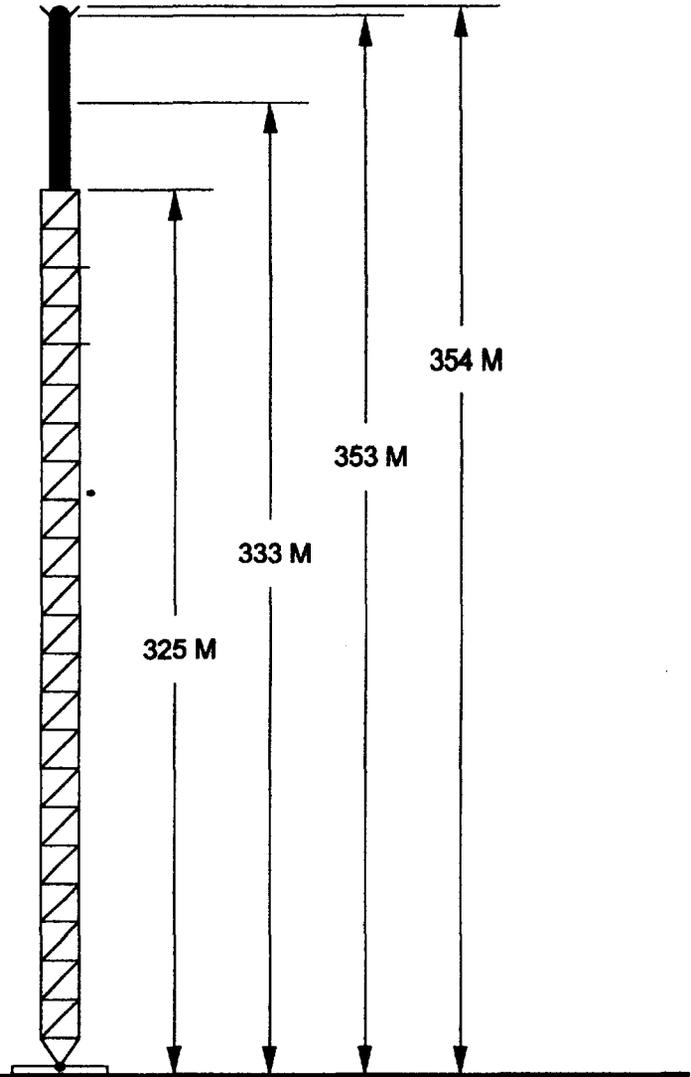
- A. Transmitter Site
- | | |
|----------------|------------|
| North Latitude | 31 33' 16" |
| West Longitude | 86 23' 32" |
- Street Address
- Mervillis Mill Road (Leon Fire Tower)
- B. Main Studio Site
- Street Address
- Alabama Educational TV commission
2101 Magnolia Ave, Birmingham, Alabama 35205
- C. Proposed Facility
- DTV Channel
- | | |
|-----------|-------------|
| Number | 11 |
| Frequency | 198-204 MHz |
- D. Antenna Height
- | | |
|---|------|
| Height of Site Above Mean Sea Level (AMSL) | 154m |
| Overall Height of Structure Above Ground
(including all appurtenances) | 354m |
| Overall Height of Structure Above Mean Sea Level
(including all appurtenances) | 508m |
| Height of Site Above Average Terrain | 60m |
| Effective Height of Antenna Above Ground | 333m |
| Effective Height of Antenna Above Average Terrain | 393m |
| Effective Height of Antenna Above Mean Sea Level | 487m |
- E. Antenna Parameters – Horizontal Polarization
- | | |
|---|--------------------|
| Maximum Antenna Gain in Beam Maximum | 8.45dB |
| Maximum Antenna Gain in Horizontal Plane | 8.33dB |
| Maximum Effective Radiated Power
In Beam Maximum | 14.77dBk
30.0kW |
| Maximum Effective Radiated Power
In Horizontal Plane | 14.65dBk
29.2kW |

ELEVATION VIEW

PROPOSED
DIELECTRIC
TW-7B11-R
ANTENNA

GUYED TOWER AND
ANTENNA TO BE LIGHTED
AND PAINTED IN
ACCORDANCE WITH FCC
REQUIREMENTS

SITE ELEVATION: 154 M AMSL



OVERALL HEIGHT AGL: 354 M
OVERALL HEIGHT AMSL: 508 M
RADIATION CENTER AGL: 333 M
RADIATION CENTER AMSL: 487 M

COORDINATES:
N. LATITUDE 31° 33' 16"
W. LONGITUDE 86° 23' 32"

NOTE: NOT TO SCALE

KESSLER & GEHMAN

TELECOMMUNICATIONS CONSULTING ENGINEERS
507 N.W. 60th Street, Suite C
Gainesville, Florida 32607

WDIQ

DOZIER, ALABAMA

981221

EXHIBIT 2



Proposal Number

Date **18-Dec-98**

Call Letters

Channel **11**

Location

Customer

Antenna Type **TW-7B11-R**

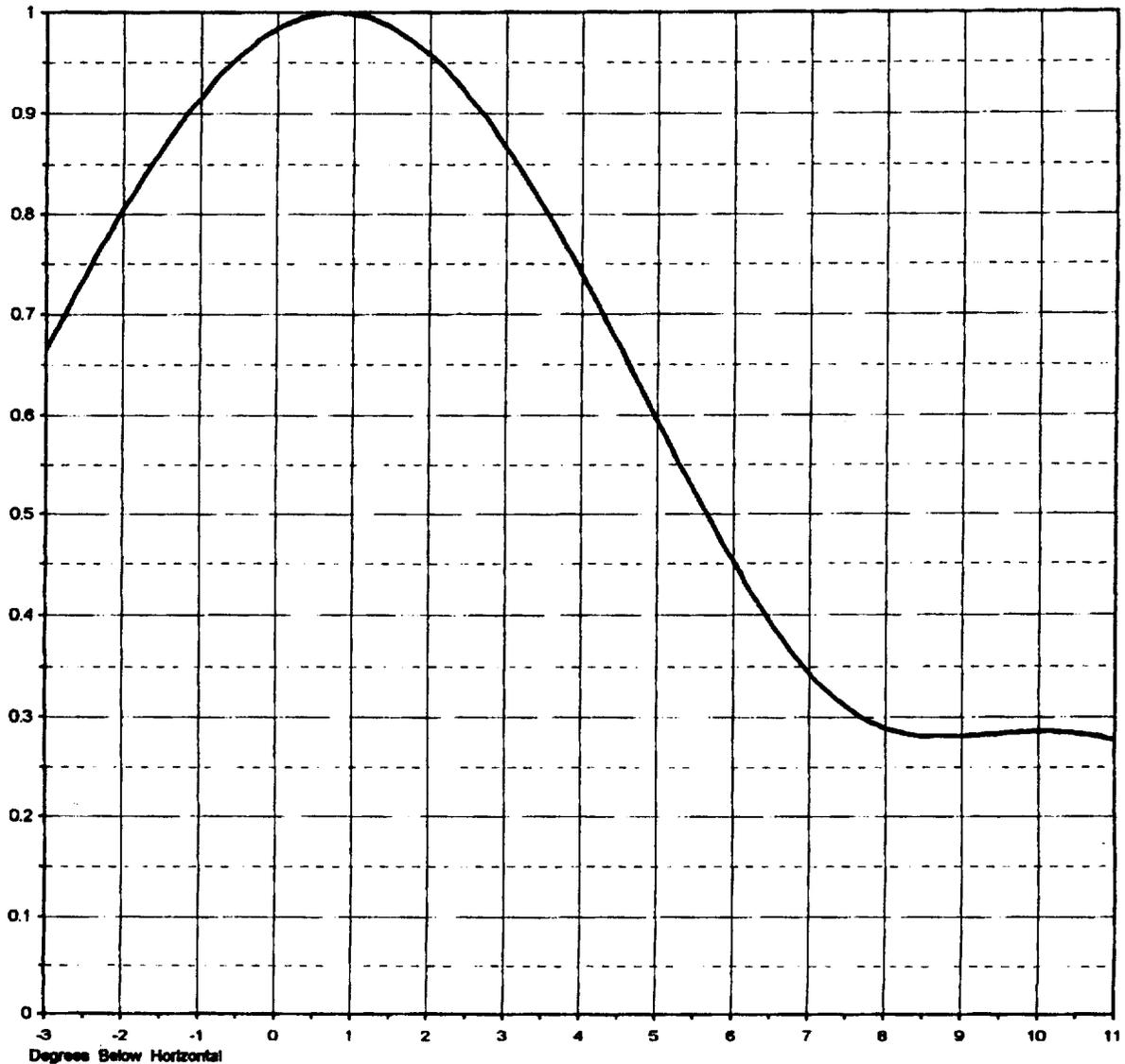
ELEVATION PATTERN

RMS Gain at Main Lobe
RMS Gain at Horizontal
Calculated / Measured

7.0 (8.45 dB)
6.8 (8.33 dB)
Calculated

Beam Tilt
Frequency
Drawing #

0.80 deg
201.00 MHz
07W070080



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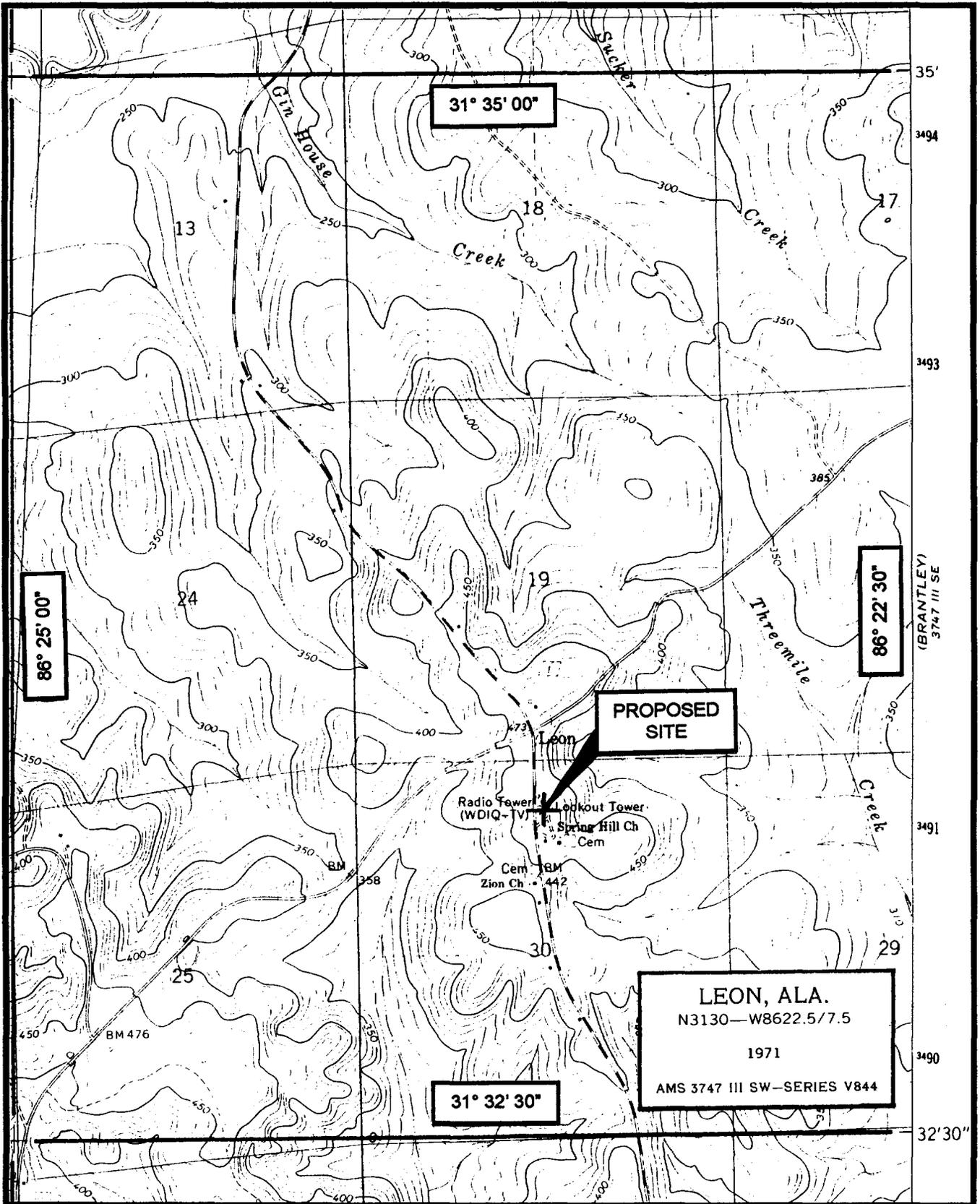
TELECOMMUNICATIONS CONSULTING ENGINEERS
507 N.W. 60th Street, Suite C
Gainesville, Florida 32607

WDIQ

DOZIER, ALABAMA

981221

EXHIBIT 3

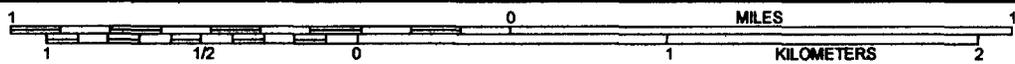


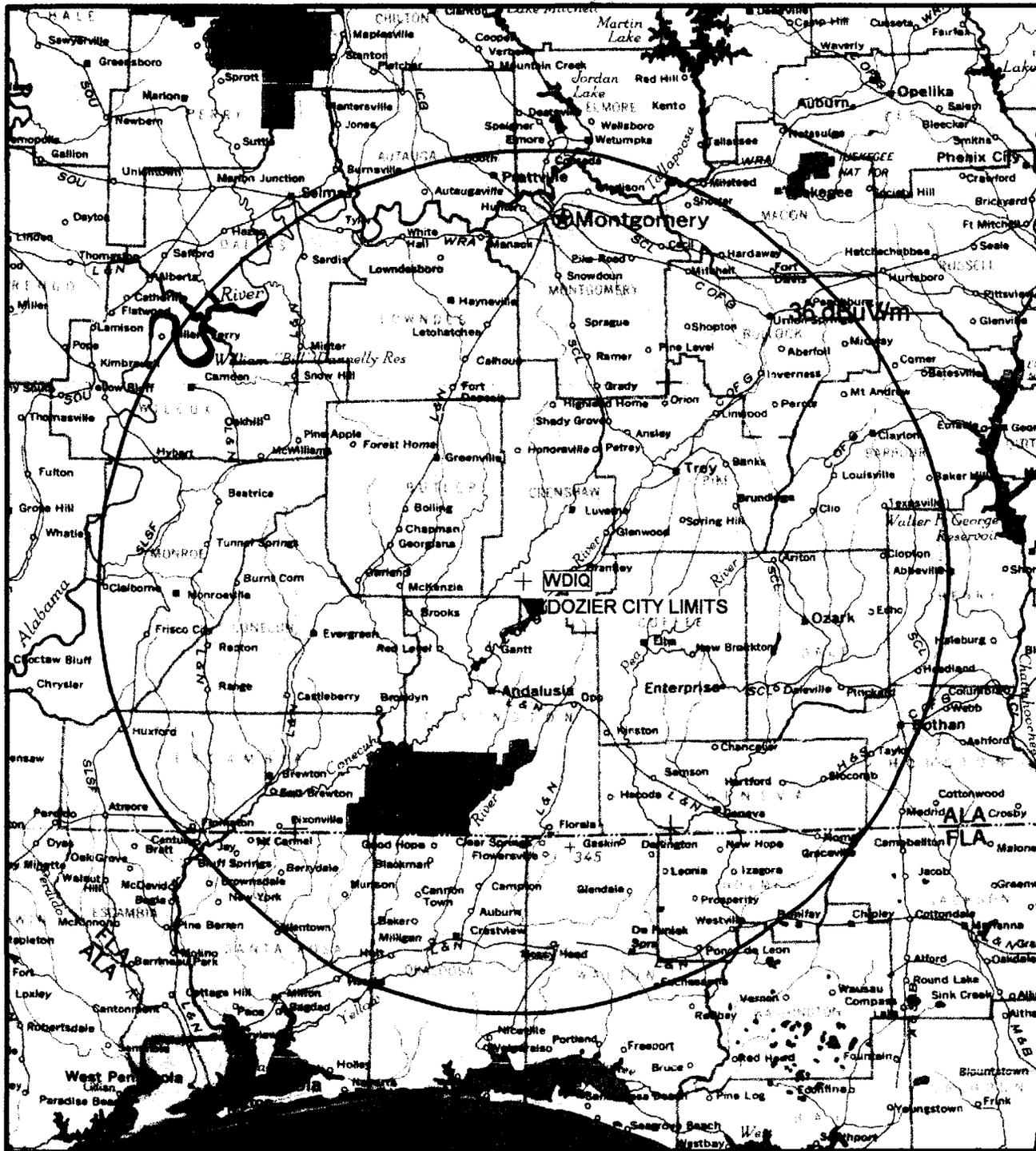
KESSLER & GEHMAN
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 507 N.W. 60th Street, Suite C
 Gainesville, Florida 32607

WDIQ
 DOZIER, ALABAMA

981221

EXHIBIT 5





SIGNAL™: WDIQ DTV COVERAGE MAP.map

Prop. model: FCC-FCC
 Time: 90.0% Loc.: 50.0%
 Prediction Confidence Margin: 0.0dB
 Climate: Continental Temperate
 Groundcover: none
 Atmospheric Abs.: none
 K Factor: 1.333
 RX Antenna - Type: DA
 Height: 9.1 m AGL Gain: 0.00 dBd
 Field strength at remote

■ = 36.0 dBu/m
 Min. receiver threshold level: -200.0 dBmW

Site	Ant. Elev. ERPd	Ant. Type	Coordinates
	AMSL (m)	(dBW)/Orient.	
WDIQ	487.0	44.77 Omni-H	N31°33'16.00"
group: 1	201.0000	MHZ	W86°23'32.00"

Notes
 EFFECTIVE RADIATED POWER 30.0 KW
 EFFECTIVE HEIGHT (AAT) 393 M

SOUTHERN MISSISSIPPI VALLEY STATES
 USGS MAP

DTV CHANNEL 11



DTV COVERAGE CONTOUR
 WDIQ

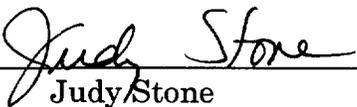
EXHIBIT 6 981221

Declaration of Judy Stone

I, Judy Stone, declare as follows:

1. I am Executive Director of the Alabama Educational Television Commission ("AETC").
2. If the proposed rulemaking amending Section 73.622, Digital Television Table of Allotments, is adopted, AETC intends to apply for Commission consent to construct the digital television facilities that will operate on the channel proposed in the attached submission.
3. If awarded this construction permit, AETC intends to construct and operate such facilities pursuant to the Commission's requirements.

I hereby declare under penalty of perjury that the statements made in this declaration are true and accurate to the best of my knowledge, information and belief.



Judy Stone

February 12, 1999