

ENGINEERING STATEMENT
APPLICATION FOR LICENSE TO COVER THE OUTSTANDING
DTV CONSTRUCTION PERMIT FOR
AN EXISTING TELEVISION TRANSLATOR
(FCC FILE NO. BDFCDTT-20061026AEQ)
K47KI-D, DUNCAN, OKLAHOMA
CHANNEL 47 9.84 KW ND ERP 509.4 METERS RC/AMSL

DECEMBER 2009

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)

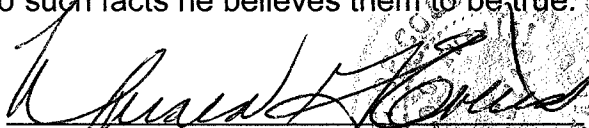
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer 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;

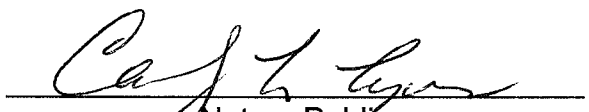
That his qualifications are a matter of record in the Federal Communications Commission;

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

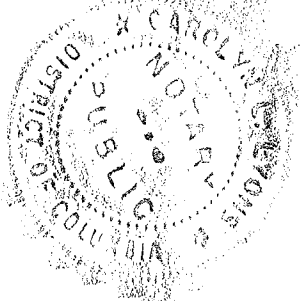
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.


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

Subscribed and sworn to before me this 23rd day of December, 2009.


Notary Public

My Commission Expires: 2/28/2013



INTRODUCTION

This engineering statement has been prepared on behalf of Oklahoma Educational Television Authority, licensee of TV translator K47KI, Duncan, Oklahoma (Facility ID #50195). This statement supports the licensee's request for license to convert to DTV operation on the currently authorized in-core Channel 47 by its outstanding construction permit (FCC File No. BDFCDTT-20061026AEQ) with a DTV effective radiated power ("ERP") of 9.84 kW at a radiation center above mean sea level ("RCAMSL") of 509.4 meters. These facilities specify due to economic reasons the construction using a 1 kW transmitter in lieu of a larger transmitter. An appropriate modification to report this change will be made.

TRANSMITTER SITE

The tower has not been significantly altered. The existing tower is located 2 miles south of Velma, Oklahoma. The geographic coordinates of the site follow below.

North Latitude: 34° 26' 01"

West Longitude: 97° 41' 07"

NAD-27

ELEVATION DATA

Elevation of site above mean sea level	397.8 meters (1305 feet)
Center of radiation of antenna above ground level	111.6 meters (366 feet)
Center of radiation of antenna above mean sea level	509.4 meters (1671 feet)
Overall tower height above ground	114.6 meters (376 feet)

The Antenna Structure Registration Number ("ASRN") for the existing tower is 1217598.

EQUIPMENT DATA

Transmitter:	Type-approved
Transmission Line:	Andrew, Type HJ7-50A, 1-5/8", 123.4 meters (405 feet) with 59.3% efficiency
Antenna:	RFS, Type RD08OM-644704L1T00 with a gain of 16.6 and 0.5° electrical beam tilt
Out-of-Channel Emission Mask:	Simple

POWER DATA

Transmitter:	1.00 kW	0.00 dBk
Transmission Line Loss:	59.3%	2.27 dB
Input Into Antenna:	0.593 kW	-2.27 dBk
Antenna Gain:	16.6	12.2 dB
ERP:	9.84 kW	9.93 dBk

SECTION III - Engineering

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Channel: _____
2. Frequency Offset
☐ No offset ☐ Zero offset ☐ Plus offset ☐ Minus offset
3. Antenna Location Coordinates: (NAD 27)
_____ ° _____ ' _____ " ☐ N ☐ S Latitude
_____ ° _____ ' _____ " ☐ E ☐ W Longitude
4. Maximum Effective Radiated Power (ERP) Toward Radio Horizon: _____ kW
5. Maximum ERP in any horizontal and vertical angle: _____ kW

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

CERTIFICATION

All applicants must complete this section.

6. **Constructed Facility.** The facility was constructed as authorized in the underlying construction permit. ☐ Yes ☐ No

See Explanation in Exhibit No.
7. **Special Operating Conditions.** The facility was constructed in compliance with all special operating conditions, terms, and obligations described in the construction permit. ☐ Yes ☐ No

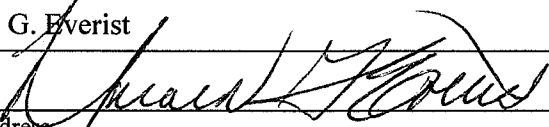
See Explanation in Exhibit No.

Exhibit No.
9

PREPARER'S CERTIFICATION ON PAGE 4 MUST BE COMPLETED AND SIGNED.

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) 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 Donald G. Everist		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date December 23, 2009	
Mailing Address Cohen, Dippell and Everist, P.C., 1300 L Street, NW, Suite 1100			
City Washington		State or Country (if foreign address) DC	ZIP Code 20005
Telephone Number (include area code) (202) 898-0111		E-Mail Address (if available) cde@attglobal.net	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001),
AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)),
AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).