

December 10, 2010

VIA HAND DELIVERY

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W., TW-A325
Washington, D.C. 20554

**Re: Amendment to Application for AM Broadcast Station License
FCC File No. BMML-20100329AFW
KLO(AM), Ogden, Utah (FIN-35069)**

Dear Ms. Dortch:

Submitted herewith, on behalf of KLO Broadcasting Co. ("KLO"), is an amendment to the pending application for AM Broadcast Station License on FCC Form 302-AM for KLO(AM), Ogden, Utah. This amendment responds to the issues raised by the Commission's letter dated October 21, 2010. Please incorporate these materials with the pending application. A certificate of amendment executed on behalf of KLO accompanies this submission.

If there should be any questions regarding this matter, please contact the undersigned.

Sincerely,



Brendan Holland

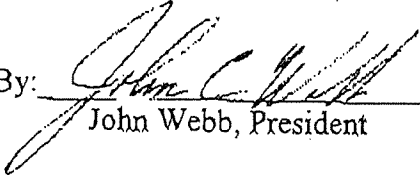
cc: Ann Gallagher
Enclosures

CERTIFICATE OF AMENDMENT

KLO Broadcasting, Co., licensee of KLO(AM), Ogden, Utah (FIN-35069), hereby amends the pending application for a covering license for KLO(AM), FCC File No. BMML-20100329AFW, with the attached materials. This amendment supplements the pending application in response to the Commission's letter dated October 21, 2010.

KLO BROADCASTING, CO.

By: _____


John Webb, President

Dated: November 23, 2010

Amendment to Application for License
Standard Broadcast Station KLO
KLO Broadcasting Co.
1430 KHz - 25 kW DA-D / 5 kW DA-N
Ogden, UT
November, 2010

State of Illinois)


)ss

County of Peoria)

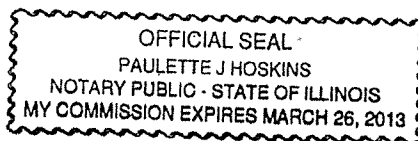
Keith Turcot, being first duly sworn, deposes and says that he is a Consulting Engineer and that he has been retained by KLO Broadcasting Co. to prepare the following engineering exhibits, that he holds a Bachelor of Science Degree in Electrical Engineering, that his qualifications have been accepted by the Federal Communications Commission, and the following exhibits have been prepared by him and that they are true and correct to the best of his knowledge and belief.


Keith Turcot, P.E.

Subscribed and sworn to before me this 18th Day of November 2010.


Notary Public

My Commission Expires:



Amendment to Application for License

The following engineering statement has been prepared for **KLO Broadcasting Co.** ("KLO"), licensee of standard broadcast station KLO in Ogden, Utah¹, and is in support of their amendment to license². This amendment is being submitted to address the deficiencies in the application as articulated by the Commission in a letter dated October 21, 2010 related to the antenna array monitoring sample system.

The sample system meets the requirements set forth in section 73.151(c)(2)(i). Measurements were performed on March 15, 2010 in accordance with rules to evaluate the match of the four sample lines length, (determined to be within 0.5 electrical degrees) and characteristic impedance, (determined to be within 0.6 ohms). The impedance of the sample lines with the tower mounted loops attached is also provided.

¹ The Facility ID for KLO at Ogden, Utah is 35069.

² License application BMML-20100329AFW

Sample Line Length

Measurements were taken to evaluate the electrical length of the four sample lines. With the sample lines disconnected from the tower mounted loop, the frequency nearest the KLO operating frequency where resistance and reactance was at minimum, the series resonant frequency, was identified³, (see Table 1). Using the approximate physical length⁴ the number of odd number of multiples of 90 degrees electrical length of cable, at the series resonant frequency, was determined. The electrical length at the operating frequency was then calculated (see equation 1) from this data.

$$\frac{\text{Frequency}_{(at Carrier)} \times 90 \times n}{\text{Frequency}_{(Series Resonant)}} = \text{Electrical Length}_{(at Carrier)} \quad \text{Equation 1}$$

The electrical length of the KLO(AM) sample cables range from 378.1 to 377.6 electrical degrees complying with the requirement that they be within 1.0 electrical degrees.

Table 1 Tower 1 Tower 2 Tower 3 Tower 4

	Tower 1	Tower 2	Tower 3	Tower 4
Series resonant frequency (MHz)	1.702	1.704	1.704	1.704
Measured complex impedance (ohms)	4.6-j0.75	4.7-j0.54	4.8+j0.18	4.7-j0.78
Calculated scalar impedance (R ² +X ²) ^{1/2} (ohms)	4.6	4.7	4.8	4.8
Line length multiples of 90° (n)	5	5	5	5
Electrical length at carrier frequency (degrees)	378.1	377.6	377.6	377.6

³ Using an HP 8712ET s/n US39250818 network analyzer.

⁴ Using a TDR, the lines were measured to be approximately 620 feet long, (phase velocity of 86%).

Sample Line Impedance

Measurements were taken⁵ to evaluate the characteristic impedance of the four sample lines. The characteristic impedance of each of the four sample lines was determined by measuring impedance at the frequencies $\pm 1/8\lambda$ from the series resonant frequency (determined above), then calculated the geometric mean impedance from the two measurements, (see Table 2).

Table 2

	Tower 1	Tower 2	Tower 3	Tower 4
Impedance + $1/8 \lambda$ from 1.704 MHz "A", (1.874 MHz)	10.3+j48.3	9.98+j48.9	9.29+j49.9	9.96+j48.5
Scalar impedance $(R^2+X^2)^{1/2}$ "Z _A " (ohms)	49.4	49.9	50.8	49.5
Impedance - $1/8 \lambda$ from 1.704 MHz "B", (1.534 MHz)	8.10-j49.3	7.96-j49.2	7.92-j49.3	8.16-j49.4
Scalar impedance $(R^2+X^2)^{1/2}$ "Z _B " (ohms)	50.0	49.8	49.9	50.1
Line impedance $((Z_A * Z_B)^{1/2})$	49.7	49.9	50.3	49.8

⁵ With an HP 8712ET s/n US39250818 network analyzer.

Sample System Assembled Impedance

Measurements were taken⁶ of the assembled sample system looking into the sample cable, where the sample monitor is normally connected, with the sample loop connected, at 1,430 kHz, (see Table 3).

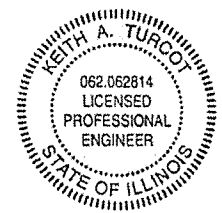
Table 3

	Tower 1	Tower 2	Tower 3	Tower 4
Impedance at 1.430 MHz, complex, with loop	5.74+j28.08	5.90+j29.85	5.88+j29.47	5.98+j29.76
Impedance at 1.430 MHz, magnitude only, with loop	28.7	30.4	30.1	30.4

Affidavit

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.

Keith Turcot



Above signature is digitized copy of actual signature
License Expires November 30, 2011

Keith A. Turcot, P.E.
November 18, 2010

⁶ With an Array Solutions VNA-2180 s/n 5010 network analyzer.