

ENGINEERING REPORT
PARTIAL PROOF OF PERFORMANCE
on
WKY(AM) – Oklahoma City, OK
for
Richland Towers – Oklahoma City, LLC
August, 2007

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MUNN-REESE, INC.
Broadcast Engineering Consultants
Coldwater, MI 49036

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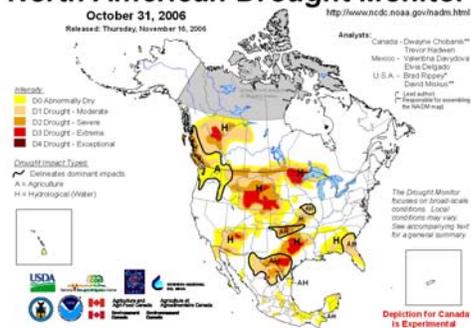
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Discussion

The firm of Munn-Reese, Inc., was retained to prepare this report detailing a daytime non-directional partial proof of performance and nighttime directional partial proof of performance on AM Radio Station WKY(AM), Oklahoma City, OK. WKY(AM) operates on 930 kHz with 5.0 kW of daytime non-directional power and 5.0 kW of nighttime directional power using a three tower array. Construction of Antenna Structure Registration (ASR) tower 1253490 by Richland Towers – Oklahoma City, LLC, has taken place, in addition to the installation of multiple antennas and feedlines. ASR #1253490 resides within the §73.1692 3.2 km affected radius of the nighttime WKY(AM) array, but outside of the 0.8 km affected radius of the daytime WKY(AM) non-directional operation. However, out of an overabundance of caution, the data contained herein is being submitted to show the WKY(AM) daytime and nighttime operations remain essentially unchanged by the nearby tower construction.

Field strength measurements were conducted by Mr. Justin Asher, Engineer for Munn-Reese, Inc. Mr. Asher made his measurements using Potomac Instruments Field Intensity Meter, Model #FIM-41, S/N 844, calibrated March 28, 2006. Representatives of both WKY(AM) and ASR 1253490 were invited to ride along during the measurement project. Mr. Ken Boyd, staff engineer of WKY(AM) was witness to portions of the before measurement program while Mr. Ed Reid, contract engineer for Richland Towers was witness to portions of the after measurement program.

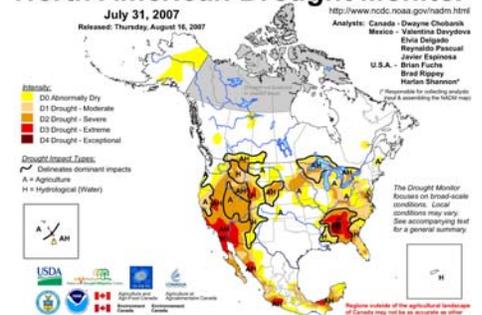
North American Drought Monitor



Measurements were taken on the six (6) cardinal radials spaced 60.0° apart for daytime non-directional operation and the four (4) nighttime monitor point radials, meeting the requirements of 47 C.F.R. §73.154 of the FCC Rules. Field strength measurements were taken on the dates and at the times indicated in the respective Tabulations of Field Strength Measurements and included in **Exhibit(s) 1.1–2.2** for nighttime operation. The tabulation sheets show the distance from the transmitter site to each point in units of kilometers. The locations and point numbers were derived from topographical maps with the assistance of

GPS computer software. Before and after measurements were taken approximately ten months apart due to delays in tower construction. Initial before measurements were conducted in late October, 2006 with very dry conditions. Temperatures ranged from 75°F to 83°F. After measurements were conducted in late August, 2007 with temperatures ranging from 71°F to 93°F. While no precipitation was observed during the after measurement program, torrential rains were noted in the weeks preceding. NOAA records indicate 5.38 inches of rain fell between August 18-19 for the area. In addition, Inspection of U.S. Drought Monitor charts¹ taken closest to the measurement dates indicate before measurements were taken in severe to extreme drought conditions with central Oklahoma being delineated as a Dominant Impact Area. After measurements were conducted in normal or non-drought conditions. As a result, higher after measurements were anticipated due to the ground conductivity-ground moisture relationship.

North American Drought Monitor



¹ The U.S. Drought Monitor is a joint effort between the USDA (United States Department of Agriculture), DOC (Department of Commerce), NOAA (National Oceanic and Atmospheric Administration) and the University of Nebraska – Lincoln.

Discussion

Exhibit 3.1 provides a summary of the field intensity measurements made on the daytime non-directional and nighttime directional array. As seen in the exhibit, all ratios indicate a uniform increase of approx 5% as expected due to the change in climate conditions was noted for both daytime and nighttime operations. No daytime radial varied by more than $\pm 2.5\%$ from the mean log average for daytime radials or $\pm 1.5\%$ from the mean log average for nighttime radials. These variances are well within the allowable 10% limits when taking into account climate factors.

In addition, all four MP values were noted to be with licensed maximum limits for both the before and after measurement programs as well as nighttime antenna monitor readings.

Therefore, through a combination of the uniform increase in field attributable to climatic changes and continued MP measurements within licensed values, the result obtained indicate the constructed tower has had a negligible effect on the WKY(AM) day and night operations.

CERTIFICATION OF ENGINEERS

The firm of Munn-Reese, Inc., Broadcast Engineering Consultants, with offices at 385 Airport Drive, Coldwater, Michigan, has been retained for the purpose of preparing the technical data forming this report.

The data utilized in this report is based on field measurements made by the undersigned, or others under the supervision of the undersigned, on the dates and times indicated in the report.

The report has been prepared by properly trained electronics specialists under the direction of the undersigned whose qualifications are a matter of record before the Federal Communications Commission.

I declare under penalty of perjury that the contents of this report are true and accurate to the best of my knowledge and belief.

August 31, 2007

MUNN-REESE, INC.

By Wayne S. Reese
Wayne S. Reese, President

By Justin W. Asher
Justin W. Asher, Project Engineer

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Exhibit 3.1 Tabulation of Ratios

Daytime Operation:

Radial	Arithmetic Ratio	Log Ratio
0.0°T	1.0301	1.0295
60.0°T	1.0612	1.0597
120.0°T	1.0673	1.0668
180.0°T	1.0673	1.0667
240.0°T	1.0490	1.0481
300.0°T	1.0427	1.0422
Average:	1.0529	1.0522

Nighttime Operation:

Radial	Arithmetic Ratio	Log Ratio
44.0°T	1.0556	1.0540
106.0°T	1.0554	1.0548
271.0°T	1.0339	1.0335
307.0°T	1.0540	1.0537
Average:	1.0497	1.0490

Radial	MP Limit (mV/m)	Before MP Value (mV/m)	After MP Value (mV/m)
44.0°T	86.6	76.0	85.0
106.0°T	151.1	120.0	130.0
271.0°T	211.0	210.0	210.0
307.0°T	162.1	148.0	160.0

Tower	Before Field	Before Phase	After Field	After Phase
1	1.000	0.0°	1.000	0.0°
2	0.604	+21.9°	0.612	+21.7°
3	0.617	-126.3°	0.623	-125.7°