

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of KING BROADCASTING COMPANY, licensee of KGW-DT, Channel 46 in Portland, Oregon, in support of its Application for Construction Permit to operate on Channel 8 with its post-transition DTV facility.

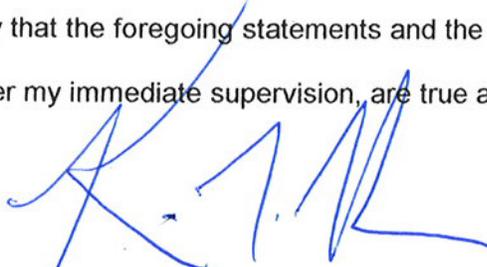
It is proposed to utilize the existing KGW-TV Dielectric omnidirectional antenna at the 272-meter level of the existing 282-meter tower on which the present KGW-DT antenna is mounted. Exhibit B provides elevation pattern data for the existing antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 43 dBu service contour. It can be seen in Exhibit D that the newly proposed 36 dBu contour extends slightly beyond that of the allotment facility assigned to KGW-DT in Appendix B of the Commission's DTV Table of Allotments. However, at no azimuth does the proposed contour exceed that of the allotment facility by more than five miles. Accordingly, since the station's post-transition DTV Channel (8) is different than its pre-transition DTV Channel (46), the applicant requests a waiver of the current freeze on the filing of such an application. An interference study is included in Exhibit E, and a power density calculation is provided in Exhibit F.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the KGW-DT site.

However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

Since no change in overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, the FCC issued Antenna Structure Registration Number 1204059 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



KEVIN T. FISHER

February 25, 2008

Dielectric

Date **04 Feb 2008**
 Call Letters **KGW-DT** Channel **8**
 Location **Portland, OR**
 Customer
 Antenna Type **TW-9B8**

ELEVATION PATTERN

RMS Gain at Main Lobe	9.0 (9.54 dB)	Beam Tilt	0.75 Degrees
RMS Gain at Horizontal	8.6 (9.34 dB)	Frequency	183.00 MHz
Calculated / Measured	Calculated	Drawing #	19W090075-90



Remarks:

EXHIBIT B

ANTENNA ELEVATION PATTERN
PROPOSED KGW-DT
CHANNEL 8 - PORTLAND, OREGON
 SMITH AND FISHER

SMITH and FISHER

CONTOUR POPULATION
43 DBU : 2,470,309
36 DBU : 2,624,442

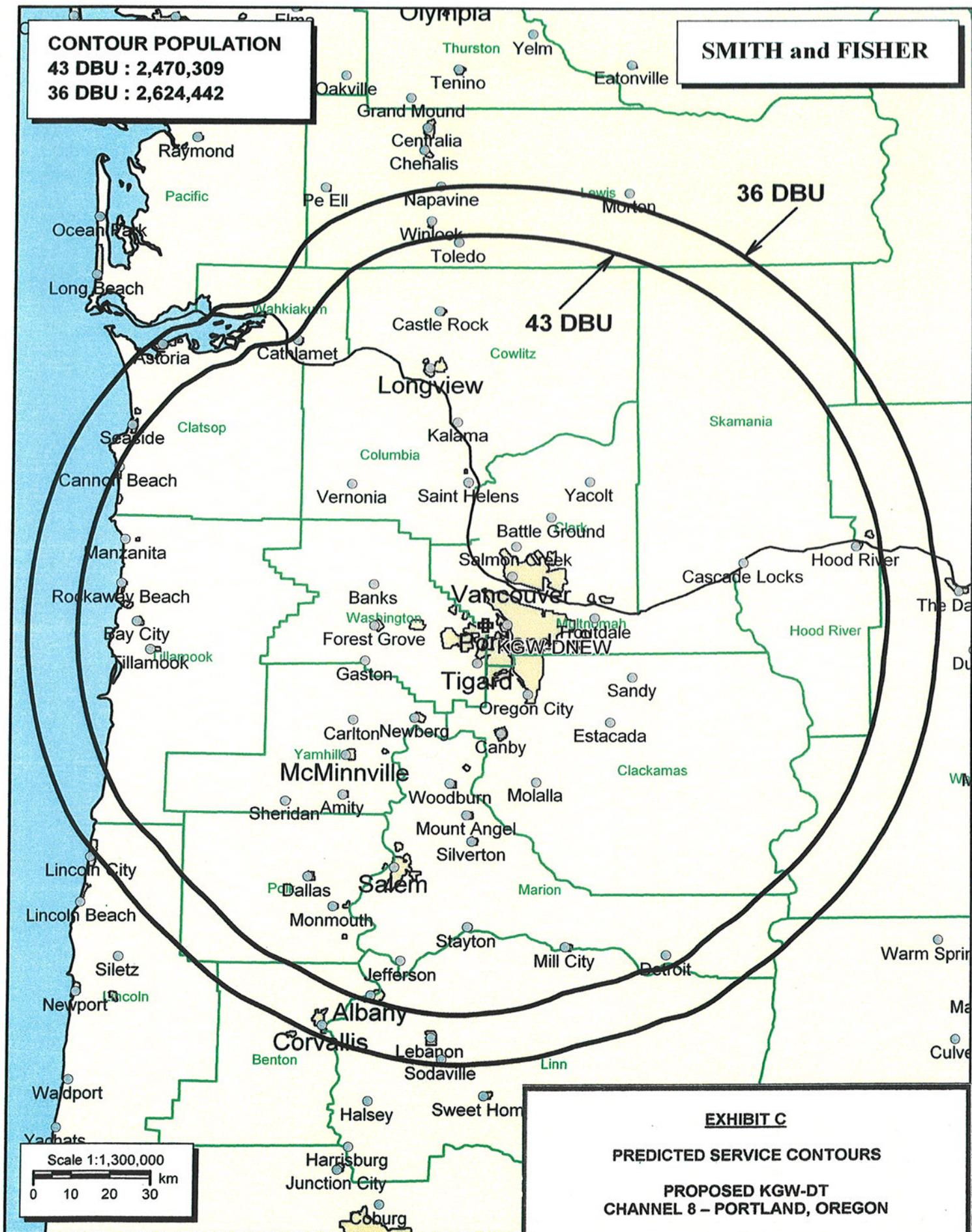


EXHIBIT C
PREDICTED SERVICE CONTOURS
PROPOSED KGW-DT
CHANNEL 8 - PORTLAND, OREGON
SMITH AND FISHER

Scale 1:1,300,000
0 10 20 30 km

SMITH and FISHER

- KGW-DT 41 DBU ALLOTMENT CONTOUR (POP=2,591,610)
- PROPOSED KGW-DT 41 DBU CONTOUR (POP=2,624,442)

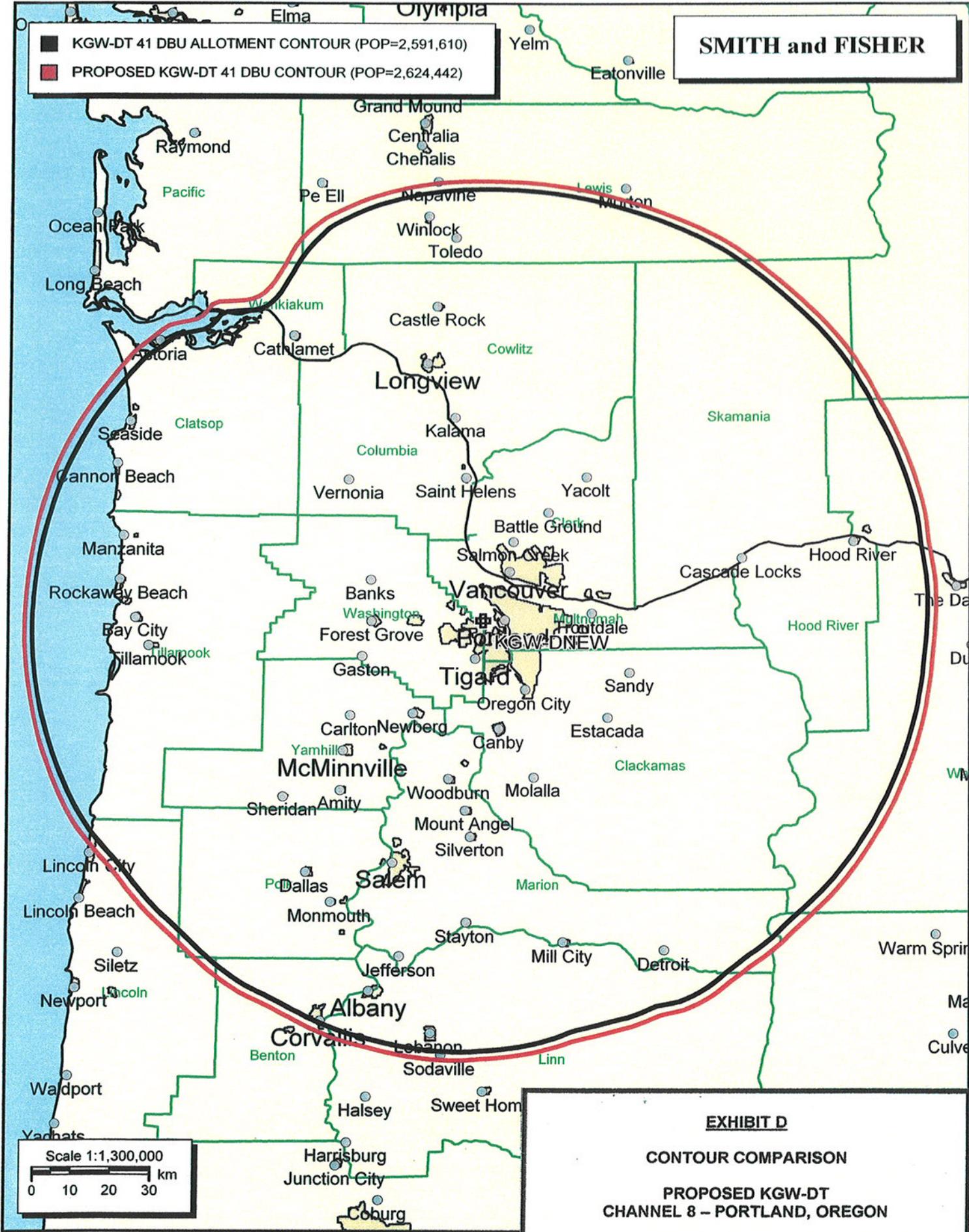


EXHIBIT D
CONTOUR COMPARISON
PROPOSED KGW-DT
CHANNEL 8 – PORTLAND, OREGON
SMITH AND FISHER

INTERFERENCE STUDY
PROPOSED KGW-DT
CHANNEL 8 – PORTLAND, OREGON

The instant application specifies an ERP of 25 kw (omnidirectional) at 524 meters above average terrain, which we have determined to be allowable under the FCC's recently approved interference standards with respect to various digital television facilities as they will exist on or before February 17, 2009, the date by which all stations must operate with the parameters recently adopted in the Commission's DTV Table of Allotments.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe III" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a cell size of 2.0 kilometers and an increment spacing of 1.0 kilometer along each radial (except where noted). In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed KGW-DT to other pertinent stations are tabulated in Exhibit E-2.

As shown, the proposed KGW-DT facility would not contribute more than 0.5% interference (beyond that which is caused by the allotted KGW-DT facility) to the service population of any potentially affected post-transition DTV station.

A Longley-Rice interference study also reveals that the proposed KGW-DT facility does not cause significant (0.5%) interference within the protected service contour of any potentially affected Class A low power television station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

INTERFERENCE STUDY SUMMARY

PROPOSED KGW-DT
CHANNEL 8 – PORTLAND, OREGON

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From KGW-DT*</u>	<u>%</u>
KOAC-DT BPEDT- 20080215ABJ	Corvallis, OR	7	1,354,175	6,122	0.45
KSYS-DT** BMPEDT- 20080214AHW	Medford, OR	8	399,004	16	<0.1

*Above that caused by the KGW-DT allotment facility.

** This study utilized a cell size of 1.0 km and an increment spacing of 0.1 km.

POWER DENSITY CALCULATION
PROPOSED KGW-DT
CHANNEL 8 – PORTLAND, OREGON

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Portland facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 25 kw, an antenna radiation center 272 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of 0.000022 mw/cm^2 is calculated to occur 1,744 meters from the base of the tower. Since this is less than 0.1 percent of the 0.2 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 8 (180-186 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.