

Via Electronic Filing
February 7, 2011

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

In the Matter of)
)
Establishment of a Model for Predicting)
Digital Television Field Strength Received at) ET Docket No. 10-152
Individual Locations)
)
)

Re: Reply to Comments

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Madam Secretary:

I, Sidney E. Shumate, President of Givens & Bell, Inc., hereby submits its consolidated reply to comments received in regard to the Report and Order and Further Notice of Proposed Rulemaking, FCC 10-194, a part of ET Docket No. 10-152.

Sincerely yours,



Sidney E. Shumate, President
Givens & Bell, Inc.
1897 Ridge Rd., Haymarket VA 20169-1306

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**CONSOLIDATED REPLY TO:
FURTHER COMMENTS OF DIRECTV, INC.
COMMENTS OF DISH NETWORK
AND
COMMENTS OF THE NATIONAL ASSOCIATION OF BROADCASTERS AND
THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION**

Givens & Bell, Inc. hereby welcomes the comment and interest of DirectTV, Dish Network, and the National Association of Broadcasters and the Association for Maximum Service Television in this matter. The files submitted by Givens & Bell as Comment on January 21, 2010 address many of the issues raised in the Comments received on the same date. The current, improved version 3.0 source code, which was released to the FCC in the comment filing, is also available at the SPLAT! project website, <http://www.qsl.net/kd2bd/splat.html>, courtesy of John Maglicane, the creator of SPLAT!. This most recent version correctly compiles with the SPLAT project wrap-around software, available for use with either 3-arc second Shuttle Radar Terrain Mission (SRTM-2) data available worldwide, or 1-arc second data available for the continental United States. In addition, preliminary documentation for each individual subroutine, both old ITM versions and new ITWOM versions, were also filed as comments, along with an Excel worksheet that consolidates the ILLR test bed data and provides

comparable results; we have also received and honored requests, both by email and via a mailed CD, from several consulting firms and broadcast engineers regarding un-pdf-encoded copies of the worksheet and source codes. Therefore, we will limit our consolidated reply to some of the most relevant remaining issues.

With regard to the Comments by Dish Network, L.L.C., (DISH), they, and the other Comments, were directed to the 2.0 version, first released at the IEEE-Vehicular Technology Society Fall Symposium in Ottawa in September, 2010, and later, stateside, at the IEEE Broadcast Technology Society 60th Annual Symposium, in Alexandria VA, in October, 2010. It should be noted that the current, 3.0 version filed before the Commission, provides further improvement and a better overall average error. We take this opportunity to note that the ITWOM has not yet been interfaced and calibrated (which should be done in cooperation with the Commissions software coding staff) with the ILLR ground cover data, and that further improvement should result when it is. We also note that, unlike the NTIA's fixed, established reference ITM core software, as part of further development of the ITWOM model, it could easily be re-calibrated to the existing ILLR data base after interfacing to the ILLR ground cover data, or for use with one-arc-second data, which consists primarily of analog signal paths of which all are east of the Mississippi River, or to an improved database that should include data from signal paths west of the Mississippi, and from digital television signal paths. Like the TIREM model, the ITWOM model is intended to evolve and improve with time; unlike the TIREM, the basic, international ITWOM version is open source and free for use by individuals, institutions, and government entities for their own internal use. Only commercial use, such as by professional consultants preparing paid reports for clients, or for publishing and sale as part of a commercial software package, requires licensure. Therefore, when compiled and used as part of an open source package, such as SPLAT!, it is available at no charge for the local station broadcast engineer to download and use.

With regard to the Comments by DirectTV, Inc., (DirectTV) we believe that the reliance on the current ILLR's ITM core, as currently contained in AntennaWeb according to the Comment of DirectTV, limits the capability and accuracy of AntennaWeb. We do note

that elements of the Decisionmark Corporation' AntennaWeb's algorithm, contained not in the ITM core software but in the wrap-around software, does contain features that have significant potential merit and which the FCC may wish to further consider in improving its software, if Decisionmark would make them available for incorporation.

With regard to the comments by the National Association of Broadcasters (NAB) and the Association for Maximum Service Television (AMST) in this matter, it is our opinion that the emphasis should not be primarily on accepting the ITWOM as is, as a replacement for the ITM core in the ILLR software for use in determining eligibility for Ku-band Satellite TV reception, a fading need. The emphasis should be on its potential for coordinated development as a better tool for determining the potential coverage area of broadcast stations in general, and especially in properly determining how much of an increase in power that the broadcast DTV stations should be allowed to transmit to properly serve their over-the air, post-digital transition audience.

The fact that Congress has demanded that the Commission make improvement in the prediction algorithm every time the Direct-to-Home Ku-band Satellite Television retransmission legislation has been renewed, demonstrates the lack of confidence by Congress in the current ITM core software based predictions.

The NAB and AMST supporting report, authored by Meintel, Sgrignoli and Wallace (MSW) states that data regarding the ILLR database is not provided; the files I provided to the FCC as comment, were requested and have been forwarded, in open, original form, by email to MSW. The data used was taken from the FCC's ECFS, as published by the NAB before the Commission as part of the previous SHIVERA proceedings. The worksheet provided consolidates the information provided in the more than 30 separate files published; the original measured signal strength data was for analog stations only, as stated by the NAB in the associated filings.

The FORTRAN version of ITWOM 3.0 has not yet been debugged to our satisfaction. It, and our recommendations for initially interfacing the ILLR ground cover data to the ITWOM, will be provided as soon as they are ready.

I, Sidney E. Shumate, as President of Givens & Bell, Inc. therefore do reaffirm G&B's Petition as submitted to the Commission, supported by our Comments and this consolidated Reply.

Sincerely yours,

A handwritten signature in cursive script that reads "Sidney E. Shumate". The signature is written in black ink and is positioned to the left of the date.

February 7, 2011

Sidney E. Shumate, President
Givens & Bell, Inc.
1897 Ridge Rd
Haymarket, VA 20169