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October 21, 2004

Marlene H. Dortch, Secretary
Federal Communications Commission
Washington, Dc 20554

Re: **Written Ex Parte Submission**
MM Docket No. 99-325

Dear Ms. Dortch:

On behalf of Clarke Broadcasting Corporation, submitted herewith is a letter discussing the adverse impact that IBOC digital operation by a "super-powered" FM station will have on KKBN(FM), Twaine Harte, California. The letter notes that KKBN's situation is one of the most egregious in the nation and that KKBN will suffer predicted interference over its entire protected service contour, including its community of license.

The writer requests that super-powered stations be given a choice of reducing power to class limits when transmitting IBOC signals or refraining from implementing the IBOC system and continuing super-powered analog-only operation.

Please associate this letter with the record in MM Docket no. 99-325.

Very truly yours,

Peter Tannenwald

Attachment
cc: (w/att) (by e-mail)
Roy J. Stewart, Esq.
Peter H. Doyle, Esq.
Ben Golant, Esq.
Steven Broeckaert, Esq.
Ms. Ann Gallagher
Ms. Susan N. Crawford
Mr. H. Randolph Holder
Mr. Gregory Jablonski (The Livingston Radio Company)

CLARKE BROADCASTING CORPORATION

KVML
KZSQ-FM
KKBN-FM
Sonora, CA
209-533-1450

ML Internet
Sonora, CA
209-536-5800

Sign Pro
Sonora, CA
209-532-1118

December 15, 2004

Marlene H. Dortch, Secretary
Federal Communications Commission
Washington, DC 20554

Re: Written *Ex Parte* Submission
MM Docket No. 99-325

Dear Ms. Dortch:

I am writing to express my concern about the destructive interference that is likely to result to our station KKBN(FM), Twain Harte, California, if stations operating with more than the maximum facilities for their class ("super powered" stations) are permitted to implement IBOC digital operation without reducing their power to the class maximum.

Our station operates first-adjacent to KSKS(FM), Fresno, California. KSKS is a Class B station but operates with 14.7 dB more effective radiated power than would be permitted if that station were confined to the 50 kW/150-meter limit for Class B stations. As the Commission is well aware, IBOC signals are intentionally transmitted on the first-adjacent channels to a station's analog channel. When the IBOC signals exceed the class maximum, the potential for interference increases dramatically, as the interference is co-channel and cannot be filtered out.

The KKBN situation is one of the most egregious in the nation. We are aware of the material submitted by The Livingston Radio Company ("Livingston") on October 21, 2004, which showed that analog interference from KSKS to KKBN covers 67% of our protected service contour and will cover 100% of our protected service area when KSKS implements IBOC operation. Livingston's problem is serious, as its super-powered neighbor operates with 12 dB more than the class maximum power. The threat to us is even worse, from a signal 14.7 dB over the class maximum.

We have commissioned our own engineering study, which is attached. It includes a map showing that KSKS's interfering contour will overlap our entire 60 dBu service area with co-channel interference when IBOC operation starts. While terrain may mitigate this interference in some areas, it will not do so in others; and terrain effects are uncertain in any event.

As one of the few stations licensed in our rural area that does not program for the larger metros in the San Jaoquin Valley, KKBN listeners depend on us for both emergency and routine day-to-day information. To subject our entire service area to co-channel interference that will destroy reception on even the most expensive receivers will do a serious disservice not only to us as a business enterprise but also to our listeners who depend on our locally oriented service.

We have no quarrel with the eventual migration of FM radio to digital operation or with the IBOC system generally. However, the risks of increased interference with IBOC, because it intentionally places energy in the adjacent channel, are well-known, and the risks that the Commission decided to take were predicated on a channel allotment scheme that assumes certain power and height limits for each station. When the underlying assumption is abandoned, as in the case of super-powered operation, the assumption that interference will be tolerable becomes completely invalid.

Super-powered stations will undoubtedly claim that they have expectations that should be honored that include service to a wide area. However, it is well established that they have no expectation of grandfathering when they move their transmitters; and we do not feel that any expectations, even if they were valid in the past, should be extended past the end of one license term even if the station does not move, particularly when there is such a serious threat of interference. But more importantly, any "expectations" of an extended service area are meaningless, because when IBOC operation starts, we will interfere with KSKS, and they will interfere with us. The result will be that no one's expectations will be met, both stations will suffer a diminution in service area, and the public will be short-changed no matter to which station they wish to listen.

Please do not ignore this problem in your deliberations. Super-powered stations should be given a choice of reducing power to the class maximum level when implementing IBOC or refraining from IBOC operation and continuing to operate analog-only and being permitted to retain their grandfathered power level.

Respectfully submitted,

H. Randolph Holder
President

Attachment
cc: (w/att) Infinity Radio, Inc. (KSKS)
2000 K St., N.W., Suite 725
Washington, DC 20006-1819

FCC Staff:
Roy J. Stewart, Esq.
Peter H. Doyle, Esq.
Ben Golant, Esq.
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CAVELL MERTZ & DAVIS INC.

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December 3, 2004

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H. Randolph Holder
Clarke Broadcasting Corporation
1175 Fairview Drive
Suite N
Carson City, NV 89701

RE: IBOC interference to KKBN

Dear Mr. Holder,

I have reviewed the material you provided regarding interference from adjacent FM "superpower" stations which may implement IBOC transmissions. At issue is the possible impact to station KKBN(FM) (Ch. 228A, Twain Harte, CA) from KSKS(FM) (Ch. 229B, Fresno, CA).

FCC database information indicates that KSKS operates with 68 kW effective radiated power ("ERP") and an antenna height above average terrain ("HAAT") of 580 meters. This is well in excess of the maximum Class B facility of 50 kW and 150 meters, indicating that KSKS is a grandfathered "superpower" facility. At the KSKS antenna height (580 meters HAAT), the maximum Class B ERP would normally be 2.3 kW. The actual KSKS 68 kW operation is 14.7 dB more power than a conforming Class B facility.

Despite its superpower status, other nearby stations, such as KKBN, only need to protect KSKS as a standard Class B facility. This often results in interference being experienced between the superpower and other stations. KSKS is located 132 km from KKBN, which complies with the minimum distance separation requirement of 113 km under §73.207 of the FCC's Rules for first-adjacent Class A and Class B stations.

The material you forwarded was filed with the FCC by *The Livingston Radio Company*, licensee of WHMI-FM (Ch. 228A, Howell, MI). Like KKBN, WHMI-FM operates first-adjacent to a nearby superpower FM station (WBCT, which operates at an ERP 12 dB above a conforming Class B maximum). The material included a coverage contour comparison, depicting the possibility of additional interference to WHMI-FM from prospective IBOC operation by the first-adjacent superpower station.

The attached **Figure 1** provides a similar contour comparison map regarding KKBN and KSKS. At present, the licensed KSKS interfering contour (without IBOC) overlaps a significant portion of the KKBN protected contour area. Should IBOC be employed by KSKS, the corresponding interfering contour will be extended to encompass the entire KKBN service area.

CAVELL MERTZ & DAVIS INC.

If the KSKS IBOC operation corresponds to a Class B conforming power level of 2.3 kW, the resulting IBOC interfering contour is much smaller (indicated with a dashed blue style on **Figure** 1). This would not extend past the interfering contour already produced by the KSKS "no IBOC" 68 kW superpower operation.[1]

As you know, the FCC's standard contour method of coverage prediction is a generalization in most circumstances. In this case there is some terrain blockage between KSKS and the KKBN protected contour area, so the extent of actual interference should be less than **Figure 1** suggests. A cursory review of the terrain indicates that areas in the southwestern portion of the KKBN protected contour and beyond (*i.e.*, towards Oakdale and Modesto) are not terrain blocked and are much more susceptible to interference. If you wish, we can evaluate this further by making coverage and interference predictions with terrain-dependent Longley-Rice propagation techniques (note that the FCC presently recognizes only their standard contour method for prediction of protected areas and incoming interference).

Please contact me via telephone or e-mail with any questions or comments.

Sincerely,

Joseph M. Davis

Enclosure

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[1]For ease of comparison to the WHMI-FM material, we have employed the same D/U ratio (12 dB) to determine the interfering contour level from KSKS. Please note that the underlying NRSC IBOC report (November, 2001) provides a range of interfering D/U ratios, and that actual results are dependent in part on the type of radio employed and the program material of the desired station.

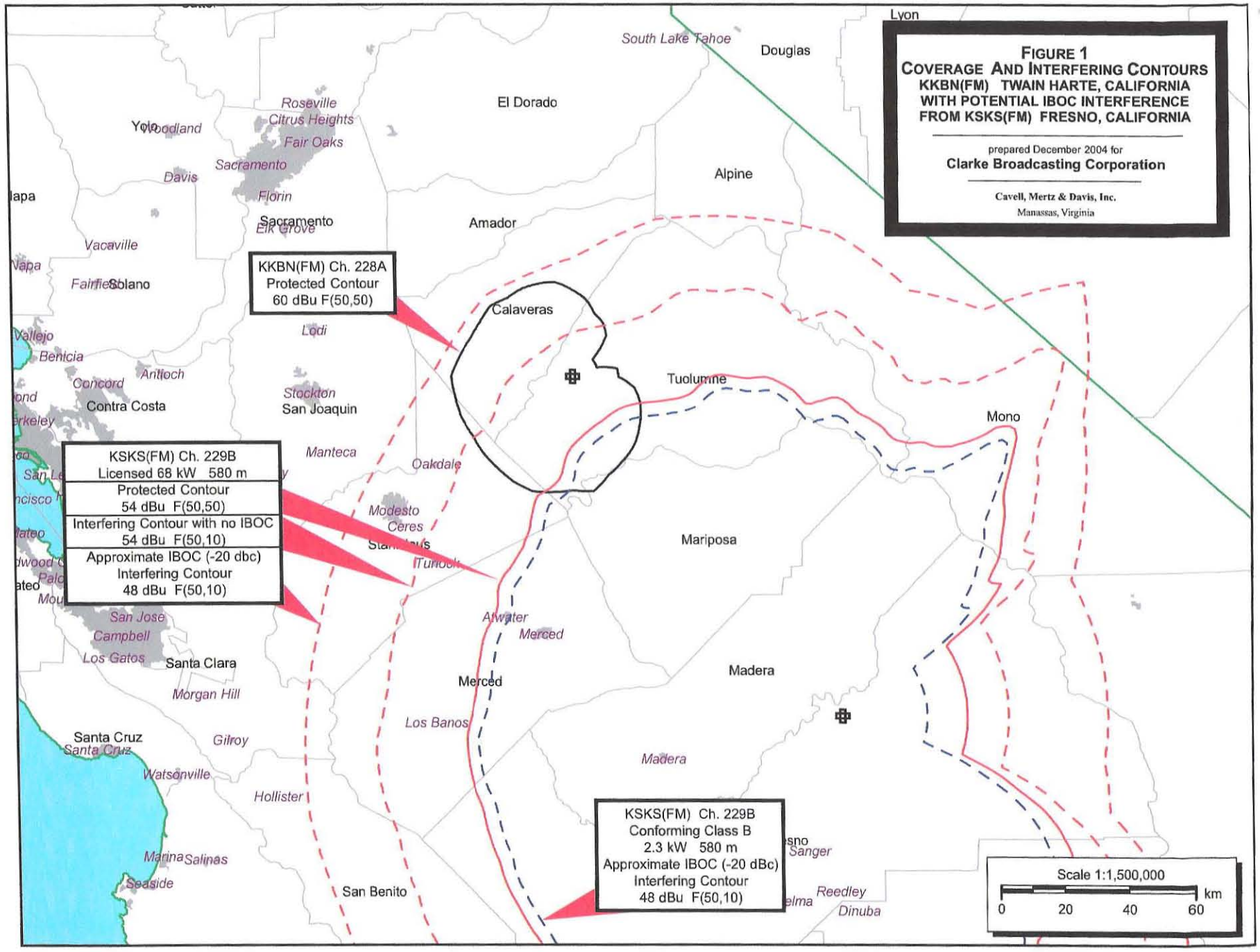
FIGURE 1
COVERAGE AND INTERFERING CONTOURS
KKBN(FM) TWAIN HARTE, CALIFORNIA
WITH POTENTIAL IBOC INTERFERENCE
FROM KSKS(FM) FRESNO, CALIFORNIA
prepared December 2004 for
Clarke Broadcasting Corporation
Cavell, Mertz & Davis, Inc.
Manassas, Virginia
KKBN(FM) Ch. 228A
Protected Contour
60 dBu F(50,50)
KSKS(FM) Ch. 229B
Licensed 68 kW 580 m
Protected Contour
54 dBu F(50,50)
Interfering Contour with no IBOC
54 dBu F(50,10)
Approximate IBOC (-20 dbc)
Interfering Contour
48 dBu F(50,10)
KSKS(FM) Ch. 229B
Conforming Class B
2.3 kW 580 m
Approximate IBOC (-20 dBc)
Interfering Contour
48 dBu F(50,10)
Scale 1:1,500,000
0 20 40 60 km
Lyon
Douglas
South Lake Tahoe
El Dorado
Alpine
Amador
Calaveras
Tuolumne
Mono
Mariposa
Madera
Merced
San Benito
Santa Cruz
Santa Clara
Contra Costa
San Joaquin
Solano
Yolo
Napa
Sacramento
Roseville
Citrus Heights
Fair Oaks
Woodland
Davis
Florin
Elk Grove
Vacaville
Fairfield
Vallejo
Benicia
Concord
Antioch
Lodi
Stockton
Manteca
Oakdale
Modesto
Ceres
Turlock
Atwater
Merced
Los Banos
Madera
Sanger
Reedley
Dinuba
San Jose
Campbell
Los Gatos
Morgan Hill
Gilroy
Hollister
Watsonville
Marina
Salinas
Seaside