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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

VIACOM

December 16, 1997

Magalie Roman Salas
Secretary
Federal Communications Commission
Room 222
1919 M Street, N.W.
Washington, D.C. 20554

RE: Oral/Written Ex Parte Presentation to Office of Commissioner Powell
MM Docket No. 87-268, Advanced Television Systems

Dear Ms. Salas:

On December 12, 1997, representatives of several television group owners met with Jane Mago, Senior Legal Advisor to Commissioner Michael K. Powell , in connection with the above-captioned rule making proceeding. The television industry representatives were: Guy Turner and Nicholas Pagon of KB Communications, Inc.; John Trinder of MaxMedia; Harry Pappas of Pappas Telecasting Companies; Douglas Binzak of Silver King Broadcasting; David Pulido of Sullivan Broadcasting; Michael Wortsman of Univision Television Group, Inc.; and Steve Goldman and John Viall of Viacom Inc. The nature and scope of the oral presentation were limited to matters pertaining to the UHF/VHF power-level disparity issue, which were raised in Viacom's Petition for Partial Reconsideration, filed on June 13, 1997, in its Opposition to Petitions for Reconsideration, filed on July 18, 1997, and in its Supplement to Petition for Partial Reconsideration, filed on August 22, 1997 in response to the Commission's Sixth Report and Order, FCC 97-115 (released April 21, 1997). The nature and scope of the written presentation, a copy of which is attached hereto, were also limited to the UHF/VHF power issue.

The proceeding at issue is a non-restricted proceeding in which presentations are permitted, but must be disclosed. Accordingly, this letter and a copy, as well as the attachment, are being filed pursuant to Section 1.1206 of the Commission's Rules.

Sincerely,

Dede Farrell

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cc: (w/o attachment)

Jane Mago, Senior Legal Advisor to Commissioner Powell
Guy Turner and Nicholas Pagon, KB Communications
John Trinder, MaxMedia
Harry Pappas, Pappas Telecasting Companies
Douglas Binzak, Silver King Broadcasting
David Pulido, Sullivan Broadcasting
Michael Wortsman, Univision Television Group, Inc.

Talking Points

The Problem: Low Power Threatens UHF Survival and Diverse Programming

1. UHF broadcasters provide to the American public the programming of new networks (such as UPN and WB), of specialty networks (such as HSN), and of non-English language networks (such as Univision and Telemundo).

2. UHF broadcasters operate at a disadvantage in the analog world, because we have smaller service areas than do VHF broadcasters. That means fewer viewers are able to access our programming in a given market than are able to access the programming of VHF stations.

3. Under the FCC's DTV Table, UHF broadcasters are assigned such small power levels that not only will we continue to have smaller service areas than VHF broadcasters, but our signals may not even be receivable by viewers in our core markets. That means that the disadvantage suffered by UHF broadcasters in the analog world will be exacerbated in the digital world.

4. As a result, we UHF broadcasters confront the economic disaster of losing our core audiences, the advertising that those audiences bring, and the revenues that that advertising generates. In short, the current Table threatens our very existence as broadcasters and, consequently, the disenfranchisement of the American public from the free, over-the-air diverse programming we UHF broadcasters provide. Accordingly, with the current FCC Table in place, we do not enter the digital world with any level of confidence.

The Solution: Increase Power Floor for UHF Stations From 50 kW to 200 kW

1. In adopting the Table last April, the Commission listened to our concerns and attempted to improve the VHF-UHF disadvantage by establishing in the Table a power "floor" of 50 kW for UHF broadcasters and a "ceiling" of 1000 kW for VHF broadcasters. We appreciate the Commission's attempts. But under the current FCC Table, UHF broadcasters in many cases will still be at a 20-to-1 power disadvantage! Additionally, 50 kW is so small a level of power as to place in question our ability to reach viewers in our core markets.

2. We offer a simple solution to this power problem. And one that works. The proposal is this: The Commission retains the cap on all VHF broadcasters. But to insure the economic survival of UHF broadcasters, the Commission increases the UHF power floor -- to 200 kW.

3. Best of all, resolving the power issue by raising the floor for UHF stations *will not delay the rollout of DTV.* Nor will it involve any DTV channel changes or any increased use of channels 60-69. The only side effect will be a de minimis level of new interference. But any increased interference will be absorbed by UHF broadcasters, who are willing to sacrifice a minimal portion of their analog service area in order to insure a more viable position in the DTV world.

4. Increasing the power floor to 200 kW will not conflict with ALTV's beam tilt proposal. Rather, a power floor increase will guarantee us a floor of no less than 200 kW. While the beam tilt plan gives us hope for increased power, such increases are far from guaranteed.

EXECUTIVE SUMMARY
FCC Meetings, December 11/12, 1997

Background: Replication of Analog Service Area

- The Table in the *Sixth Report and Order* is based on the principle of ***replication***, which provides that each station's DTV service area equals that of its analog Grade B service area.
- Yet, the Table limits replication and sets a power floor of 50 kW and a ceiling of 1000 kW so that all stations can provide DTV service "competitively within their respective markets."
- FCC also supports concept of ***maximization***, which permits stations to increase their assigned service areas by increasing power, but only if such increases do not create new interference.

The Problem: Power Level Disparity Between V-to-U and U-to-V Digital Stations

- To replicate the VHF stations' larger analog Grade B service areas in the DTV UHF band ("V-to-U" stations), the Table assigns these stations power levels at or near 1000 kW. At the same time, the Table assigns power levels to UHF stations in the DTV UHF band ("U-to-U" stations) as low as 50 kW -- ***20 times smaller*** than that of their V-to-U competitors.
- In addition, the ***Table's*** power disparity is exaggerated by the Table's planning factors, which overestimate the capability of home antennas and TV sets to adequately receive DTV signals.
- Given the Table's tremendous differences in assigned power and the Table's use of overly optimistic planning factors, the competitive status of UHF stations vis-à-vis VHF stations is exacerbated rather than maintained. In fact, in combination with the optimistic planning factors, the assigned power of U-to-U stations is ***so inadequate as to jeopardize the ability of viewers to receive UHF stations' DTV signals***.

The Solution: "Immediate Intermediate Maximization" (a.k.a. Increasing the Power Floor)

- UHFs seek only to insure that their competitive disparity with VHFs is not exaggerated.
- Yet, in order to proceed into the DTV world with confidence, UHF stations must be assured that they are viable players. The Commission can provide such assurance ***by immediately maximizing the UHF station power floor*** to an intermediate floor of 200 kW.
    - Implementing "immediate intermediate maximization" will reduce the greatest power differential between DTV VHF and UHF stations from 20:1 to 5:1.
    - Implementing "immediate intermediate maximization" will not affect channel assignments or require the increased use of channels 60-69.
    - However, increasing the floor means the Commission will have to accept a new level of "de minimis" interference. But any new interference will be absorbed by analog UHF stations (which will be the beneficiaries of an increase in the power floor) --and only in their Grade B service areas.

- Studies conducted in coordination with MSTV indicate that the power assignments of most DTV stations can be raised to 200 kW while creating less than 1% of new interference to analog stations.

- The Immediate Intermediate Maximization proposal assures an increased power base for UHF stations and can be used in tandem with ALTV's beam tilt proposal.

PROPOSAL TO INCREASE THE MINIMUM POWER LEVEL ALLOCATED TO UHF DTV STATIONS

I. PROBLEM

The FCC is on the verge of codifying a DTV plan that will give U-to-U DTV stations power insufficient to insure that they can reach their viewers in their core markets, especially in urban areas. This power issue will also further harm the competitive position of UHF broadcasters relative to the VHF stations.

In April, 1997, the FCC established a Table of Allocations for DTV stations in its Sixth Report and Order. This table is the basis on which the FCC will launch the DTV service. The table was based on a computer model created by the FCC to analyze the assignment to all eligible NTSC stations of a digital channel. Since real-world digital information did not exist when the model was created (and does not exist to this day), the FCC was forced to make a number of theoretical assumptions about the operating environment. While many assumptions were made, three seriously impact the UHF digital channels of current UHF stations (U-to-U DTV stations):

- Use of an outdoor antenna at a height of 30 feet.
- A receiver noise figure of 7db.
- Replication of VHF service area in the VHF band.

Each assumption and its effect is described in section IV.

The result of the first two assumptions is to give U-to-U broadcasters insufficient power to guarantee that their signals will reach set-top antennas common on television sets, particularly in large buildings in urban areas. Moreover, the third assumption leads to such a power differential between U-to-U and V-to-U stations, often as much as 20:1, as to swing the DTV competitive playing field far in favor of the V-to-U DTV broadcaster, so much so that it threatens the viability of the U-to-U DTV business.

The effect of this problem will be felt predominantly by affiliates of the emerging new networks and the nation's foreign language networks, and millions of Americans predominantly in major urban areas.

II. PROPOSAL

Raise the minimum power levels in the table for DTV stations from 50 kW to 200 kW, except in those few instances where such an increase will cause excessive interference.

Preliminary studies show that a minimum power level of 200 kW can be supported within the current FCC Table with minimal additional interference. Allowing the minimum level to be increased to 200 kW will reduce the worst case power differential to 5 to 1.

In light of the public policy goals of maximizing the availability of over-the-air television and guaranteeing that existing viewers can receive the same stations in a digital environment, some increase in interference for some UHF NTSC stations is a necessary trade-off to ensure that millions of viewers in the core service area are not disenfranchised. To address the few cases where the net new interference resulting from a power level of 200kW will be excessive, the FCC needs to define a new level of *de minimis* interference, creating a standard by which to judge these situations. In considering whether additional NTSC interference is acceptable, however, it is important to remember that the new interference from the increased power levels will occur in the analog Grade B contour and will exist only during the NTSC to DTV transition. Moreover, from the viewer's perspective, it is irrelevant whether reception of a television station is lost because of interference or lack of power.

Studies to determine minimum power levels and/or levels of de minimis interference are currently underway in cooperation with MSTV. The first very preliminary analysis indicates that the great majority of DTV stations can increase their power levels to 200 kW and introduce less than 1% of new interference to NTSC stations when compared to the 50 kW minimum power level. The remaining stations can increase the power in varying amounts between 50 kW and 200 kW.

III. CONCLUSION

The power levels incorporated in the Sixth Report and Order threaten the ability of UHF broadcasters to reach their existing viewers in their core markets and exacerbate the competitive disadvantage of UHF stations relative to the VHF industry. Short of redoing the table, the options to ameliorate these problems are limited. The easiest and most reliable solution is to increase the minimum power levels in a controlled manner, tolerating *de minimis* additional interference to prevent the disenfranchisement of millions of American viewers.

IV. SUMMARY OF THE PROBLEMATIC ASSUMPTIONS

1. Use of an outdoor antenna at a height of 30 feet

The Table assumes that every TV set will use a directional outdoor antenna mounted at a height of 30 feet, an assumption dating back to the 1950s. Based on this assumption, the FCC's Table assigns lower power levels than those that would have been assigned if indoor antennas were assumed. The more realistic assumption is that many viewers, especially in urbanized centers, will be receiving the digital channels over the air on indoor antennas. Large outdoor antennas are not generally utilized by urban viewers or those who subscribe to cable television.

The power needed to penetrate a building and reach a set-top antenna is substantially higher than that needed to reach an outdoor antenna 30 feet in the air.

2. A receiver noise figure of 7 db

The receiver noise figure basically describes how much signal is needed at the receive antenna for the TV set to provide a certain level of performance. The better the noise figure, the less power the broadcasters need in order to provide a certain level of service to that TV set. The FCC's Table assumed a noise figure of 7 dB, which the consumer electronics industry acknowledges is very difficult to achieve in the real world in a cost-effective way. Indeed, discussions with television set manufacturers have revealed that the 7 dB noise figure is overly optimistic. A noise figure of 10 dB (which is worse than a 7 dB noise figure), which the FCC had originally proposed, is more realistic. The 3 dB differential results in the Table's cutting stations' assigned power levels.

By lowering the power of the U-to-U DTV stations even further, the Table exacerbated the problem of reaching viewers in their core areas, which for most stations is their DMA.

3. Replication of service area

The FCC Table is predicated on the principle of replication, which means that every TV station has the same DTV coverage as its current NTSC coverage out to the edge of the Grade B contour. While this seems reasonable on the surface, this approach ignores the fact that VHF NTSC stations cover areas over the horizon which UHF frequencies are not intended to reach. In an effort to force the UHF signal to go where the laws of physics do not intend it to reach, the Sixth Report and Order provides extremely high power levels (up to 1,000 kW) for most V-to-U stations.

The effect is to give the V-to-U stations a very significant competitive advantage in the market. These stations have been given sufficient power to offset the problems caused by the above assumptions. As a result, it is highly likely that V-to-U stations will be able to reach far more homes in their core service areas than will U-to-U stations, which may not even be discernible in core service areas.