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

In the Matter of:	)	
	)	
Amendment of Parts 73 and 74 of the	)	
Commission's Rules to Establish Rules for Digital	)	MB Docket No. 03-185
Low Power Television, Television Translator, and	)	
Television Booster Stations and to Amend Rules	)	
For Digital Class A Television Stations	)	

COMMENTS ON NOTICE OF PROPOSED RULE MAKING

I am responding to the Notice of Proposed Rule Making cited above, as an individual citizen of the United States of America and a Television Station Engineer. In this document, I will address comments to 19 specific sections of the NPRM and will identify them by paragraph number. To save space here and not restate the question, I will generally be responding to the words "We seek comment…" or a direct question asked in the referenced paragraph.

I come from the perspective of being an engineer at a full service television broadcast station in a major U.S. market. Our engineering team is also responsible for the proper operation of 28 LPTV translators across several states in the U.S. I have also built 2 LPTV stations a decade ago, which would by today's standards, be called "Class A LPTV Stations."

Three underlining philosophies of engineering and broadcasting will guide the comments I have to share concerning this proposal:

A. Keep it simple. Any Rulemaking that addresses Low Power Television, Television Translator, Television Booster Stations and Class A Television

Stations should be guided by simplicity. Private individuals or small staffs operate many of these stations. Thus simple, easily interpreted rules will facilitate compliance from these parties.

B. Keeping costs down for stations addressed in this NPRM. In paragraph 88 of this proposal the Commission says: "We are concerned that such equipment would be cost prohibitive to LPTV and TV translator stations, many of which operate on limited budgets." I agree with the Commission's implication that financial considerations will be of great importance to those effected by this NPRM. Thus my comments are also guided by sensitivity to financial matters.

C. Let the marketplace decide. Many of the questions raised in the NPRM appear to address matters of "policy" and not strict rule making. In paragraph 10 the Commission says: "Translators simultaneously retransmit such programs and signals subject to the prior written consent of the TV broadcast stations whose signals are rebroadcast." Some of the issues raised will be better served by allowing "TV broadcast stations" and "Translators" to work out agreement in terms of their "written consent" instead of instituting a list of complicated rules, policies or directives.

Paragraph 12 asks for comments regarding the definition of digital TV translators and allowances for local message insertions. This definition should be a logical extension of the current definition of analog translators. Simply the digital TV translator should "pass through" the content and video format of the primary DTV station. Locally inserted

messages should be limited to the same as analog translators. The translator owner and the primary DTV station should be the ones to work out a satisfactory arrangement for "written consent" if the translator owner wishes to provide a service other than "pass through." The matter of multiple DTV program sources on a single multicasting translator will be addressed later. If a translator owner or operator desires to do more regarding local announcements or programming with his station, he can pursue upgrading the station to Class A status. Thus the current analog translator definitions and restrictions are consistent with the possible definition of a digital TV translator.

The last sentence of paragraph 13 addresses the issue of a translator altering the signal of the main station. So long as the transmitted signal meets the technical requirements of an analog or digital translator, altering of the input signal should be a matter to be decided between the translator operator and the primary DTV station to work out in their "written consent." The FCC should be primarily concerned with the transmitted signal. Issues of whether a translator could convert a DTV signal to analog, an HDTV to SDTV for transmission or multi-channel SDTV can be addressed between the translator operator and primary DTV station(s).

The philosophies of simplicity and financial issues of translator operators should guide considerations of the issues in paragraph 14. It may be appropriate for the FCC to have a "preference" as to heterodyne versus regenerative digital translators but the final decision should be left to the operator. Rules already exist for controlling the transmissions of an analog TV translator, which could be extended to digital TV translators. These include

type acceptance of the transmitting equipment or conditions for use of non-type accepted equipment. Other technical rules are addressed in this NPRM. The translator operator should decide the type of equipment to use based on his financial ability and what he perceives as the best way to serve the public. The decision on additional digital translator rebroadcast modes should also be left to the operator. Again his interest will be controlled by the elements of "written consent" between him and the primary DTV station(s).

For the sake of simplicity, local message insertion as addressed in paragraph 15 should be limited to the types permitted for analog TV translators. My experience with translator operators is they want their operations as simple as possible. Most don't want to deal with local message insertion. Many of these translators are atop mountains and in hard to reach areas. The more they can function without operator intervention the better and cheaper they can run. If a TV translator operator, analog or digital, wishes to provide more local content than current rules allow, he may pursue upgrading the translator to Class A status.

Marketplace pressures will ultimately impact the topic of DTV translator "multi-casting" as presented in paragraph 16. Here again the issue could easily be left up to the translator operator and primary DTV station(s) as they hammer out their "written consent" document. A primary DTV station may wish control the complete translator signal and require the translator operator to "pass through" the primary signal be it multi-cast SDTV signals or an HDTV signal as the primary station chooses. The translator operator on the

other hand would be free to pursue written consent with primary station(s) that best suit his local marketplace needs. Providing a mix of different primary stations may, in the view of the translator operator, best serve the public interest. Thus the translator operator should be given total flexibility as to the number and type of signals he provides. The primary DTV station(s), the local marketplace served by the translator and the associated costs of equipment for providing multiple program sources will ultimately control the operator's ability to provide service. The FCC rules should allow for this flexibility and focus on maintaining proper transmission standards.

In response to paragraph 29 I would encourage the FCC to consider continuing the policy of the *Channel 52-59 reallocation order* to permit LPTV and TV translator stations to operate indefinitely on these channels on a non-interfering basis and to negotiate interference agreements with new primary service providers. It would keep things simple to not require applicants for channels 52-59 to demonstrate that no lower channels are available for their digital operations. It would provide greater flexibility and perhaps improved displacement relief to make these channels available to both applicants for new digital low power service and applications seeking to convert existing analog operations to digital.

Field modification of equipment is of great concern as addressed in paragraph 81. The Commission should consider as simple an approach as possible considering the certification of all field modifications. Modern manufacturing design of at least one company I am aware of accommodates the use of the intermediate power amplifiers and

high power amplifiers of their transmitters to function with either analog or digital modulation or front end equipment. This design enables translator operators to convert to digital with the minimum of investment, easing financial constraints on digital conversion. The jury is still out on the question of demonstrating digital average transmitter power output compared to NTSC peak power and maintaining it within permissible limits. However, by requiring LPTV and TV translator stations to perform a proof of performance, it is consistent for the FCC to permit a qualified person to certify in FCC license applications that such transmitting systems, after installation, meet all digital equipment standards.

I would agree with the Commission's desire, as expressed in paragraph 82, to facilitate flexible LPTV station operations and minimize the cost of regulatory compliance with regard to operating schedules and minimum hours of operation. The LPTV or TV translator operator will be influenced by 2 factors to govern hours of operation issues. The first is the viewing public who may become frustrated if the hours are too few. Secondly the primary DTV station from whom the translator operator must obtain written consent to rebroadcast their signal. If there is a problem with the hours of operation, the translator operator might be unable to obtain written consent and be compelled to pursue another course of action. Thus the Commission should let the marketplace decide and not adopt minimum daily and/or weekly hours of operation for digital LPTV and TV translator stations.

In the matter of unattended operation in paragraph 84, there does not appear to be any significant technical differences for remotely controlling analog and digital transmitters/translators that would make it necessary the Commission to consider changing its current requirements.

I support the proposal in paragraph 87 that DTV broadcast stations or other program suppliers be permitted to identify the translator or LPTV stations that retransmit their signals. This will keep things simple for the LPTV or TV translator operator.

Station identification as addressed in paragraphs 88, 89 and 90 is another very complicated issue. There appears at this time to be no simple answer or one that will effectively minimize the financial impact on LPTV and TV translator stations. Operators may be compelled to invest in some sort of digital service multiplexer or PSIP generator to identify their station. Perhaps further field study is in order taking into account the ease of off air identification of a digital LPTV or TV translator station and the reaction of the viewing public to various means of station identification.

I support the conclusion in paragraph 97 of placing a high priority on facilitating the digital transition of existing LPTV and TV translator service. Existing stations should be given the initial opportunity to further the DTV transition in their communities before providing digital station opportunities to non-incumbents.

I believe marketplace forces will be the best facilitators of the end of the DTV transition as considered in paragraph 115. The best trigger-based mechanism for LPTV and TV translator stations to cease analog service will be when all Full Service television stations have completed the transition and have terminated analog service. Presumably, on this occasion, the viewing public will be eager to receive DTV signals from all over the air sources available to them. LPTV and TV translator operators will be compelled to offer digital only services at this time and are likely to complete their conversion well in advance of this time since many operators depend on Full Service television stations and their written consent for their content.

Signal booster stations as presented in paragraph 121 should not be permitted to deliver programming to communities or areas located beyond the protected area of the station whose signal is being retransmitted. Allowing this would come dangerously close to creating a "gray area" in defining a digital booster as opposed to a digital translator. Providing coverage outside a Full Service television station's coverage area should always remain the domain of TV translator stations.

Under section *H. Remaining Issues* paragraph 123 with regard to call sign formats, I see NO compelling reason for any LPTV or TV translator station either analog or digital to have a unique call sign in the sense of adding a "-LP" a "-CA" or any other suffix. The viewing public has multi-channel off air, cable TV and satellite delivered services many of which look more like air traffic control shorthand when identified by simple 3 letter designations such as CNN, TBN, TNN, TLC, etc. The tradition and fascination of

broadcast call signs makes no difference to the viewing public. Also it's a weak argument that the industry will run out of call signs. Even if one considers that all television broadcast stations of any kind use either a "K" or "W" as their first call letter, there remains 17,576 possible permutations for 4 letter call signs using the English alphabet. I would submit that the viewing public could care less about where their preferred programming is coming from and unique 4 letter call signs beginning with "K" or "W" would only be effective in assisting the FCC in identifying individual Full Service TV, LPTV, TV translator or TV booster stations.

Digital LPTV and TV translator stations should be authorized to use television broadcast auxiliary service ("BAS") spectrum to operate in a similar manor to which they may be authorized in today's analog service as expressed in paragraph 126. Rulemaking would be simple if BAS eligibility, provisions, bands and purposes were applied to digital LPTV and TV translator stations, making these stations subject to the BAS rules governing digital operations.

Finally, a particular digital service contour would be more appropriate with regard to defining the area for locally produced programming of digital Class A stations as asked in paragraph 127 of this NPRM. This paragraph contrasts this thought with using the predicted analog Grade B contours to define the area in which a program could be produced to be considered "locally produced programming" for Class A stations. Setting a digital rule with an analog premise is like walking through a door yet keeping one foot

outside. If we are committed to a digital transition for over the air broadcast television then all of the considerations for digital definitions should be in the "digital" domain.

Let me say thank you to the Federal Communications Commission for addressing the issues of digital LPTV and TV translator stations now through this quite in depth Notice of Proposed Rulemaking.

I appreciate this opportunity to express some comments. I have not addressed all of the concerns expressed in the NPRM, only the ones I thought would greatly effect the way our company will need to deal with the transition and operations in the digital domain.

Respectfully submitted,

Stephen J. Hendrix