

**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 Low Power Television and Television Translator Stations)	MB Docket No. 03-185
)	
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions)	GN Docket No. 12-268
)	
Amendment of Part 15 of the Commission's Rules to Eliminate the Analog Tuner Requirement)	ET Docket No. 14-175
)	
)	

To the Commission:

**Formal Comments of Nikolaus E. Leggett, Licensed Radio Operator, Inventor, and
Analyst**

I am a certified electronics technician and an Extra Class amateur radio operator (call sign N3NL). I hold an FCC General Radiotelephone Operator License with a Ship Radar Endorsement. I am an inventor holding three U.S. Patents. My latest patent is a wireless bus for digital devices and computers (U.S. Patent # 6,771,935). I have a Master of Arts degree in Political Science from the Johns Hopkins University. My studies included public administration, constitutional law and judicial behavior, and American political parties.

I am one of the original petitioners for the establishment of the Low Power FM (LPFM) radio broadcasting service (RM-9208 July 7, 1997 subsequently included in MM Docket 99-25).

I am also one of the petitioners in the docket to establish a low power radio service on the AM broadcast band (RM-11287). I have filed a total of over 200 formal comments with the FCC over the years since the 1970s. I have filed comments with other Federal agencies as well including the USPTO, FAA, FERC, EPA, and the TSA.

Extending the Digital Transition Date

I am in favor of the Commission's proposed extension of the digital transition date for low power television (LPTV) and TV translator stations. This extension should be at least for several years in duration. This would allow some of the LPTV stations and their viewers to continue to take advantage of analog television.

Analog television has the advantage of not being constrained by the digital cliff effect. An analog television signal degrades gradually into a snowy but usable form as the signal gets weaker. In contrast, a digital television signal has a high quality image until the image suddenly breaks up because the signal is too weak to be processed (the cliff effect). Refer to reference One.

Rural and mountain people can receive analog TV signals in environments where a broadcast digital TV signal cannot be received at all. I have traveled a lot in the Southern Appalachians and seen the numerous valleys where digital service is just not practical without the expenditure of an enormous amount of money for numerous line-of-sight digital repeaters.

By extending the transition date, some of the analog service can be retained for these people. By the way, the cliff effect is not just a problem for mountain and rural people. My sister lives in Long Island City, N.Y. and has trouble receiving the full-power digital TV stations due to the cliff effect in her local area.

An Engineering Error

It is likely that the Commission's embracing digital technology and dismissing the value of analog technology was an engineering error of a major degree. One of the consequences of this error is that people of moderate means who live in unfavorable locations are blocked from receiving broadcast television.

I hope that the Commission avoids this type of error in the future by extending this conversion date, and by refraining from requiring radio broadcasting to be all digital.

Respectfully submitted,

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Reference One: Article on the cliff effect in the Wikipedia encyclopedia.