POSSIBLE POWER CEILINGS FOR "TWO TIERED SYSTEM"

HUMAN POPULATION DENSITY (Per sq. mi.)	**(Figures rounded to the nearest 1,000)** **TIER ONE: Neighborhood**	**TIER TWO: Community**	Examples of This Density
3,000-10,000 +	**1w/50 feet** 3,000-11,000 +	**10w/50 feet** 14,000-45,000 +	10K = Wash., DC 3K = DC Area Av.
1,000-3,000	**10w/50 feet** 5,000-14,000	**10w/100 feet** 15,000-46,000	1K = Gr. Falls, VA
500-1,000	**10w/50 feet** 2,000-5,000	**100w/100 feet** 19,000-39,000	.5K = App. MD Av.
		(Audience below falls beneath 15,000-person minimum at 117/sq.mi.)	.12K = App. TN Av.
100-500	**10w/100 feet** 2,000-8,000	**100w/328 feet** 13,000-64,000	.1K = App. USA Av. (Lower 48) App. LA Av.
50-100: ALL TIER ONE	**100w/328 feet** 6,000-13,000		.05K = App. OK Av.
20-50: ALL TIER ONE	**100w/328 feet** 3,000-6,000		.02K = App. UT Av.
(Audience below falls beneath 2,000-person minimum at 15/square mile)			.013K = App. ID Av.*
1-20: ALL TIER ONE	**100w/328 feet** 129-3,000	**	.001K = App. AK Av.

* States with population density averaging roughly 20/sq.mi. or less: NB (22), UT (21), ID (13), NM (12), ND (10), SD (9), NV (9), MT (6), WY (5) and AK (1).

** At **250 watts,** 328 feet = 206-4,000. Falls below 2,000 at 9/sq.mi. (SD, NV av.)

Don Schellhardt

CHART V:
POSSIBLE POWER CEILINGS FOR "SINGLE TIER" SYSTEM

Chart V is a companion document to Chart IV. It shows how geographically adjusted power ceilings could be incorporated into a "Single Tier" system of microradio regulation.

Chart IV, in contrast, indicates how geographically adjusted power ceilings could be incorporated into the "Two Tiered System" (as set forth by the RM-9208 Reply Comments by the RM-9208 Petitioners). The proposal creates two microradio groups: Neighborhood Stations and Community Stations, with the difference based on transmission range PLUS lower regulation tied to lower wattage. Chart IV preserves this basic structure -- but shifts to: (a) varying power ceilings, which are (b) derived by calculating how to keep all microstation audiences inside -- or at least close to -- a desired size range. This is an option for the FCC's consideration, NOT a proposal.

Chart V pursues the same objective but embodies a Single Tier System which may be administratively simpler for the FCC (although, in the process, it may sacrifice some of the potential diversity in re-legalized microradio). Like Chart IV, it is simply an **option.**

Since column 1 of Chart IV already shows what eliminating Tier Two would do, while column 2 of Chart IV already shows what eliminating Tier One would do, Chart V uses **a single, MID-range option** for setting a target range of microradio audience sizes. In Chart IV, target ranges are 2,000-15,000 (Neighborhood Stations) and 15,000-100,000 (Community Stations). The target range in Chart V is 10,000-50,000.

Whether the FCC adopts Two Tiers or a Single Tier, and whether the highest rural power is 100 watts or 250 watts, adjustments for population density are highly advisable.

(1) Lower wattage in high population areas takes advantage of an "upside" to spectrum congestion. That is, conventional broadcasters are threatened most by microradio in high population areas, where the spectrum is most crowded. However, the spectrum is most crowded here BECAUSE this is where the biggest audiences are! THUS, microstations don't need to find (or create) a "100 watt hole in the spectrum" to survive in a city like Washington OR a suburb like Fairfax. They may be able to "make it" on 10 watts -- which makes it easier to make room for them.

(2) In areas with relatively low (or even moderate) population density, unused spectrum can almost always be found (and more can be created quickly by replacing FM translator stations with locally based microradio). It is a mystery why the NAB is opposed to even modest microradio in these areas, given that they have abandoned so much of the spectrum here -- BUT it is certainly clear, from reading Charts IV and V, why conventional radio stations have concentrated so heavily in the largest metropolitan areas. From Utah to the Washington area, for example, the jumps in audience size are dramatic! Unfortunately, the same PATTERN OF UNDER-SERVICE TO RURAL AREAS could also develop with microradio IF power ceilings are made uniform while population density is allowed to vary greatly. The availability of much higher power ceilings in low population areas -- with the prospect of a SOMEWHAT uniform audience size, regardless of location -- will "equalize" the current geographical incentives to some extent. Hopefully, a more geographically "efficient" distribution of radio stations will be the result.

POSSIBLE "SINGLE TIER" POWER CEILINGS
Targeted Microradio Audience Size = 10,000-50,000

(Figures rounded to the nearest 1,000)

HUMAN POPULATION DENSITY (Per sq. mi.)	**POWER CEILING AND AUDIENCE SIZE**	Examples of This Density
10,000 +	**10w/50 feet** 45,000 +	10K = Wash., DC
3,000-10,000	**10w/50 feet** 14,000-45,000	3K = DC Area Av.
1,000-3,000	**10w/100 feet** 15,000-46,000	1K = Great Falls, VA
500-1,000	**100w/100 feet** 19,000-39,000	.5K = App. MD Av.
100-500	**100w/328 feet** 13,000-64,000	.1K = App. USA Av. (Lower 48) App. LA Av.
	(Audience falls below 10,000-person minimum at 77/sq. mi.)	.77K = App. MO Av. *
50-100	6,000-13,000	.05K = App. OK Av.
20-50	3,000-6,000	.02K = App. UT Av.
1-20	129-3,000	.001K = App. AK Av.

* States with population density averaging roughly 77/sq. mi. or less: MO (75), WA (67), TX (64), VT (59), MS (57), MN (54), IA (52), OK (51), AR (46), ME (38), CO (34), KS (30), AZ (29), OR (28), NB (22), UT (21), ID (13), NM (12), ND (10), SD (9), NV (9), MT (6), WY (5) and AK (1). (24 states) At **250 watts,** 328 feet for areas of <100/sq. mi., audiences do not fall below minimum until 49/sq.mi. (Arkansas and 15 other states).

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Chart IV considers how this approach might be implemented within the "Two Tiered System" presented by the RM-9208 Petitioners in their RM-9208 Reply Comments. Chart V shows how the same approach might be integrated with a "Single Tier".

In either case, the "downside" of moderately amplified complexity is more than offset by the advantages. An explanatory notation in Chart V stresses these benefits:

Whether the FCC adopts Two Tiers or a Single Tier, and whether the highest rural power is 100 watts or 250 watts, adjustments for population density are highly advisable.

(1) Lower wattage in high population areas takes advantage of an "upside" to spectrum congestion. That is, conventional broadcasters are threatened most by microradio in high population areas, where the spectrum is most crowded. However, the spectrum is most crowded here BECAUSE this is where the biggest audiences are! THUS, microstations don't need to find (or create) a "100 watt hole in the spectrum" to survive in a city like Washington or a suburb like Fairfax. They may be able to "make it" on 10 watts -- which makes it easier to make room for them.

(2) In areas with relatively low (or even moderate) population density, unused spectrum can almost always be found (and more can be created quickly by replacing FM translator stations with locally based microradio). It is a mystery why the NAB is opposed to even modest microradio in these areas, given that they have abandoned so much of the spectrum here -- BUT it is certainly clear, from reading Charts IV and V, why conventional radio stations have concentrated so heavily in the largest metropolitan areas. From Utah to the Washington area, for example, the jumps in audience size are dramatic! Unfortunately, the same PATTERN OF UNDER-SERVICE TO RURAL AREAS could also develop with microradio IF power ceilings are made uniform while population density is allowed to vary greatly. The availability of much higher power ceilings in low population areas -- with the prospect of a SOMEWHAT uniform audience size, regardless of location -- will "equalize" the current geographical incentives to some extent. Hopefully, a more geographically "efficient" distribution of radio stations will be the result.

Hypothetical Nature of Charts II, IV, V and VI

Before moving on to other topics, let me stress again the hypothetical nature of the various Charts on audience size as a function of wattage and population density. Chart III presents only raw data: the others, however, are possible policy options that I am raising for consideration -- but am not proposing.

Explanatory notations on the Charts themselves stress the same point. "This is an option for the FCC's consideration, NOT a proposal," says one. "These particular target ranges," says another Chart notation, "are intended to be illustrative -- NOT definitive."

These disclaimers are stressed because there are major questions which would have to be answered before the Commission could intelligently adopt any of these proposals.

(a) How much audience is enough? Multiplying broadcast coverage areas by human density per square mile can tell you the size of the potential residential audience for a licensed microstation. It cannot tell you, however, what share of this potential audience a microstation might have a reasonable chance of attaining. Nor can it tell you how market share might vary from urban areas to rural areas: in the latter case, the natural urban area advantage in audience size might be partly offset by reduced competition and resulting boosts in market share.

CHART VI:
THE INTERACTION OF WATTAGE AND POPULATION
At 100 Watts

This Chart shows how the potential residential audience for a radio station can vary dramatically -- even as power levels are held constant at **100 watts.**

Chart II provides a comparable study of power ceilings that are uniform at 10 watts.

See the other Charts for background information on data sources and methodology.

(Figures rounded to the nearest 1,000)

HUMAN POPULATION DENSITY	EST. POTENTIAL RESIDENTIAL AUDIENCE AT 100 WATTS: 50 feet	100 feet	328 feet
10,000 people per square (Just over the average for Washington, DC)	181,000	--	--
5,000 people per square mile (Approximate average for Arlington, VA)	94,000	--	--
3,000 people per square mile (Approximate average for Washington, DC AREA AS A WHOLE)	54,000	114,000	--
1,000 people per square mile (Approximate average for Great Falls, VA)	18,000	38,000	--
150 people per square mile (Approximate average for VA AS A WHOLE)	3,000	6,000	--
20 people per square mile (Approximate average for UTAH AS A WHOLE: (8 other states have a LOWER average)	<1,000	1,000	3,000

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August 11, 1998

Most important, perhaps, is the fact that the numbers alone cannot tell you what market share of what potential residential audience -- that is, what total listenership -- is needed to assure microstation sustainability. This requires judgment: NOT just multiplication and division. Information from those with actual experience and/or expertise in radio marketing -- especially microradio marketing -- would be very useful.

Consequently, the Commission should explicitly solicit public comments on this question when it issues its upcoming Notice of Proposed Rulemaking on microradio re-legalization.

(b) Will the NAB openly accept 10 watts? As indicated in the preceding pages, the NAB has "dropped a hint" that it might consider a compromise at 10 watts. However, a hint is not a proposal. Microradio advocates like me, who might be inspired to conduct intellectual exercises to explore the practical consequences of one possible compromise, would nevertheless be foolish indeed to make any policy commitments and/or counterproposals on the basis of a whisper of a wisp of a hint of a change in position by the NAB.

(c) What will the microbroadcasting community accept? Microbroadcasters are an independent, individualistic lot. In an era when "herd instincts" are far too powerful in far too many places, this independence and individualism resounds to their credit. However ...

It does complicate the task of forging a compromise -- if indeed a compromise is possible in the first place.

As a practical matter, the Commission should realize that any compromise may include only segments of the microbroadcasting community. Americans for Radio Diversity, the Community Radio Coalition, the Leggetts, myself and several others can be broadly cateorized as leaders in the moderate, entrepreneurial "wing" of the microradio movement. The Committee for Democratic Communications of the National Lawyers' Guild (with ties to Stephen Dunifer), Pete TriDish, Lorenzo Ervin, Frieda Werden and several others can be broadly categorized as leaders in the radical, "anti-profit" wing of the movement. Beyond these broad categorizations, however, the truth is that no microbroadcaster has been authorized or deputized to speak for any other microbroadcaster.

Thus, the FCC should realize that any compromise will likely win support from only some of the microradio movement. This may be enough, however, to make a compromise work.

(d) Will the Commission listen? It is true, of course, that the FCC is legally free to do whatever it wishes, without concern for the needs and aspirations of microbroadcasters. This is only true, however, in the short run.

If the Commission does not adopt some form of microradio re-legalization, or if microradio is re-legalized under

conditions which do not assure both a financially sufficient potential listenership and protection from corporate acquisition, then there will be "real world" consequences:

1. Constitutional challenges to the microradio ban will continue to gather momentum. Already, issues once raised as a defense against FCC-requested injunctions are now being raised in microstation-requested injunctions against the FCC. In short, some microbroadcasters are now on the legal offensive, moving from defense to counterattack. If Commission policies toward microradio are not made equitable and sustainable, these lawsuits will multiply -- until one of them finally comes before a judge who will declare the microradio ban unconstitutional.

At that point, the courts -- not the Commission -- will be deciding what to do about microradio. Thus, if the FCC uses its currently broad legal discretion for the purpose of inaction and/or inadequate action, the Commission could ultimately end up with no legal discretion at all.

2. The conversion of many unlicensed, unregulated stations into licensed, regulated stations -- a prospect which could save the overworked FCC a great amount of personpower -- will not occur on a substantial scale and/or will be reversed as newly licensed microstations realize that "the deck is stacked".

Most microstations will "go legit" if conditions are fair.

3. Unhappy microbroadcasters will "keep the pot boiling" in Congress. Just as 1998 marked the first year in which some microstations sought injunctions against the FCC, rather than the other way around, so 1998 also marked the first year in which individual microstation operators -- and, in many cases, their listeners! -- began to personally lobby their Senators and Representatives for microradio re-legalization.

Give them until next spring and they'll be "pros" at it.

In any event, these three "real world consequences" are virtually certain to follow inaction and/or inadequate action.

I have also considered other actions that could be undertaken if the Commission does not live up to the hopes it has aroused. These include the following:

4. Disgruntled station license applicants could sue the FCC for denying them a license under: (a) an unconstitutional statutory mandate that requires favoring the rich through the use of auction; and/or (b) an unconstitutional loosening of previous limits on corporate ownership in a geographical area.

To date, microstation requests for injunctions against the FCC have focused primarily on the Constitutionality of the microradio ban alone. Such, at least, is my understanding.

However, with the mighty Fourteenth Amendment ("equal protection of the laws") as an engine, the "outsiders" of radio could also challenge auctions and acquisitions in court.

It should be noted that any rejected applicant for a station license -- that is, any "low bidder(s)" -- could bring a Fourteenth Amendment lawsuit against the auction and acquisition system.

He, she or they would not have to be involved with microbroadcasting. A rejected applicant for a conventional radio station license could also sue -- and would likely have the resources for protracted litigation.

The relentlessly self-promoting Rodger Skinner, who really wants to own a conventional radio station but doesn't have the money to bid for it, comes to mind immediately as a potential plaintiff. Of course, this does not, by any means, exhaust the list of candidates.

5. Since the NAB vocally insists "The law is the Law" when it comes to enforcing the ban on microradio, NAB member stations could be given "a dose of their own medicine". The microradio movement -- which is low on money but rich in personpower -- could form volunteer "task forces" to monitor specific stations for any possible violations of FCC regulations. This could include careful monitoring of broadcasts -- most definitely including commercials! -- to verify absolute compliance with FCC mandates. It could also include inspections of all publicly available station records on operations and revenues, electronic spot checks of station wattage and so on.

A very wise saying arose, a century ago or more, along the frontiers of the American West.

The saying was this: "If you're ready to dish it out, you'd better be ready to take it."

Amen.

6. Microbroadcasters could start to probe how monolithic the NAB really is -- or isn't. Individual member companies of the NAB could be approached and asked, one by one, whether they are willing to openly accept microradio re-legalization, assuming mutually tolerable wattage limits and FCC mandates for avoidance of interference. Those companies which said "Yes" could be praised on the air by microbroadcasters -- and, of course, their regular advertisers could be praised as well. The opposite could be done for those who say "No".

These three "backup" tactics are not needed at this time -- when the Commission is considering re-legalization and the NAB may be seriously considering compromise. Let there be no doubt, however, that the microradio movement is visibly shifting from defense to offense. If necessary, the movement has the resources and the will to "carry the war to the enemy".

(e) Will microstations need larger audiences than they have now? Reportedly, most microstations run between 10 watts and 40 watts. This does not necessarily mean, however, that that this wattage is right for microradio after re-legalization.

Many present microstations (perhaps a majority) seem to be part time operations. With re-legalization, some or all part time microstations may be required to undertake full time operation. This could increase costs (perhaps dramatically), on top of the new costs of regulatory compliance. These stations will then need higher advertising and/or fund raising revenues, which means higher listenership, which means larger market share and/or a larger broadcast coverage area. The larger coverage area requires equipment upgrades and/or higher wattage.

This effect can be eased and/or prevented, in many cases, if the Commission adopts the RM-9208 Petitioners' proposal to allow voluntary time sharing of a single frequency by up to 6 different microstations. Another major step would be adopting at least the framework of the RM-9208 Petitioners' "Two Tiered System", where the lower-powered stations in Tier One are largely intended to accommodate time shared, part time operations.

(f) What is the impact of uniform power at 100 watts? Uniform wattage at 100 watts is the closest thing to a consensus on power that you can find in the microradio community. This is what a majority of the microradio community wants, but it may be too high in urban areas and yet too low in rural areas.

Chart VI is a counterpart to Chart II. Chart II shows the effect of uniformity at 10 watts, Chart VI the effect of uniformity at 100 watts. As noted before, a mix may be best.

Incorporation By Reference of Certain Filings By Kevin Lange, Thomas Desmond and Wolfgang Kurtz/Jerry Lansman

The remainder of these Reply Comments will focus on the concepts of "scarcity" and "efficiency": two terms which are often bandied about in debates over microradio. Unfortunately, "scarcity" and "efficiency" are used as "buzzwords" far more frequently than they are explained as concepts.

These Reply Comments will probe the economic (and, to some extent, the political) aspects of "scarcity" and "efficiency". Politics and economics are among the areas where my expertise, experience and inclinations are strongest.

Nevertheless, some very knowledgeable and articulate commenters in RM-9208 have directly and effectively addressed technological aspects of "scarcity" and "efficiency" in the radio broadcasting industry.

The insights and information they have shared could become a valuable part of the Biennial Review process and substance.

Therefore, I hereby incorporate by reference the following documents:

Written Comments of Kevin Lange in RM-9208/RM-9242;

Written Comments of Thomas Desmond in RM-9208/RM-9242;

and

Reply Comments of Wolfgang Kurtz and Jeremy Lansman in RM-9208/RM-9242.

WHAT IS "SCARCITY"?

I have seen scattered assertions that:

1. Regulation of radio is necessary only if there is a scarcity of available spectrum;

and

2. With universal use of auctions for licensing of radio stations, spectrum scarcity will be eliminated -- basically by definition -- because market forces will then be free to reach their own point of balance between supply and demand.

In response, the Leggetts and I said this in the RM-9208 Petitioners' Reply Comments (in RM-9208):

3. The U.S. Supreme Court's decision in the Red Lion case, which specifically cites "spectrum scarcity" as a Constitutional prerequisite for radio regulation, refers to the government's regulation of programming content -- that is, on-air speech -- rather than the government's inherent ability to regulate radio station business activity under the Commerce Clause of the Constitution;

and

4. The literal multiplication of radio licensing costs, following the onset of mandatory auctions, strongly suggests a price-inflating spectrum shortage (at least in the larger urban markets) rather than a price-dampening spectrum surplus.

(a) Inconsistent Use of the "Spectrum Scarcity" Argument. In addition to making points 3 and 4, above, the RM-9208 Petitioners also noted the inconsistent use of the "spectrum scarcity" argument by some commenters and observers. As at least one member of the Commission has observed, in public, some conventional broadcasters, and allies thereof, have called for continuation of the ban on microradio because, they say, there is not enough spectrum for even low-powered new stations. Simultaneously, the same interests claim that auctions, loose lids on market share and even total radio deregulation can be justified because competition is replacing regulation as a way to assure that the interests of consumers are protected. It is argued that competitive forces can work in the radio industry because there is now an abundance of spectrum.

This is, literally, "doublethink". In his novel, 1984, where he invented the term, George Orwell defined doublethink as "the ability to hold two contradictory ideas in one's mind at the same time, while believing equally in each".

That is certainly the case here! The only "loose fit" in the label is the fact that true doublethinkers must actually believe in the two contradictory ideas at the same time. It is doubtful whether this much sincerity can be credited in the current case, since the auction prices being bid for new stations hardly suggest an honest belief in spectrum abundance.

When established broadcasters vote with their dollars instead of their words, they believe in spectrum scarcity.

(b) Competition as a substitute for regulation. Even with wide open market entry and numerous suppliers of goods and services, plus market forces that are undistorted by either extensive government regulation or a scarcity problem, competition is not necessarily a substitute for government oversight when it comes to prtecting the individual consumer or the society as a whole.

The proof of this particular pudding is the Year 2000 problem, which threatens the nation's computers -- including, I presume, the Commission's computers.

The computer-oriented industries which produced this problem were marked by easy market entry, MANY suppliers (including many startups), intense competition, one of the lowest levels of government regulation in the United States -- and basic resources that were largely bounded by nothing more than the limits of human knowledge and imagination.

Yet, with all of these consumer choices and supplier resources and competitive pressures, no one apparently decided to compete by building a computer that would last past the twentieth century. "Herd instinct" and short term focus prevailed in spite of the intense competition -- and perhaps even because of it, since competitive pressures to

contain costs may have overshadowed competitive incentives to sell more computers by offering higher reliability.

In the end, it appears that various computer companies will have incurred thousands of dollars in potential legal liability -- perhaps more -- for every $1.00 they saved in production costs.

This is a cost/benefit ratio that the old Soviet Union would have considered inefficient.

The "moral of this story" is not that government regulation would have prevented this problem. No one but God knows that for sure. The lesson, rather, is that competition -- under conditions as close to "an unfettered free market" as any American industry is likely to get -- failed to prevent the problem.

This is not an argument against allowing market forces to have an impact. It is, rather, an argument against giving market forces a "blank check".

Unfortunately, some free market economists seem to have more blind faith in the marketplace than most people have in God.

(c) De-mystifying economists. Beneath the surface of the debate over spectrum scarcity, free market economists hold the key to an underlying -- though largely unarticulated -- debate over the very meaning of the word "scarcity".

To understand the differing meanings, you must enter the rarified world of these free market economists.

It should be stressed at the outset that not all economists are free market economists. John Maynard Keynes guided the federal government's fiscal policy, for better or for worse, in more than one Presidential Administration. Well into the 1960's, books on economic policy by John Kenneth Galbraith and Arthur Schlesinger, Jr. -- both vocal advocates of investments in America by its government -- were making the bestseller lists. Further, only a few years ago, Professor Lester Thurow of MIT won a Nobel Prize for work asserting the pivotal importance of public sector regulations and investments in promoting a nation's economic progress.

However, the NAB is not thinking of Lester Thurow when it quotes "economic theory". Nor are the Lester Thurows of the world quoted any more with much frequency, compared to free market economists, during publicly visible debates inside Congress, within many federal agencies and before the radio, television and print media.

It may not be a complete coincidence that public exposure to public sector economists has dwindled as the pervasive domination of media by megacorporations has grown.

In any case, free market economists are no longer mysterious for this writer and attorney. I have worked closely with such

economists during my 12 years as a Government Relations executive with the American Gas Association (AGA) in Arlington, Virginia. On subjects as varied and complex as deregulation of natural gas at the wellhead (that is, at the point of production), transformation of interstate gas pipelines from sellers of natural gas to carriers of natural gas, recovery of natural gas industry Research, Development and Demonstration costs through regulated pipeline and utility rates, marketing of combined cycle power generation turbines and commercialization of Natural Gas Vehicles and Electric Vehicles, my effective analysis and advocacy as a writer and an attorney required me to grasp as well the perspectives of marketers, technologists and -- most definitely! -- economists.

At AGA and its nearly 300 member companies, these were mostly free market economists.

I gained additional (albeit much more limited) exposure to both free market economists and public sector economists while I was a legislative aide in Congress, specializing in business regulation issues and national defense issues. Also, I worked from time to time with a public sector economist when I was a Public Relations Consultant to the Overseas Private Investment Corporation (OPIC) in Washington, D.C.

All of this has taught me an important lesson: There are far too many lawyer jokes and not nearly enough economist jokes.

Here is one contribution toward easing the shortage of economist jokes:

An economist and a "real world" businessman fell into a deep pit in the woods.

"Uh oh," said the businessman, eying the height of the walls and noticing the lack of natural handholds and legholds. "We may be stuck in here for a while."

With an air of confidence, the economist shook his head. "No problem," he pronounced. "First, we assume a ladder."

(d) "There are none so blind ... "

"As those who will not see."

Or, perhaps, those who see what isn't there.

The imaginary tale above illustrates how some free market economists actually think. Where scarcity might get in the way, scarcity is assumed away.

I remember, at one natural gas industry meeting, hearing this declaration by a man with a Ph.D in Economics:

"As long as prices are deregulated, there can never be a shortage of natural gas or anything else."

This man is now CEO of a large, diversified and aggressively acquisitive energy company. He still supports deregulation of everything -- and he is still mistaken.

At the time, I rubbed my eyes and toyed with the idea that he might really consider all resources to be infinitely elastic.

What he probably meant, however, was that deregulated prices in a shortage would quickly increase highly elastic supplies or ration relatively inelastic supplies by price.

The theory is that, in the midst of a shortage, those with the greatest need for a product or service will bid the the highest prices. Those who don't need the product or service as much will drop out of the bidding and shift to a substitute product or service.

That is the theory.

The reality is this: For certain products and services -- such as natural gas and radio -- there IS no substitute, or at least no substitute which is both quickly available and affordable, in the case of everyday consumers or everyday companies. They cannot switch: they must buy or do without.

Furthermore, the amounts bid in a shortage (or, for that matter, under more typical conditions) do not reflect the need for a product or service as much as they reflect the purchasing power of the highest bidders. During a natural gas shortage, with "rationing by price", millionaires in Aspen who heat their swimming pools in January can (and might!) bid more for that luxury than most people can bid to heat their homes. Likewise, in the world of radio, megacorporations which hardly need more stations in urban areas are bidding enough to gain licenses. Yet "dead air" haunts rural America, the area of greatest need.

Despite these flaws, the theory is the logic through which some free market economists state that, by definition, a spectrum shortage cannot occur in an auction-driven ("price-deregulated") radio marketplace. They echo my economist-turned-CEO friend who proclaimed that, by definition, there can never be another natural gas shortage now that wellhead prices are deregulated.

Such economists deal with the problem of unmet consumer needs by taking those who have such needs -- and making them invisible.

To the free market economists I have known, the absence of a "shortage" means -- basically -- that no one who can afford to buy a product has to go without it. Similarly, a lack of "surplus" means that no one who makes a product is lacking a buyer for all of the products produced. The ideal situation occurs when the marketplace reaches a "market clearing price" that establishes "market equilibrium". Market equilibrium is a flawless, usually unattainable point of ideal balance between supply and demand -- with no eligible buyers turned away for lack of inventory and no competent producers saddled with unsold goods or services.

The free market economists may be right that markets, with their relative speed and flexibility, can bring us closer to this ideal supply/demand balance than government policies can.

My question is: So what??

What's in it for The People??

From the perspective of the society as a whole -- that is, from the "public interest" perspective which the Commission is required by law to take -- what is the **VALUE** of an ideal balance between supply and demand if the people of a society do not benefit from this balance??

In some cases, of course, the benefits at stake are peripheral or even frivolous. For example, the largely unregulated market for BMWs seems close to "market equilibrium": that is, no one who can afford to buy a BMW has to go without one -- and the manufacturer of BMWs has only a small inventory of unsold cars. This happy picture, however, is not quite so happy if you consider those who want to buy a BMW but cannot afford one. Such people are not factored into the free market economists' criteria for measuring whether "scarcity" exists.

Still, in the case of BMWs, this major oversight does no real harm -- since owning a BMW is hardly crucial for the maintenance of anyone's life or liberty.

Problems arise for a society when people (and/or companies!) need something they can't afford, rather than just wanting it.

Look at the largely unregulated business of the global food supply. I did just that myself when I was a Public Relations Consultant to the Overseas Private Investment Corporation (OPIC). While there, I wrote most of OPIC's

Annual Report. That year's Annual Report focused closely on OPIC's role as insurer for dozens of agribusiness projects -- involving food production, food preservation, food transportation and food distribution -- throughout the world.

Then, as now, millions of people were dying around the world -- especially in Africa and Asia -- from malnutrition or even outright starvation. With a little research, however, I quickly established that the cause of this suffering was not a shortage of food in the absolute, physical sense. There was more than enough food being produced: in fact, farm prices were being depressed by a food surplus!

In some areas, I learned, people were starving due to inadequate infrastructure: insufficient roads for bringing Botswanese cattle to market, for example, or a lack of ice for refrigerating fish catches in Ghana. Food delivery was stalled.

In most cases, however, people were dying because they lacked enough money to buy enough food. The cost of growing food in developed nations, and then shipping it to developing nations, was too high to be recovered from the developing nation customers -- even if the food was sold "at cost" rather than being expected to earn a profit.

This same situation applies today. Eventually, an absolute, physical shortage of food may come to the world as the result of runaway human overpopulation -- perhaps assisted by other