C. Use of DBS Capacity.

With respect to alternative use restrictions on DBS capacity, the Commission has proposed a rule that would modify its former temporal requirements for DBS service on each transponder in favor of a broader measure of DBS capacity. Specifically, the Commission proposes that fifty percent of the total number of DBS channels that an operator is assigned at a given orbital location must be used to provide domestic DBS service. Within these limits, DBS operators would be permitted maximum flexibility to make "optimal use" of their DBS spectrum. The Notice also reminds potential and current DBS providers that other use restrictions apply to the DBS service, including the Cable Act's Section 25 public interest requirements and dedicated channel capacity for noncommercial, educational or informational programming.

DIRECTV supports the Commission's flexible approach with respect to the use of DBS spectrum, which will enable DBS providers to better tailor new program offerings to public demand. With respect to public interest requirements, DIRECTV has commented fully in the Commission's pending rulemaking to implement Section 25 of the Cable Act.[49] The Commission has noted that the constitutional status of this provision is on appeal in the D.C. Circuit.[50] In DIRECTV's view, the Commission should await the outcome of the appeal before taking further action in the docket.

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[49] See Comments of DIRECTV, Inc., MM Docket No. 93-25 (May 24, 1993); Reply Comments of DIRECTV, Inc. (July 14, 1993).

[50] See Daniels Cablevision, Inc. v. United States, 835 F. Supp. 1 (D.D.C. 1993), appeals pending sub nom. Time Warner Entertainment Co. v. FCC, No. 93-5349 (and consolidated cases) D.C. Cir.).

D. East/West Paired Assignments.

Under the Commission's Continental regime, the Commission determined that DBS channels would be assigned only in east/west pairs. The Commission's policy goal underlying this rule was to ensure that all DBS resources were used as intensely, and at that time, the feasibility of full-CONUS service had not yet been demonstrated.[51/]

DIRECTV agrees with the Commission's proposal to eliminate the east/west distinction, which no longer makes technical or policy sense. DIRECTV has proven that full-CONUS service is viable, and there will be several DBS providers offering it. Although DBS operators should be free to continue to respect and configure their systems according to paired assignments, there should be no longer be a Commission rule that mandates this practice. As the Commission acknowledges, this is particularly so since the western orbital locations may be usable for niche services to the western United States, and possibly even for international services to Pacific Rim countries. The Commission's proposal to allow the marketplace to determine the viability of service from non-paired channels is sound and should be adopted.

E. Service to Alaska and Hawaii.

The Commission has proposed to require service to Alaska and Hawaii for new permittees where it is technically feasible to do so, and to condition existing permittees' retention of their western orbital locations on such service.

DIRECTV supports the Commission's goal of including service to Alaska and Hawaii in any future plans for DBS service. In implementing these requirements, however, DIRECTV also urges the Commission not to impose overly restrictive service conditions. In

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51/ Notice at ¶ 64.

particular, DIRECTV notes that the Commission proposes a "technically feasible," and not an absolute "technically possible" standard. DIRECTV supports this approach, which presumably takes into account the weight and power resources needed to serve Alaska and Hawaii, the recognition that dish size may be somewhat larger in some portions of those areas, and the fact that, until altered, the technical characteristics of service to Alaska and Hawaii must be consistent with the technical imitations imposed by the Commission and the ITU.[52/] DIRECTV believes that these conditions are reasonable, and will facilitate the Commission's goals of bringing DBS more effectively to these important geographic regions.

F. License Term

The Commission's interim DBS rules provided for a five-year license term for DBS systems, although the Communications Act provides for a 10-year term for non-broadcast radio licenses.[53/]

As the Notice observes, DBS technology has now progressed to the point where DBS space stations may have useful lives in excess of ten years. Ten years is also the license term traditionally used for licensing space stations in the fixed-satellite service. DIRECTV believes that extending the license term to ten years for non-broadcast DBS satellites makes good sense, and agrees with the Commission that a longer license term should promote further investment and innovation in the DBS service.

52/ For example, DIRECTV's service to Alaska from 101° W.L. is constrained by signal strength limits over the Siberian peninsula to the west of Alaska.

53/ See 47 U.S.C. § 307(c).

V. AUCTION MECHANICS

The Commission has chosen to auction ACC's spectrum in two large 28- and 24-channel blocks corresponding to the 110° W.L. and 148° W.L. orbital positions. The license blocks would be auctioned sequentially in multiple rounds, with bids submitted via open outcry.[54/]

DIRECTV believes that all of the proposals in the Notice with respect to running such an auction sound reasonable, and should facilitate an efficient auction of ACC's channels, subject of course to DIRECTV's fundamental objections set forth above to the Commission's proposed spectrum aggregation limits. The choice of competitive bidding as a methodology will be wholly undermined if the universe of potential bidders is needlessly and arbitrarily constrained.

VI. CONCLUSION

DIRECTV urges the Commission to adopt the proposals set forth in the foregoing Comments. In particular, the Commission should allow DIRECTV and other independent DBS operators to participate in any upcoming auction for ACC's DBS channels, and should impose appropriate competitive safeguards with respect to the participation of cable-affiliated DBS entities as set forth above.

54/ Notice at ¶¶ 80-82.

Respectfully submitted,

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November 20, 1995

Statement of Professor Jerry A. Hausman

1. My name is Jerry A. Hausman. I am MacDonald Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139.

2. I received an A.B. degree from Brown University and a B.Phil. and D. Phil. (Ph.D.) in Economics from Oxford University where I was a Marshall Scholar. My academic and research specialties are econometrics, the use of statistical models and techniques on economic data, and microeconomics, the study of consumer behavior and the behavior of firms. I teach a course in "Competition in Telecommunications" to graduate students in economics and business at MIT each year. Service provision by cable providers, the introduction of new competition to cable providers, and competition with broadcast TV is one of the primary topics covered in the course. In December 1985, I received the John Bates Clark Award of the American Economic Association for the most "significant contributions to economics" by an economist under forty years of age. I have received numerous other academic and economic society awards. My curriculum vitae is included as Exhibit 1.

3. I have done significant amounts of research in the telecommunications industry. I have published numerous papers in academic journals and books about telecommunications. I have also edited two recent books on telecommunications, Future Competition in Telecommunications (Harvard Business School Press, 1989) and Globalization, Technology and Competition in Telecommunications (Harvard Business School Press, 1993).

4. I am familiar with the direct broadcast satellite (DBS) industry. I first did research on DBS in the early 1980's when I served as a consultant to Sears and Comsat on the commercial viability of DBS. I have continued to follow the industry since that time. I have also studied DBS and cable

competition in the United Kingdom and the prospect for DBS in Australia. After an extremely long period of development, DBS has finally reached the stage of technology where it may provide programming services to consumers which will allow it to succeed economically. I believe that DBS has the potential to be a long term competitor to cable television in the distribution of multichannel video programming. I previously submitted a Declaration to the Commission on behalf of DIRECTV regarding the competitive impacts of an assignment of Advanced Communication Corporation's construction authorization to Tempo/TCI.

I. Summary and Conclusions

5. Beginning with first principles, the Commission should recognize the fundamentally different economic environment created by the auction of ACC's DBS spectrum. The FCC should "let the market decide" who values the DBS spectrum the most. The FCC should only intervene in the auction if it believes that the outcome will lead to the exercise of market power. It should not engage in industrial policy or show favoritism to certain industry participants.

6. DIRECTV, or other holders of DBS spectrum authorizations, should be permitted to bid for the DBS spectrum formerly controlled by ACC. The correct market definition in which to assess the market is the relevant product market of multichannel video programming distributors (MVPDs). The MVPD market is currently dominated by cable providers. The economic structure of the MVPD market would not permit DIRECTV to exercise market power given the presence of cable TV providers, at least two other DBS providers, direct-to-home (DTH) providers like Primestar and TVRO distributors, as well as emerging technologies such as MMDS and Video Dialtone (VDT). DIRECTV's market share in the MVPD market is at most 1.5%. It could not exercise unilateral market power.

7. Vertical integration between cable providers and upstream content providers has previously led to anti-competitive outcomes, as recognized by both Congress and the FCC. With increased vertical integration between cable providers and multichannel content providers likely to occur, e.g. the proposed merger of Time-Warner and Turner Broadcasting, the Commission should continue to monitor the MVPD market and enforce rules which decrease the exercise of market power by integrated providers of cable TV and multichannel programming.

II. The Relevant Market Definition

8. The competitive consequences of the proposed acquisition of ACC's former DBS spectrum (or other DBS spectrum) should be considered in the relevant product market of multichannel video programming distributors (MVPDs). The MVPD market currently is dominated by cable providers exercising dominant market power. This market definition is identical to the market definition used by the Commission (FCC) in its recent 1994 "Competition Report" (1994 CR) on the status of competition in the market for the delivery of video programming as well as Congress in the 1992 Cable Act.[1] The market definition also follows from an application of the DOJ and FTC Horizontal Merger Guidelines (April 2, 1992) since a hypothetical (and actual) cable monopolist is able to increase prices above competitive levels. (Merger Guidelines, ¶ 1.0)[2] Indeed, the DOJ economists adopted this market definition when they applied the 1984 Merger Guidelines which are quite similar to the 1992 version.

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[1] U.S. Federal Communications Commission, CS Docket No. 94-48. In the Matter of Implementation of Section 19 of the Cable Television Consumer Protection and Competition Act of 1992. Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming. First Report, September 19, 1994.

[2] The Merger Guidelines define an "economically meaningful market" to be a market that could be subject to the exercise of market power. As I discuss below, wide agreement exists that cable TV operators have exercised significant market power.

9. Economists, government regulators, and Congress have concluded that cable operators have market power and have engaged in a variety of anti-competitive actions. In particular, authors of a number of articles published in economic journals, economists at both the U.S. Department of Justice (DOJ) and the Federal Trade Commission (FTC), my own economic analysis, and Congress have determined that cable operators' prices to consumers have reflected the exercise of market power--the ability to price above competitive levels for extended periods of time.[3] While over-the-air broadcasting and video cassettes do compete to some extent with cable programming, they are not close enough competition to hold down cable prices to competitive levels.

10. Cable TV was essentially deregulated (with respect to price and programming) during the period subsequent to the 1984 Cable Act until its recent (1992) re-regulation by Congress. During this period, cable TV operators exercised significant market power. The U.S. Congress determined that the average monthly cable rate increased almost 3 times as much as the Consumer Price Index during the period of deregulation. In response to this price increase, Congress passed the 1992 Cable Act which re-regulated cable rates.

11. The FCC recently determined that "for most households, cable television is the only provider of multichannel video programming. Cable systems continue to have substantial market power at the local distribution level." (1994 CR, ¶ 13)

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[3] According even to the National Cable Television Association, basic cable rates more than doubled from $9.20 in 1984 to $18.85 in 1992. (NCTA, Cable Television Developments, 6-A, June 1993) In real terms (adjusted for inflation), the price increase is approximately 50%. The real price for most telecommunications services decreased over this same period.

12. The FCC has adopted the MVPD market definition as the relevant market in which to do its competitive analysis. Within this market definition, the FCC has determined that cable operators, MMDS (Multichannel Multipoint Distribution Service), DBS, TVRO, VDT (Video DialTone provided by a telephone company), and SMATV (Satellite Master Antenna Television Systems) systems should be considered MVPDs. (1994 CR, ¶ 49) However, cable TV is by far the "dominant medium for providing consumers with multichannel video programming" as found by the FCC. (1994 CR, ¶ 201). Indeed, the 1994 penetration demonstrates that cable has approximately 94% of all subscribers to MVPDs. Thus, to date, the other MVPD services have not been successful in providing effective competition to cable TV. The FCC concluded, "At present, competitive rivalry in most local multichannel video programming distribution markets is largely, often totally insufficient to constrain the market power of incumbent cable systems." (1994 CR, ¶ 112)[4] Thus, cable continues to have market power, and the exercise of cable's market power is held in check, to some extent, by FCC regulation. However, as economists universally agree, competition is a far superior means to eliminate the potential exercise of market power than regulation. DBS has a potentially important role in providing this necessary competition.

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[4] A question may arise whether over the air broadcast signals can constrain the possible supra-competitive pricing by cable operators. The FCC decided in 1991 that in most circumstances that cable systems offer a "steadily-expanding complement of specialized program services" which consumers demand and for which broadcast networks do not offer effective competition. (1994 CR, ¶ 101) Broadcast television continues to lose viewers to cable TV. The most recent 1995 ratings for October 1995 demonstrate that basic cable continues to take away increasing amounts of viewership from free TV in the US. Compared to 1994, basic cable has gained 12.5% in terms of viewer share while the networks have lost 4.1%. For 1994 compared to 1993 cable gained 12.5% overall while free to air TV lost 4.3%. For the period 1991-1995 basic cable has gained 36.2%. Thus, the constraining power of broadcast on cable has been <u>decreasing</u> since 1991.

II. The Competitive Importance of DBS in the MVPD Market

13. Recent US experience has demonstrated the competitive importance of DBS in the MVPD market. The first competitor in DBS, DIRECTV (along with USSB), began service in June 1994. It operates three high-powered DBS satellites positioned at 101 degrees W.L. and offers approximately 175 channels of entertainment and information programming directly to homes and businesses equipped with DIRECTV DSS receiving systems, which features a satellite dish antenna 18 inches in diameter. DIRECTV covers the continental US and a large portion of Alaska.

14. DIRECTV has been quite successful. DIRECTV recently announced that it has reached 1,000,000 subscribers (New York Times, Nov. 2 1995, p. A17). While DIRECTV's subscribership is still quite small relative to Cable TV's customer level of 63 million subscribers, it has begun to show the potential to provide significant competition to cable.[5]

15. The competitive importance of DIRECTV is demonstrated by the estimate that about 50% of DIRECTV's subscribers are in areas passed by cable. Of that group, 2/3 were cable subscribers when they purchased their DSS antenna systems. Among these cable subscribers, approximately 60% canceled cable after subscribing to DIRECTV, with approximately the remaining 40% split about evenly between those who reduced their cable service level and households who made no changes to the cable service.[6] Thus, DBS in the US is a commercially successful service which may provide meaningful MVPD competition to cable TV.

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[5] See Comments of DIRECTV, Inc. to the Federal Communications Commission, CS Docket No. 95-61, submitted June 30, 1995.

[6] Id.

16. DBS is still of minor, but growing, competitive importance in the overall MVPD market. DIRECTV's 1 million subscribers is only 1.0-1.5% of the overall MVPD market. It is thus inconceivable that DIRECTV could exercise market power in the MVPD market with such a tiny share while facing competition from cable TV with its 94% share, at least two other DBS providers, Primestar, TVRO dealers, VDT, MMDS and other technologies.

III. The Fundamental Purpose of Auctions is To Let the Market Decide

17. I submitted one of the first declarations to the FCC encouraging a simultaneous auction for allocating spectrum to the Personal Communications Services (PCS). The economic basis for my recommendation for PCS auctions was "to let the market decide" who values the spectrum the most. The firm which has the highest economic value for the spectrum will bid the most and will win the auction. This outcome leads to the economically efficient outcome, and is superior to spectrum allocations by government regulators. The outcome of the PCS auctions has been a great success for the FCC to date.

A. Proposed Spectrum Restriction on DBS

18. Unfortunately, the NPRM on "Revision of Rules and Policies for the DBS Service" (Oct. 27, 1995) seems to have lost sight of the basic market-oriented rationale which support auctions. While the NPRM adopts a relevant market of MVPDs (¶ 34) and recognizes the differentiated product nature of competition between DBS and other MVPDs, it effectively proposes to limit spectrum aggregation by DBS providers to only a single full-CONUS orbital slot. (¶ 40) This proposed restriction does not make economic sense.

19. DIRECTV or other independent DBS providers may decide to purchase another full-CONUS orbital slot to expand their currently limited channel capacity. These additional channels would allow the DBS provider to provide additional programming offerings and more near "video on demand", in order to

allow the DBS provider to better compete with dominant cable providers, who may soon offer at least 500 channels (or even more) on hybrid fiber/coax systems currently under construction. If the value of the spectrum is higher for DIRECTV to provide this additional programming than for other bidders, DIRECTV should be permitted to be the high bidder and purchase the spectrum. The outcome follows the market oriented logic behind the use of competitive bidding to allocate spectrum.

B. DIRECTV Could Not Exercise Market Power in the MVPD Market

20. Under a market-oriented auction framework, the acquisition of the DBS spectrum by DIRECTV should only be prohibited if DIRECTV could exercise market power arising from the spectrum acquisition. Such an outcome is economically impossible.

21. First, cable TV now passes 96% of US households and approximately 50% of DIRECTV's subscribers are current or former cable subscribers. Cable providers are upgrading their networks and currently hold a 94% share of the MVPD market. The acquisition of additional spectrum will not increase the probability that DIRECTV will engage in coordinated interaction with cable TV providers. Given the difference in technologies and difference in products, as recognized by the NPRM, terms of coordination would be difficult to reach or to enforce. As a matter of economics, coordinated interaction is extremely unlikely in differentiated product markets.

22. The only other possibility of market power arising from the acquisition of ACC's spectrum would be the unilateral exercise of market power by DIRECTV. However, as discussed above, DIRECTV must compete with cable incumbents, other DBS and DTH providers, MMDS, and emerging VDT providers. The discussion in the DOJ and FTC Horizontal Merger Guidelines (MG, April 2, 1992) demonstrates that DIRECTV would not be able to exercise unilateral market power. As the MG state: "Substantial unilateral price elevation in a

market for differentiated products requires that there be a significant share of sales in the market accounted for by consumers who regard the products of the merging firms as their first and second choices, and that repositioning of the non-parties' product lines to replace the localized competition lost through the merger to be unlikely." (¶ 2.21) DIRECTV would not be able to exercise market power under this MG analysis because of the presence of a large and significant amount of MVPD competition.

23. The criteria of the MG for unilateral price increases following an acquisition would not be met if DIRECTV were the high bidder for ACC's DBS spectrum. First, DIRECTV does not have a "significant share of sales" compared to cable TV. DIRECTV's share of sales in the MVPD market is only 1.5%. More importantly, two other DBS providers will provide "DBS competition" and will be able to reposition their product lines to replace any localized competition which the acquisition would decrease. No barriers to expansion by these DBS providers will exist given the DBS technology, i.e. each DBS provider will have an infinite elasticity to supply additional customers. Thus, using the approach of the MG, DIRECTV could not exercise unilateral market power by increasing the price of its services above competitive levels or by decreasing the quality of its service offerings. Under these competitive conditions, no regulatory or antitrust reason exists to restrict DIRECTV's ability to bid for the additional spectrum.

24. The FCC should also recognize that the ability to bid is not a guarantee of a license. This factor is the most significant aspect of auctions as an allocation device. If DIRECTV is the high bidder for the DBS spectrum, it is because DIRECTV believes it can put the spectrum to the highest value use. Since the outcome will be pro-competitive, the Commission should not restrict DIRECTV's ability to purchase the spectrum. Otherwise, the Commission will decrease economic efficiency by placing restrictions on the market's ability to allocate scarce spectrum resources to their highest

value economic use. This anti-competitive regulatory outcome would be a very disappointing reversal of the Commission's recognition of the superiority of a market allocation, rather than a regulatory allocation, of the spectrum.

IV. Conduct Rules are Necessary to Constrain the Market Power of Cable Providers and their Affiliates

25. The NPRM discusses conduct-based rules to protect competition (¶ 55-56). Since the Commission intends to permit the dominant cable providers (with 94% of the market) to expand their ownership of DBS spectrum, such rules can decrease the ability of cable providers to engage in anti-competitive actions with respect to DBS. I agree with the Commission proposal to extend the Tempo II conditions to all DBS operators that are affiliated with cable operators. These marketing limitations of the NPRM (¶ 55) should be imposed in order to prohibit price discrimination by a cable-affiliated DBS provider. A prohibition on price discrimination would stop a DBS service controlled by cable providers from charging lower prices in non-cable regions and higher prices in cable regions where it would compete with existing cable services. A prohibition on price discrimination, through the extension of the Tempo II rules, would permit competitive DBS providers to enter the market and expand their services without facing a "below market" offering by the cable providers, which could create barriers to entry or expansion by existing or new DBS competitors.

26. The Commission's proposed prohibition on exclusive distribution rights (¶ 56) is also necessary to stop anti-competitive price discrimination. Otherwise, the rules against price discrimination can be evaded by an exclusive distribution agreement in geographical areas where the cable operator offers service. The price in the cable operator's service areas could be set at a level to limit competition with the cable service, while in other areas where the cable operator does not offer service, the

affiliated DBS operator's price could be set at much lower levels. The exclusive contract would allow the cable operator to exercise market power in its own geographical area, while the affiliated DBS operator's lower price in other areas would create a barrier to entry or expansion by competing DBS providers, who would find it more difficult to cover their incremental costs. The overall result would be decreased competition in the MVPD market.

27. More important, the Commission needs to maintain DBS competitors' access to programming (¶ 57-60). Because of the vertical integration of cable providers and cable programmers, anti-competitive actions by cable TV companies could damage severely the emerging MVPD competition. Since the Primestar partners control approximately 60% of cable subscribers nationwide (NPRM ¶ 57), they can and have in the past extracted concessions from unaffiliated programmers. The Commission currently presumptively or entirely forbids exclusive contracts between vertically integrated programmers and cable operators. It should further forbid the use of all exclusive contracts involving cable-affiliated DBS providers such as PRIMESTAR.[7] Thus, Tempo DBS, if it wins the DBS auction, would not be able to have an exclusive contract for DBS transmission of programming from either a cable-affiliated or unaffiliated programmer. By foreclosing its DBS competition from obtaining rights to such programming, Tempo DBS would otherwise decrease the attractiveness of their competitors' offerings. Since consumers typically buy MVPD services in a bundle, usually from a single provider (rather than buying a program at a time from a multitude of sellers) denying programming sources to their competition would be an effective anti-competitive strategy by cable operators. A Commission rule prohibiting this foreclosure strategy would lead to increased competition in the MVPD market. Otherwise, the cable companies could use their market power to force an unaffiliated programmer to provide exclusive rights for DBS transmission to Tempo DBS. From a public interest standpoint and from a competition standpoint, such an exclusivity outcome

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[7] The Commission raises this issue in ¶ 60.

would otherwise create unacceptable barriers to entry or expansion by DBS operators.

28. Next, cable-affiliated DBS should not be allowed to bundle their purchases of unaffiliated programming with their cable provider corporate affiliates.[8] Otherwise, the cable companies can exercise their monopsony power, which TCI has exercised in the past, to extract below market prices for their DBS affiliates' purchases of programming from non-affiliate programmers. Exercise of this market power will limit the ability of programmers to invest in new programming because of the lower economic returns they will receive from their new programming, will limit consumer choice by limiting the amount of new programming created because of the lower economic returns, and will create an anti-competitive situation in which unaffiliated DBS providers will find it difficult to compete because of the decreased amount of new programming which they can offer to potential subscribers.

29. Equivalent to prohibiting bundling, the Commission should attempt to stop cable-affiliated DBS providers from exercising the monopoly power of cable providers by acquiring programming in other ways. No tied deals or other discriminatory contract mechanisms to force a lower price should be allowed. The Commission should monitor carefully potential exercise of market power by the cable companies in the programming market as it affects competition from DBS providers in the MVPD market.

30. I believe that a prohibition on sharing proprietary information gained from another MVPD, e.g. future plans for programming from a DBS provider like DIRECTV, with a cable affiliated DBS competitor should also be enacted. Such a "Chinese Wall" would stop a cable company from using its upstream market power to gain information from a downstream competitor and

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[8] These additional suggested programming access rules are put forward in response to ¶ 60.

pass it on to its DBS affiliate. Without this prohibition on sharing proprietary information, MSO's will be able to use their market power to decrease innovation in marketing and programming from competing firms. If the MSO's affiliated provider gains advance notice of planned innovations, they will be able to devise business strategies to counter the attempted innovation. Thus, the advance notice will decrease the expected returns from the innovations and will decrease the economic incentive to undertake such innovations. This outcome would be anti-competitive and would harm consumers who would not benefit from such innovations.

31. I have no competitive concerns with the "Headend in the Sky" (HITS) as it affects DBS providers to the extent that it is efficiency enhancing.(¶ 61-62) However, I believe that any DBS provider should be permitted to use its spectrum to also provide an alternative to HITS. Again, the market logic of spectrum allocation should allow the most valuable use of the spectrum. Economic efficiency would increase if another DBS provider found it profitable to provide an alternative HITS. Small cable operators could also benefit from increased competition. Thus, if the Commission allows the use of DBS spectrum for HITS uses, the Commission should not have any restrictions on any DBS provider using its spectrum for a HITS or other related MVPD uses. However, the Commission should enact rules (similar to the programming access rules discussed above) that forbid anti-competitive actions by cable companies exercising their market power which would decrease the ability of a competitive DBS to compete in providing HITS service. Thus, rules against discrimination are necessary to stop cable operators from exercising their market power to decrease HITS competition from developing.

Nov 17, 1995

Jerry A. Hausman

November 1995

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1992-	John and Jennie S. MacDonald Professor
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Associate Editor, Bell Journal of Economics, 1974-1983
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Associate Editor, Econometrica, 1978-1987
Reviewer, Mathematical Reviews, 1978-1980
American Editor, Review of Economic Studies, 1979-82
Associate Editor, Journal of Public Economics, 1982-
Associate Editor, Journal of Applied Econometrics, 1985-1993
Member of MIT Center for Energy and Environmental Policy Research, 1973-
Research Associate, National Bureau of Economic Research, 1979-
Member, American Statistical Association Committee on Energy Statistics, 1981-1984
Special Witness (Master) for the Honorable John R. Bartels, U.S. District Court for the Eastern District of New York in Carter vs. Newsday, Inc., 1981-82
Member of Governor's Advisory Council (Massachusetts) for Revenue and Taxation, 1984-1992
Member, Committee on National Statistics, 1985-1990
Member, National Academy of Social Insurance, 1990-
Member, Committee to Revise U.S. Trade Statistics 1990-1992
Director, MIT Telecommunications Economics Research Program, 1988-
Board of Directors, Theseus Institute, France Telecom University, 1988-
Member, Conference on Income and Wealth, National Bureau of Economic Research, 1992-

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