

resulted in viewers turning off their televisions or watching less-preferred shows during the access period.¹⁰⁰ This loss is an economic cost to society because PTAR thereby lowered the well-being or welfare of those viewers. EI estimates the monetary value of that welfare loss at more than \$200 billion dollars.¹⁰¹

¹⁰⁰ See EI Study at 32-40.

¹⁰¹ See EI Study at 41. The notion of a welfare loss derives from the concept of "consumer surplus." Consumer surplus represents the dollar value that a consumer would pay for a good or service over and above the price he or she actually must pay to obtain that good or service. There is a consumer surplus on the part of broadcast television viewers even though the explicit price for viewing is zero. The surplus simply represents the dollars that the consumer would pay if the broadcaster could charge the consumer his maximum willingness-to-pay for that program. By denying viewers programs that they desire, society effectively loses that consumer surplus. If viewers can be induced to watch less-preferred programs, then a loss remains, albeit having been somewhat reduced by the dollar value of the consumer surplus of the viewer for the less-preferred program. Consumer surplus is a valuation technique that has frequently been used in economic analysis of the television industry. See, e.g., Owen and Wildman, *Video Economics* at 334 n. 8. See also Roger Noll, Merton Peck, and John McGowan, *Economic Aspects of Television Regulation*, App. A (1973). For a fuller explanation of consumer surplus, see F. M. Scherer and David Ross, *Industrial Market Structure and Economic Performance* 21-29 (1990).

EI's estimation method relies upon the study of viewer valuations of broadcast network and independent signals conducted in the late 1960s by Noll, Peck and McGowan, *supra*. Noll *et al.* constructed a model of viewer welfare based on a sample of cable systems in 1969. Using econometric techniques to estimate the model, Noll *et al.* concluded that the total consumer surplus associated with programs broadcast by network affiliates was larger than the total consumer surplus associated with programs broadcast by independent stations. Specifically, EI relied upon Table A-2 in Noll *et al.* showing that the total surplus associated with receiving signals from three network affiliates was equivalent to 5.07 percent of household total income while the total surplus associated with receiving signals from three independent broadcast stations was equivalent to 1.34 percent of total household income. The difference (3.73 percent of household income) between these two numbers represents, according to EI, the loss of welfare (consumer surplus) imposed on a household by being required to watch only independent broadcasts instead of network broadcasts. Multiplying this percentage by the value of network programming represented by the access period indicates that PTAR imposed a reduction of consumer surplus equal to 0.3 percent of total viewer income. Multiplying this figure by total television household income in 1971 results in a loss of \$2.5 billion per year. Adjusted for inflation, this amounts to \$8.5 billion in 1994 dollars. Multiplying \$8.5 billion times 25 years (the length of time PTAR has been in place) results in an estimated total welfare loss of more than \$200 billion. (See Appendix J of the EI Study for a full explanation of EI's calculation of the \$200 billion welfare loss.)

This estimate is somewhat problematic since it ignores increasing household income since 1971 (which would increase the size of the estimated loss). It also ignores the growth of cable networks which should serve to reduce the difference in valuation placed by households on network affiliate signals over independent signals (*i.e.*, as we've stated elsewhere, cable growth and other developments have significantly reduced any signal handicap associated with UHF independent signals).

44. PTAR proponents dispute this quantitative estimate. Indeed, the WW Study asserts that EI's estimated \$200 billion welfare loss is not statistically distinguishable from zero. We disagree with WW's statistical analysis and reject its conclusion.¹⁰² However, the WW Study also asserts that, because EI's analysis rested upon a twenty-five year old study, it suffers from a number of flaws, *e.g.*, it does not control for new market factors such as numerous and varied cable networks and widespread use of VCRs. Here, we agree with WW and are persuaded that the difference in viewers' valuations of affiliates programs and independents' programs are smaller now than in 1970. Indeed, one of the likely effects of growth in cable systems is to reduce viewers' valuations of over-the-air broadcast programming overall, thus tending to reduce the difference in viewers' valuations between affiliates' and independents' programs. Thus, we believe that the size of EI's estimated welfare loss, while not zero, is overstated. Whatever the correct figure is for the welfare losses due to PTAR, the Commission concludes that the economic costs of PTAR far exceed the rule's economic benefits.

45. We are persuaded that there are efficiency costs to retaining PTAR. PTAR does deprive the networks and their affiliates of the opportunity to take advantage of the efficiencies networks provide. The record does not provide reliable estimates of the size of the welfare loss to consumers due to PTAR. But it is safe to say that, by altering the normal functioning of the market, PTAR generally produces inefficiencies that impose significant costs on the consumer. This is particularly the case with respect to the off-network restriction. The logical connection between restricting the size of the market for network television programs as PTAR does and reduced investment (both quantitatively and qualitatively) in that programming is too clear to be ignored.

¹⁰² The EI Study bases its \$200 billion estimated welfare loss on differences in viewers' valuations of over-the-air signals from network affiliates and from independent stations using data from the late 1960s. Noll *et al.*, *supra*, estimate the value placed by viewers on three affiliates' signals at 5.07 percent of household income and, similarly, the value for three independents' signals at 1.34 percent of household income.

In their Reply Comments at 43, WW argue that, because the 95 percent confidence intervals for these two estimates overlap, we cannot be certain that there is any statistically significant difference between them. (The interval surrounding 5.07 percent runs from 2.61 to 7.41 percent while the interval for 1.34 percent runs from 0.16 to 2.80 percent.) Thus, according to WW, the EI Study's \$200 billion welfare loss is not statistically distinguishable from zero.

The Commission concludes that WW has provided some reason for skepticism about the size of EI's estimated welfare loss. However, WW's demonstration that the confidence intervals overlap, while instructive, is not compelling. First, WW's confidence intervals are approximate and not exact. (We do not know that the underlying random variables are normally distributed and the sample size of cable delivery systems used by Noll *et al.* is not very large.) Second, the extent of overlap is slight (0.19 percent) rather than substantial. Therefore, the underlying study by Noll *et al.* does provide reasonable evidence that viewers in the late 1960s placed a higher value on the networks' programming (provided through their affiliates) as compared to the value placed by viewers on programming broadcast by independent television stations.

VI. ANALYZING THE PUBLIC INTEREST NEED FOR PTAR

A. Increasing Opportunities for Independent Programmers

46. PTAR's principal purpose was to promote source diversity by strengthening existing independent producers and encouraging entry of new producers. From an economic perspective, the Commission anticipated that the decrease in supply of programming available to affiliates (caused by PTAR's ban on network and off-network programming) would provide independent producers greater access to the prime-time schedules of the Top 50 Market Affiliates. Thus, the Commission predicted that the rule would increase the net amount of diverse programming available to the viewing public and induce the entry of new program suppliers into the market.

47. A number of parties argue that PTAR has failed to promote these goals.¹⁰³ They point out that four companies -- Paramount, Warner Brothers, Fox, and King World -- distribute over 95 percent of the first-run syndicated programming aired during the PTAR access period. The first three are major Hollywood studios that have been major suppliers of prime time programming both before and after PTAR.¹⁰⁴ King World is a new entrant to the market since PTAR's adoption, and in fact is the leading supplier of access period first-run programming. But its two most popular programs -- *Wheel of Fortune* and *Jeopardy* -- got their start as *network* programs and then went into first-run syndication.¹⁰⁵ Putting aside the question of who *distributes* access period programming, opponents of the rule also argue that PTAR has failed to increase diversity in terms of who *produces* such programming. According to the EI Study, there are 38 percent fewer suppliers of prime time entertainment programs now than there were prior to PTAR.¹⁰⁶

¹⁰³ See NBC Comments at 13-19; EI Study at 59-63.

¹⁰⁴ These three studios accounted for 17.5 percent of the entertainment series programs supplied to the three networks during the 1969-70 season immediately prior to PTAR's adoption. They accounted for 21.7 percent of such programming during the 1993-94 season. Comments of NBC at 16 n.6; EI Study at 59-60, App. E; Coalition Comments, Fig. 2. Each of these companies has also started its own broadcast network. Comments of NBC at 15-16.

¹⁰⁵ See Comments of NBC at 17.

¹⁰⁶ EI Study at App. E; Comments of NBC at 19. The EI Study, at 92, defines suppliers -- or "packagers" -- as "the entity that assumed contractual responsibility to a network for production or delivery of a series." The ups and downs in the number of packagers of prime time programming, however, may very well be attributable more to the inherent riskiness of the program production industry than to any potential or actual anticompetitive effects of PTAR. For example, the number of packagers dropped to 26 in 1985-86 and rose to 35 in 1992-93. We also observe that the identity of packagers varies from year to year. This suggests that the list for any given year does not represent all program suppliers willing and able to sell programs to the networks. See *supra* note 73. We further note that, despite the "trend" seen by EI, the video programming market is not even moderately

48. Moreover, the rule has been criticized for actually lowering program quality and diversity. The Network Inquiry Special Staff commented in its 1980 report that PTAR "has failed to spawn network prime-time quality programs" such as the dramas, comedies, and documentaries provided by the networks to their affiliates during prime time.¹⁰⁷ Rather, the great majority of first-run syndicated programming during the access period is made up of game shows and news magazine shows.¹⁰⁸ Both these programming formats existed prior to PTAR and are available in other dayparts.¹⁰⁹ Most of these programs are also "stripped," *i.e.*, the same program airs each weekday night, with a different game, edition or episode shown each night.¹¹⁰ Two observers of the industry have recently stated that PTAR lowers program quality during the access period because it takes away "the tremendous economies of scale of networking whereby the network can spend more money to produce or acquire a program than a less widely distributed alternative and yet incur less cost per viewer in doing so. When one takes away the economies of scale, as does PTAR, one takes away the ability to create high-cost programming."¹¹¹

49. Without judging the quality of particular programs, we agree that PTAR, by eliminating network programming, may have resulted in the loss of efficiencies that the networks and their affiliates may have enjoyed in the absence of the rule. We note, however, that there are many variables that affect the number of program producers and program types in the market, with or without PTAR. It is also possible that the competitive advantage first-run producers gain in the access period from PTAR may help them finance first-run shows that air in other dayparts and thus leads to greater diversity in this respect.¹¹² In fact, the syndication market as a whole has produced an increasing number of new first-run programs,

concentrated. *See supra* Section IV.B.

¹⁰⁷ *Network Inquiry Study*, Vol. II at 737. *See also* FTC Staff Comments at 28.

¹⁰⁸ EI Study at 61. The following were the distributors and their first-run syndicated programs that aired on the Top 50 Market Affiliates in November 1994: King World - *Wheel of Fortune*, *Jeopardy*, *Inside Edition*, *American Journal*; Paramount - *Entertainment Tonight*, *Hard Copy*, *Price is Right*; Warner Brothers - *Extra*; Fox - *Current Affair*; and Genesis - *Real Stories Highway Patrol*. Coalition Comments at Exh. 2.

¹⁰⁹ EI Study at 61.

¹¹⁰ EI Study at 61.

¹¹¹ Krattenmaker & Powe, *Regulating Broadcast Programming* at 73. *See also National Ass'n of Indep. Television Producers & Distrib. v. FCC*, 516 F.2d at 533 ("[T]he degree of diversity in programming for access time has been disappointing.").

¹¹² *See* FTC Staff Comments at 28.

growing from 45 first-run syndicated programs sold in 1970 to 250 in 1990.¹¹³ Nevertheless, we recognize the limits of regulatory efforts to promote program diversity, and realize that PTAR prevents the use of network efficiencies during the access hour.

50. Mindful of these issues, we turn to the critical question of whether PTAR is necessary *today* as a means of promoting the growth of independent programmers and source diversity. In answering this question, it is important to remember that in adopting PTAR, the Commission cautioned that it was not its intention "to carve out a competition free haven for syndicators" or "to smooth the path for existing syndicators."¹¹⁴ Rather, the central objective of the rule was to provide "opportunity . . . for the competitive development of alternate sources of television programs."¹¹⁵

51. We no longer believe PTAR is necessary to provide this opportunity under today's market conditions. We reached a similar conclusion in eliminating the fin/syn rules' restriction on network acquisition of financial interest and syndication rights in network prime time entertainment programming. In reaching this conclusion, we dealt with the same source diversity concerns and stated that "[i]f profits are competitive, then the only reason to employ regulatory devices to protect producer profits is if we determined that, for some reason, the public required a greater array of producers than the market would normally bear."¹¹⁶ As in the fin/syn proceeding, "[n]o party . . . has provided any reasoned justification for such a result here."¹¹⁷

52. None of the networks (or their affiliates) appear to exercise undue market power in video programming distribution, in the video programming production market, or, on the basis of the evidence before us here, in the national television advertising markets. They no longer can be viewed as a "funnel" or "filter" through which all independent programming must pass. As described above in Section IV.B., the dramatic increase in alternative outlets -- independent stations, the Fox, WB, and UPN networks, cable networks, and other nonbroadcast outlets -- has greatly increased the market opportunities for program suppliers. Moreover, the networks compete vigorously with each other in purchasing independent programming for distribution to their affiliates. They acquire from outside producers over 75 percent of the entertainment programs they distribute to affiliates.¹¹⁸ The healthy demand for

¹¹³ *Notice*, 9 FCC Rcd at 6340.

¹¹⁴ *PTAR I*, 23 FCC 2d at 397.

¹¹⁵ *Id.*

¹¹⁶ *Fin/Syn Second R&O*, 8 FCC Rcd at 3302-03.

¹¹⁷ *Id.* at 3303.

¹¹⁸ Comments of NBC at 13-14; EI Study at 106, Table E-25.

programming created by all these competing outlets is demonstrated by the EI Study's identification of nearly 1,400 production companies producing shows that were either broadcast or carried on cable in 1994.¹¹⁹

53. Repeal of PTAR will subject suppliers of first-run syndicated programming to greater competition during the access period. A Top 50 Market Affiliate may, for example, decide to acquire the rights to broadcast an off-network program during this period, or demand that the first-run syndicator lower its price to induce the station to carry its programming rather than off-network fare. This competition in today's marketplace can provide incentives to provide more innovative, higher quality programming, all of which benefits the consumer.

54. Repeal of PTAR will also eliminate the costs generated by the rule, which we have described in Section V. Most importantly, prices for off-network programming will no longer be artificially constrained, which we expect will encourage investment in the production of network programming.

55. Proponents of the rule have not provided any evidence to support their claims that this competition will "destroy the market for first-run non-network syndicated programming."¹²⁰ To the contrary, the record indicates that first-run programming is quite popular. In 1994, 181 first-run syndicated programs were broadcast, and 18 of the 25 most popular syndicated programs were first-run.¹²¹ Satellite delivery is now available to non-network suppliers, reducing their distribution costs, previously a disadvantage compared to network distribution to affiliates. Indeed, we concluded in the fin/syn proceeding that "first-run increasingly is a fully comparable alternative to network distribution."¹²²

56. The record suggests that many Top 50 Market Affiliates may very well continue to broadcast first-run syndicated programming during the access hour even without PTAR. First-run programming often attracts larger audiences than off-network fare.¹²³ Indeed, a

¹¹⁹ EI Study at 24; *id.* at 107-24, App. F.

¹²⁰ INTV Reply Comments at 30.

¹²¹ Coalition Comments at 7.

¹²² *Fin/Syn Second R&O*, 8 FCC Rcd at 3306.

¹²³ For example, the LECG Study at 84, looked at the November 1993 ratings for markets 51-60, the largest non-PTAR markets. In those markets, the average rating for first-run programs was 12.4, compared to only 7.2 for off-network programs. In addition, according to data provided by INTV, in markets 1-100, on VHF affiliates, first-run syndicated programming in the access period in November 1993 had an average rating of 12.0 versus an average of 8.7 for off-network programs. Similarly, INTV asserts that off-network programs on UHF affiliates had an average rating of 5.2 versus a 9.6 rating for first-run programs. INTV Comments at 68 n.116.

number of the Top 50 Market Affiliates have recently made long-term commitments to renew first-run syndicated programming they presently carry even though they were aware of the Commission's review of PTAR.¹²⁴ The performance of programs that formerly aired on the Fox network (which are not subject to the off-network restriction) also indicates that first-run programming can compete against off-network programs. According to the Coalition, "only four of the stations in the Top 50 markets that purchased the successful off-Fox show *Married . . . With Children* were ABC, CBS or NBC affiliates. In total, only 13 stations in the Top 50 markets selected off-Fox shows."¹²⁵

57. In addition, first-run syndicated programming makes up 76 percent of all access hour syndicated programming broadcast by network affiliates in markets 51-100 which are not subject to PTAR.¹²⁶ This suggests that there will continue to be a healthy demand by network affiliates for first-run programming after the repeal of PTAR, including the top 50 markets. The LECG Study, however, argues that programming choices in non-PTAR markets cannot be used to predict the choices that would be made by the Top 50 Market Affiliates in the post-PTAR world because top 50 market purchases influence the choices in lower markets. According to LECG, first-run programming "may be more risky" because such programs "have the potential for higher ratings than off-network programs but they also have the potential for significantly lower ratings."¹²⁷ Based on this assertion, LECG claims that "[t]he decision to air a first run syndicated program in the top 50 markets makes the choice of this program by an affiliate in a smaller market less risky since the top 50 market sales establish nationwide viability."¹²⁸ LECG thus concludes that "it is wrong to assume that the pattern of carriage of programs on stations outside the top 50 markets can be used to predict post-PTAR clearances in all markets."¹²⁹

58. LECG is correct in that syndicated programs need to obtain clearances in a

¹²⁴ See Coalition Reply Comments at 9, stating that CapCities/ABC's owned stations have recently reaffirmed their commitment to license *Wheel of Fortune* and *Jeopardy* until 2000, and that three CBS-owned stations have renewed *Entertainment Tonight* through 1999.

¹²⁵ Coalition Reply Comments at 9-10.

¹²⁶ Coalition Reply Comments at 8 (citing Nielsen Station Index, Nov. 1994). According to the EI Study, at 47, Figure 13, first-run programming in non-PTAR markets accounted for 54 percent of access hours aired by the three network affiliates.

¹²⁷ LECG Study at 60.

¹²⁸ *Id.*

¹²⁹ *Id.* at 60.

number of the largest markets to be successfully syndicated.¹³⁰ But this does not mean we should discount completely the inferences that can be drawn from current buying patterns in non-PTAR markets. The success of first-run programs in these markets may have as much to do with factors other than PTAR's effect on the top-50 markets. As we have stated, and as LECG concedes, first-run programming often enjoys higher ratings than off-network shows. It may be more popular because it is, after all, new programming rather than reruns. Moreover, as the EI Study points out, first-run programming generally has lower overall production costs, allowing them to compete effectively against off-network programs even though the latter has recovered a portion of its production costs in the up-front market.¹³¹ We also note that a good number of syndicated programs have aired for quite some time and have established "nationwide viability," and thus would not face the problem LECG identifies even assuming it were valid.¹³²

59. To the extent off-network or network programming would displace first-run syndicated programs from the Top 50 Market Affiliates, first-run programs should be able to find a place on independent stations, not to mention other outlets such as cable.¹³³ In such an event, independent stations will have an incentive to air first-run programming to counter-program the affiliate's programming; an independent station will be motivated to air, for example, such programs as *Hard Copy* in response to the affiliate who shows reruns of *Cheers*. Indeed, many independents already broadcast first-run programs in prime time opposite network broadcasts; among non-Fox independent stations in the top-50 markets, 39 percent of prime time hours were first-run syndication.¹³⁴

60. A number of PTAR proponents, citing the LECG Study, argue that repeal of PTAR will harm viewers because network affiliates will substitute less-popular but more

¹³⁰ See *Second Fin/Syn R&O*, 8 FCC Rcd at 3327 (The success of first-run programs is contingent "on clearances by the most powerful stations in the top few markets, and . . . on clearances in a large number of markets throughout the country.").

¹³¹ According to EI, "[b]roadcasters are concerned with cost per ratings point. . . . In equilibrium, the supply of off-network and first-run syndicated programs should adjust so that marginal programs of each type cost the same per rating point." EI Supplementary Study at 34. See also *infra* ¶¶ 60-63.

¹³² Viacom attempts to discount the relevance of program choices in non-PTAR markets by arguing that first-run syndicators are able to price more "competitively" in markets 51-100 because they earn a substantial portion of their revenues in the Top 50 markets. Viacom Comments at 32. But it offers no evidence to quantify or even substantiate this claim.

¹³³ Proponents of the rule argue that independent UHF stations do not provide a sufficient alternative outlet because of the UHF signal disadvantage relative to VHF stations. See INTV Comments at 65. In Section VI.B.1, *infra*, however, we find that this disadvantage has been significantly reduced. To the extent it does exist, it does not justify continuation of PTAR.

¹³⁴ EI Study at 49-50.

profitable off-network programs for first-run shows. They argue that first-run syndicated programming is handicapped in competing with off-network programming because producers of first-run syndicated programs must recover all of their variable and development costs from the syndication market. In contrast, according to these parties, producers of off-network programs have already recovered much of their development costs through the first-run licensing fees they earn from the networks. Thus, off-network programs need only be priced to cover their variable costs and their unrecovered development costs. Affiliates will consequently replace more popular first-run syndicated programs with equally or less popular off-network programs because the latter result in greater profits because of their cost advantage.¹³⁵

61. We do not find this argument persuasive. As an initial matter, even assuming these parties are correct in their assertions, they have not identified a market failure or provided a justification for regulatory intervention. In a market economy, many goods do not get produced because the revenue they generate is insufficient to cover the costs of producing those goods.¹³⁶ In any event, the record indicates that the costs of off-network shows, including unrecovered production costs, and the costs of first-run syndicated programming are comparable. As EI points out, according to LECG's own data, the average off-network syndicated program has unrecovered production costs of approximately \$90,000 per episode.¹³⁷ This is comparable to the per-episode production costs of the average first-run syndicated program, which LECG estimates at \$70,000 to \$100,000 per episode.¹³⁸ The unrecovered production costs of off-network shows cannot be dismissed as "sunk costs," because producers have come to rely on off-network runs to recover the production deficits of these shows as well as failed network pilots and series and undoubtedly take them into account in deciding whether to produce a show in the first place. Moreover, the broadcast of off-network programming entails distribution costs as well as any residual payments and royalty costs that must be made when a show is successfully syndicated.¹³⁹ Thus, off-network shows do not appear to have any cost or profit advantage relative to first-run syndicated programming. We consequently find no evidence that first-run programming suffers an inherent disadvantage relative to off-network programming that requires continuation of PTAR.

62. WW's reply comments also take issue with LECG's conclusions concerning the

¹³⁵ INTV Comments at 47-51.

¹³⁶ See EI Supplementary Study at 33.

¹³⁷ *Id.*

¹³⁸ LECG Study at 64, 71.

¹³⁹ Coalition Reply Comments at 6-7.

advantage of off-network programs over first-run syndication.¹⁴⁰ First, they argue that LECG's economic theory is wrong. LECG's model assumes that program suppliers have only one buyer, a monopsonist. It also treats program sales by suppliers to broadcasters as one-time transactions. We agree with WW that neither of these assumptions by LECG is realistic. Relaxation of either assumption, argues WW, will result in equilibrium program prices that do not display an inherent cost advantage for off-network programs. WW shows, moreover, that even within LECG's static, monopsony framework, off-network distributors do not have an inherent cost disadvantage that would permit them to outbid first-run syndicators.

63. WW, in their reply comments, rebut LECG's argument by using the book publishing industry as an analogy.¹⁴¹ Expected revenues from new books must cover their development, production and distribution costs. Few new books are commercially successful. There is, of course, no PTAR-type rule in book publishing. Therefore, argues WW, according to LECG's theory, there should be a dearth of new book publishers or authors because they are unable to make money due to the many existing titles available as either new or used books. WW states that according to LECG's logic, this competition should hold book prices down to avoidable cost and make it impossible for new titles to recover their full costs; and asks how can one explain the thousands of new books written and published each year as well as the new book publishers entering the market each year.¹⁴² Just as a PTAR-type regulation is not necessary for book publishing, PTAR is no longer necessary to provide a competitive advantage to independent programmers for television.

B. Fostering the Growth of Independent Stations and New Networks

64. The Commission's central purpose in adopting PTAR in 1970 was to promote the growth of independent program producers. It expressed the view that this would in turn benefit both affiliated and independent stations. "[T]his modest action will provide a healthy impetus to the development of independent program sources, with concomitant benefits in an increased supply of programs for independent (and, indeed, affiliated) stations. The entire development of UHF should be benefited."¹⁴³ We conclude that today PTAR is no longer necessary to promote independent program sources. The record before us, as well as the decision in our fin/syn proceeding, shows that there is a healthy supply of independently produced programs available to the television industry.

65. Representatives of independent stations and one of the new networks, however,

¹⁴⁰ See WW Reply Comments at 12-16.

¹⁴¹ WW Reply Comments at 16.

¹⁴² See WW Reply Comments at 16.

¹⁴³ *PTAR I*, 23 FCC 2d at 395.

argue that PTAR continues to be necessary in providing independent stations with competitive advantages over competing network affiliates.¹⁴⁴ One advantage is that independent stations in the top-50 markets have access to lower priced off-network programming, since Top 50 Market Affiliates cannot air this programming during the access hour. Another advantage is that under PTAR these Affiliates cannot compete against independent stations by running network programming during this time period.

66. INTV credits PTAR with having promoted the growth of independent stations, most of which are located in the UHF band. It claims that "independent television service would deteriorate materially if the rule or the off-network provision were repealed."¹⁴⁵ Its comments focus primarily on the off-network provision, arguing that elimination of this aspect of the rule would force independent stations to pay more for off-network programming and possibly be outbid for it.¹⁴⁶ According to INTV, this would reduce the ratings and revenues of independent stations, which would in turn "undermine and reduce their abilities to provide public interest programming," including news and public affairs programming.¹⁴⁷

67. Viacom argues that PTAR is necessary for the further development of the two newest networks, UPN and WB. According to Viacom, without a strong base of independent stations "and the audiences they attract during the prime time access hour, the new networks will never become strong, competitive media voices in the broadcast marketplace."¹⁴⁸ WB and UPN were launched in January of this year, and are seeking to expand their programming schedules and affiliate base which is made up of primarily UHF stations. Viacom claims that "PTAR is vital to the financial health of UPN's independent station base, and may well mean the difference between economic viability and going dark for many of those UHF stations."¹⁴⁹ Both INTV and Viacom support their arguments by pointing to the LECG Study which asserts that the repeal of PTAR will result in a severe drop in ratings for independent stations in both the access period and the adjacent prime-time period. WB, the other "new network," did not submit comments in response to the *Notice* arguing that PTAR is necessary for the

¹⁴⁴ See, e.g., Comments of INTV, Viacom. See also Comments of MAP/PAW; SBA Chief Counsel. Viacom, through its subsidiary Paramount Pictures, holds a contingent ownership interest in UPN. Paramount is also the second largest distributor of access period first-run programming to the Top 50 Market Affiliates. See Coalition Comments, Exh. 2; FTC Staff Comments at 27.

¹⁴⁵ INTV Comments at 40.

¹⁴⁶ *Id.* at 51-54.

¹⁴⁷ *Id.* at 54-60.

¹⁴⁸ Viacom Comments at 3.

¹⁴⁹ *Id.* at 14.

success of the new networks.¹⁵⁰

68. ABC, CBS, and NBC, their affiliates, and the Coalition dispute these claims.¹⁵¹ They assert that independent stations and the new networks do not need the protections of PTAR, and that the rule merely provides an inequitable competitive advantage to these stations. In addition, Fox filed reply comments stating that, "[c]onsistent with its view that competition, rather than regulation, is the best servant of the public interest, [it] has no objection to repeal of the Prime Time Access Rule."¹⁵²

69. We have noted the importance of off-network programming to the access period ratings of independent stations.¹⁵³ But the record does not conclusively show that repeal of either the off-network provision or the network restriction of PTAR will undo the growth of independent stations since the rule was adopted. Nor will repeal of the rule likely undermine the development of new broadcast networks, or otherwise harm the Commission's outlet diversity goals.

70. The number of independent television stations has grown by almost 450 percent since PTAR was adopted, from 82 stations in 1970 to over 450 today.¹⁵⁴ We agree with INTV that "[n]o one may deny that independent television has grown and prospered since" adoption of the rule.¹⁵⁵ One of the questions before us is, however, what will happen to independent television in today's marketplace if PTAR is repealed. The record indicates that advances in television design, the growth of cable penetration, and the growth in demand for television advertising all have strengthened independent television. As noted, independents also have a robust supply of programming to turn to under today's market conditions. The repeal of PTAR is unlikely to threaten these advancements. Nor is there sufficient basis in

¹⁵⁰ MPAA, representing a number of companies including Warner Brothers, filed comments advocating the retention of the network restriction but expressly declined to address whether the off-network provision of the rule should be continued. MPAA Comments at 2 n.3.

¹⁵¹ The EI and WW Studies were submitted in support of this position.

¹⁵² Fox Reply Comments at 1.

¹⁵³ *Fin/Syn Second R&O*, 8 FCC Rcd at 8294 n.64. Moreover, the value to independent stations of popular off-network programming is not limited to the immediate effects during the time the particular program is aired. Rather, the proponents of PTAR have observed that success during the access period -- which is enhanced by airing popular off-network fare -- enables the station to carry over audience viewership into adjacent prime time hours. The Coalition argues, however, that certain first-run syndicated programming can provide this same carry-over effect given its high ratings. Coalition Reply Comments at 11; *see also* Viacom Comments at 23-26.

¹⁵⁴ *See supra* ¶ 27.

¹⁵⁵ INTV Comments at 22.

the record to conclude that repeal will so undermine the ratings and profits of independent stations that our outlet diversity goals will be implicated. It is likely that repeal of the rule will subject these stations to greater competition in acquiring off-network programming and in attracting audiences during the access hour and prime time. But there is not sufficient evidence in the record to support the claims that this competition will result in dramatic ratings declines and revenue losses to an extent that threatens the overall viability of independent stations and their ability to satisfy their public interest obligations. Relatedly, there is no reliable evidence to indicate that repeal of PTAR will jeopardize the station base of the new networks or threaten their further development.

71. We consequently conclude that PTAR is not warranted as a means of ensuring the growth of independent television stations or new networks. This is especially the case given the costs of the rule. The off-network provision discourages investment in network programming. Moreover, it is becoming increasingly inequitable to provide a competitive advantage to independent stations over network affiliates in today's marketplace. The networks and their affiliates, like independents, face growing competition from nonbroadcast media.

72. Having summarized our conclusion and the reasoning behind it, we now discuss our analysis in detail. We reached this conclusion by addressing three questions raised by the commenters: *First*, does the record show that the "UHF handicap" warrants affording independent stations a competitive advantage in the form of PTAR? *Second*, does the record demonstrate that PTAR is needed to support independent television stations' ratings and profitability and that repeal of PTAR would significantly harm outlet diversity? *Third*, does the record support the argument that the repeal of PTAR will frustrate the development of the new networks? We will discuss each question in turn.

1. *The UHF Handicap*

73. Proponents of the rule seek to justify PTAR by pointing to the signal reach disadvantage of UHF stations relative to VHF stations.¹⁵⁶ They maintain that this "UHF handicap" places independent stations at a structural disadvantage since most of them are in the UHF band. Affiliates of the three major networks are predominantly VHF stations.

74. Our review of the record, however, as well as Commission findings in other proceedings, leads us to conclude that the UHF handicap has been reduced to some extent. First, Congress and the Commission have taken a number of steps over the years to ameliorate this handicap by requiring television equipment improvements. The Commission itself noted earlier this year:

From a technical perspective, the ability of the UHF television service to

¹⁵⁶ See Viacom Comments at 9-11; INTV Comments at 23-25; INTV Reply Comments at 11-12.

compete against VHF service, however, has improved in the 24 years since the secondary affiliation rule was adopted. One major change occurred as a result of the Commission's invocation -- beginning in the 1970s -- of the authority it had been given under the All-Channel Receiver Act of 1962 to require not only that television receivers be capable of tuning comparability for VHF and UHF channels but that such television receivers provide a greater degree of tuning comparability for VHF and UHF channels. Pursuant to this authority, between 1970 and 1973, the Commission required television receivers to have more comparable tuning for UHF channels. In 1976, the Commission provided that any television receiver equipped with a VHF antenna must also have a UHF antenna, and in 1978 the Commission reduced the maximum allowable noise figure for television receivers. In 1982, the Commission modified the television all-channel requirements and recommended that information on improving UHF reception be disseminated to the public. Advances in television design and the role of cable carriage have decreased the gap between VHF and UHF stations. *These developments substantially alleviated the technical disadvantages faced by UHF television receivers . . .*¹⁵⁷ [Emphasis added.]

75. Second, the growth of cable has resulted in a reduction in the UHF handicap with respect to those viewers that subscribe to cable. The number of households subscribing to cable has grown from 4.5 million in 1970 to 60.5 million in 1994 -- 66.3 percent of U.S. television households.¹⁵⁸ As the Commission's Office of Plans and Policy has observed, ". . . the growth of cable made possible the expansion in the number of broadcast television stations by increasing the potential audience for UHF stations."¹⁵⁹ Indeed, the growth of independent stations over the years seems to track closely the growth in cable penetration.¹⁶⁰ Nonetheless, the disparity between UHF and VHF remains for a portion of the now approximately one-third of viewers that do not subscribe to cable.

76. The EI Study submitted in this proceeding provides further evidence that cable growth has significantly reduced the UHF handicap. EI argues that cable has eliminated the UHF signal disadvantage.¹⁶¹ The EI Study updates an earlier study conducted by R. E. Park

¹⁵⁷ See *Report and Order* in MM Docket No. 91-221, FCC 95-97, at ¶ 20 (March 7, 1995).

¹⁵⁸ These are Commission calculations based on information contained in the 1971/72 *Television & Cable Factbook* and the April 10, 1995 issue of *Broadcasting & Cable* at 89.

¹⁵⁹ See Florence Setzer & Jonathan Levy, "Broadcast Television in a Multichannel Marketplace," OPT Working Paper No. 26, 6 FCC Rcd 3996, 4012 (1991). See also FTC Staff Comments at 31-32.

¹⁶⁰ See EI Study, Figures 2 and 3, at 8 and 10.

¹⁶¹ See EI Study at 9, App. C at 83-88.

for the Commission in 1979. Park and the EI Study use a sample of cable systems in the Southeastern U. S. to test for the UHF handicap. Park used 1977/78 audience share data and found that VHF network affiliates had greater audience appeal than UHF independent stations. However, Park also found that UHF signals on cable had a much smaller handicap. EI replicates the Park study with data from 1993/94, finding that the handicap of UHF independents carried on cable has disappeared entirely. INTV challenges the conclusions drawn by the EI's study on a number of grounds, arguing that it suffers from selective sampling, anomalous results, and failure to distinguish between local and distant signals.¹⁶² After review of these arguments in Appendix B, we conclude that EI's study provides additional evidence that cable has reduced the UHF handicap.

77. We disagree with INTV that cable may not necessarily extend a UHF station's coverage to areas not already reached by the station's over-the-air signal. At present, local commercial broadcast stations generally are entitled to mandatory carriage on cable systems *throughout* their television market without regard to over-the-air signal coverage. Further, a broadcast station's inclusion within a particular television market is a reflection of where a station actually competes for viewers and revenues with other market-area stations.¹⁶³ Retention or repeal of PTAR does not alter the must-carry status of any station.

78. However, although cable has reduced the UHF handicap, we understand that it may still affect some portion of viewers who are not cable subscribers.¹⁶⁴ INTV argues that cable does not offset the UHF handicap for the one-third of viewers who are not cable subscribers. We think this may overstate somewhat the size of the broadcast audiences subject to any remaining UHF handicap. There are undoubtedly viewers who choose not to subscribe to cable because they can receive good quality over-the-air VHF and UHF signals and do not desire additional channels over cable. Indeed, as we have described, the number of viewers receiving good quality UHF signals has increased given non-cable factors such as improved receiver technology. We also note that cable penetration is quite high even among low-income viewers. According to the EI Study, at 8, "[i]n no income class is penetration less than 50 percent, except for those with incomes under \$10,000. Even for that group penetration is 46 percent." Thus, the number of viewers who both receive poor UHF signals *and* cannot afford cable appears to be relatively low.

¹⁶² See INTV Reply Comments at 8-12, Exh. 1 at 6-9.

¹⁶³ 47 C.F.R. § 76.55(e). See also *Report and Order* in MM Docket 92-259 (Broadcast Signal Carriage), 8 FCC Rcd 2965, 2975-78 (1993), *recon. granted on other grounds*, 9 FCC Rcd 6723 (1994). In this regard, the Commission is able to, among other things, add or subtract communities from a television station's market to better reflect marketplace conditions. *Id.* Moreover, any signal deficiency adversely affecting the provision of cable carriage where a station is entitled to such carriage may be overcome by the provision of an appropriate signal directly to the cable head-end, thus overcoming any signal disparity for cable viewers. 47 C.F.R. § 76.55(c)(3).

¹⁶⁴ See INTV Reply Comments, Exh. A at 7.

79. While the UHF disparity continues for some viewers, we do not think the public interest is served by tying PTAR to its complete elimination. The rule does not and cannot address the technical disparities that still exist between some stations. Moreover, the rule has never been tailored to the UHF/VHF distinction. Rather, PTAR provides a competitive advantage to independent stations by limiting the programming options available to Top 50 Market Affiliates, even in cases where the affected network affiliates are themselves UHF stations.¹⁶⁵ We do not believe this is appropriate given today's market conditions and the costs imposed by the rule. The handicap has been reduced. Affiliates, like independents, are facing increased competition in the television marketplace from non-broadcast sources. We thus conclude that the UHF handicap that remains does not warrant continuation of PTAR.

80. The Commission reached a similar conclusion in eliminating its UHF impact policy from consideration in licensing proceedings. Under this policy, applications to initiate or improve VHF service were considered contrary to the public interest if the proposals threatened adverse economic impact on existing or potential UHF stations.¹⁶⁶ The Commission found, in the context of licensing and allotment proceedings, that "the former disparities between the UHF and VHF services have been largely eliminated. This improvement has resulted from the continuing growth of the television market and Commission requirements for changes in television receiver designs that have reduced significantly the technical handicap of the UHF service."¹⁶⁷ The Commission further observed that "the UHF service has become, by and large, a healthy and profitable sector of the television industry. . . . The large increase in the number of UHF television stations since the adoption of the UHF impact policy attests to the competitive health of the service."¹⁶⁸ Given these findings, the Commission found that "it is no longer reasonable to assume that there is a public interest need to restrict competition" from VHF stations as a means of fostering the growth of UHF stations.¹⁶⁹

¹⁶⁵ In Detroit, for example, PTAR applies to the CBS's WGPR, a UHF station located on Channel 62, but not to the Fox affiliate, WJBK, a VHF station located on Channel 2. See Coalition Comments at 27-28. In general, PTAR applies to 20 UHF ABC, CBS, and NBC affiliates in the Top 50 PTAR Markets.

¹⁶⁶ *Report and Order* in MM Docket No. 87-68, 3 FCC Rcd 638 (1988), *clarified*, *Memorandum Opinion and Order* in MM Docket No. 87-68, 4 FCC Rcd 2276 (1989).

¹⁶⁷ *Id.* at 642.

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

2. *PTAR and the Ratings, Growth, and Profitability of Independent Television Stations*

81. *Introduction.* Proponents of PTAR argue that independent stations are generally newer to the industry and less profitable than network affiliates. They claim that PTAR has helped ameliorate these disadvantages and has resulted in the growth of independent stations. According to this argument, PTAR has increased substantially the audience shares of independent stations during the prime time access hour compared to what their shares would be given the absence (or repeal) of PTAR. Higher ratings in the prime time access period also carries over into higher ratings in the hour following the access period. These parties argue that, because the prime time hours are typically the hours that contribute disproportionately to station revenues and profits, independent stations have become far more profitable than they would have been absent PTAR. This profitability, in turn, has made them attractive as potential affiliates for the newly developing networks. Thus PTAR has operated as an indirect, albeit significant, cause of the development of these new networks. Repeal of PTAR, according to these parties, will severely reduce independent station ratings during access and prime time periods, resulting in a drop in their revenues. They claim this will in turn undermine their ability to provide public interest programming, possibly lead to some stations "going dark," and "stunt the development" of the UPN and WB networks.¹⁷⁰

82. These arguments are based on an infant industry rationale for PTAR. Infant industry arguments in the United States go back at least as far as Alexander Hamilton, and arose as a justification for protecting new domestic industry from established foreign competitors.¹⁷¹ The infant industry theory would argue that protection for entrants, *i.e.*, new firms, is needed so that they may be able to grow to a size sufficient to realize economies in their operations and, at that point, be able to compete with established firms. PTAR, by providing a competitive advantage to independent stations, promotes their growth, which in turn provides a stable station base for new networks. In other words, for any new broadcast networks to develop, there must be a base of successful independent stations.

83. We do not believe PTAR can be justified *today* on the basis of these infant industry arguments. Independent stations as a group can no longer be said to be in their infancy. Their numbers have grown dramatically in the 25 years since the adoption of PTAR. Their operations are, on average, profitable, and they have a ready supply of program sources. Moreover, the record indicates that much of the growth of independent stations may be unrelated to the rule. The increased demand for advertising appears to have contributed to the growth of independent stations.¹⁷² In addition, the reach of UHF signals has been extended by

¹⁷⁰ Viacom Comments at vi, 14.

¹⁷¹ See also Adam Smith, *The Wealth of Nations*, Chapter II, Book IV, The Modern Library, New York (1965).

¹⁷² See EI Supplementary Study at 12-13.

improvements in television transmitter and receiver equipment design.¹⁷³ Click stop channel selectors (as opposed to the floating UHF dial on older televisions) for the UHF band and, more recently, remote controls to select channels have also strengthened the competitive position of independent stations. Moreover, as stated in the FTC Staff's comments, at 32, "[i]n all likelihood, it has been the growth of cable, more than any other factor, that has facilitated the entry of new commercial television stations, and the formation of new advertiser-supported broadcast television networks, such as Fox."¹⁷⁴

84. A number of PTAR proponents point out that cable has two effects on UHF stations. It improves signal quality but it also subjects UHF stations to competition from the additional channels available to a viewer shifting from over-the-air reception to a cable delivery system. This argument implicitly concedes that the UHF signal disadvantage is eliminated for cable consumers. In any event this increased competition is the result of a greater number of distribution outlets, which is entirely consistent with the Commission's diversity goals. We do not think it justifies providing independent stations a competitive advantage *vis-a-vis* PTAR Top 50 Market Affiliates when the latter, along with the networks, face the same competitive pressures from cable.

85. The record does not support the assertion that the repeal of PTAR will reverse the trends that led to the growth of independent stations.¹⁷⁵ Nor is there sufficient support for the proposition that repeal of PTAR will significantly reduce independent stations' ratings and undermine these stations' profits as to affect their ability to provide public interest programming or otherwise implicate the Commission's outlet diversity concerns.

86. *The Impact of PTAR on Ratings and Station Growth.* Proponents of the rule rely on a regression analysis set forth in the LECG Study to support their claims regarding the importance of PTAR to independent stations. The LECG analysis attempts to demonstrate that the adoption of *each* of the two components of PTAR (the three hour network restriction and the off-network restriction) increased the ratings of independent stations.¹⁷⁶ The same analysis also seeks to show that repealing PTAR will result in a 58 percent drop in access period ratings and in a carry-over 67 percent drop in the ratings for the first (following) prime-time hour for independent television stations. The study examines three periods of time: (1) the pre-PTAR years, 1966 through 1970; (2) the immediate post-PTAR years, 1971

¹⁷³ See Harold L. Vogel, *Entertainment Industry Economics* 156 (1990).

¹⁷⁴ See EI Supplementary Study at 10-11. See also Owen and Wildman, *Video Economics* 180 (1992); Robert Crandall, *The Economic Case Against the FCC's Television Network Financial Interest and Syndication Rules*, at 38, Comments filed on June 14, 1990 in response to the *Notice of Proposed Rule Making* in MM Docket No. 90-162.

¹⁷⁵ See *infra* ¶ 88 and Appendix C.

¹⁷⁶ See LECG Study, at 50, Figure IV.1.

through 1976 and 1979; and (3) recent post-PTAR years, 1987 and 1993.

87. The LECG Study's regression analysis reached these conclusions:

- PTAR had a positive and significant effect upon the growth of the number of independent stations *in the long run*, revealing the effect somewhere between 5 to 15 years after PTAR implementation.¹⁷⁷
- PTAR had an immediate and continuing effect on independent stations' ratings, increasing them significantly. The increase was smaller in the largest markets. PTAR actually reduced independents' ratings in New York.¹⁷⁸
- The estimated equations can be used to predict the effects of the repeal of PTAR in the period from 1995-2004. They assume that each of the top 30 markets continues to grow in size to the same extent it did as over the 1966-1993 period, and that cable penetration by market grows as it did from 1973-1993.
 - For all programming periods, the repeal of PTAR will have a negative effect on the ratings of the average independent station in all markets over the 1995-2004 period. The size of the negative effect will vary over time and across markets, increasing in the smaller markets.
 - For the access period, the repeal of PTAR will have a negative impact upon average station ratings for all but the largest market, New York City (where independent station ratings will increase). The size of the negative impact increases in the smaller markets.
 - Because of the predicted effects of PTAR repeal on prime time ratings, and, LECG argues, because the access period generates a disproportionate share of total independent stations' profits, the repeal of PTAR will result in greatly reduced earnings for independent stations.¹⁷⁹

88. The WW and EI Studies are highly critical of the conclusions drawn by LECG's analysis and the methodology it used. We have reviewed the LECG Study carefully.

¹⁷⁷ See LECG Study at 54-55.

¹⁷⁸ See LECG Study at 51-55.

¹⁷⁹ See LECG Study at 48.

Cognizant of the resources required to conduct such a large-scale study, we nonetheless are concerned with certain problems in LECG's analysis:¹⁸⁰

■ LECG does not link its econometric model to an underlying conceptual model of behavior in the television industry. In other words, LECG does not provide a model that tells us how independents and affiliates would respond to changes in today's television marketplace. Without such a conceptual model, the econometric estimates of the equations in LECG's analysis cannot be linked to industry behavior so that Commission regulations such as PTAR can be analyzed. For example, if prices of off-network programming rise, would independents purchase less popular programming, or would they continue to purchase the same programming, albeit at higher prices? Without answering questions such as this, one cannot predict ratings changes.

■ LECG uses its historical analysis of the effects of PTAR (based largely on data from the 1970s) to predict the effects of repealing PTAR today. This approach ignores the problem of hysteresis.¹⁸¹ Even if factor A caused certain changes in the past, there is no guarantee that removal of factor A in the future will reverse those changes. Technologies, markets and regulations have changed considerably since 1970. There is no reason to believe, as LECG seems to, that removal of PTAR will return us to the three-network broadcast television world of 1970.¹⁸²

■ LECG's statistical methodology (the use of time trends) links changes in independent stations' ratings since 1970 to a single regulatory policy, PTAR. However, many non-PTAR changes in regulations have significantly ameliorated the UHF handicap. The Commission has discussed the numerous changes in regulations it has promulgated to reduce the UHF handicap. These changes are not included in LECG's model. As a consequence, we do not find the predictions of the model reliable.

¹⁸⁰ Appendix C provides a discussion, much of it highly technical, of additional problems which we have identified with the analysis.

¹⁸¹ *Webster's II New Riverside University Dictionary*, 1988, defines hysteresis as "[t]he failure of a property that has been altered by an external agent to return to its original value when the cause of the alteration is removed."

¹⁸² The largest of the new broadcast television networks, Fox, supports repeal of PTAR, suggesting that Fox does not believe that history will reverse itself. *See supra* paragraph 68.

■ There are errors and gaps in LECG's datasets.¹⁸³ For example, many of the independent stations included in the sample failed to meet Nielsen's minimum reporting standards and therefore exhibit *zero* reported ratings when their actual ratings were, while small, positive.¹⁸⁴

■ There seem to be problems with LECG's specification of its equations and their estimation. Application to a sample of network affiliates in some cases shows that PTAR had no effect on ratings and in other cases showed that PTAR raised affiliate ratings, thereby casting doubt on the econometric specification itself.¹⁸⁵

■ LECG's study reports point estimates for regression coefficients without confidence intervals, making it impossible to confirm that LECG's predicted ratings declines for independent stations are statistically distinguishable from zero.

89. As a result of these and other problems, discussed in Appendix C, we conclude that the LECG Study, and the arguments advanced by parties based on this study, do not provide sufficient evidence to demonstrate that repeal of PTAR will result in significant ratings declines for independent stations. For the same reasons, the study does not provide reliable evidence that PTAR has as a historical matter increased independent station ratings.¹⁸⁶ LECG's analysis simply interprets the decreased ratings differential between independent and affiliated stations as wholly due to the adoption of PTAR.¹⁸⁷ With respect to LECG's calculated drop in ratings differential, LECG does not adjust for any other potentially important variables such as the growth of cable, changes in advertising markets, changes in business activity, and other regulatory changes in the 1966-1976 period such as government

¹⁸³ See WW's Reply Comments at 24. WW alleges that stations are misclassified, Canadian stations are included when they are clearly not subject to PTAR, and data are missing for years and stations.

¹⁸⁴ See WW Reply Comments at 24-25.

¹⁸⁵ See WW Reply Comments at 30.

¹⁸⁶ According to LECG's analysis, the ratings differential between independent and affiliate stations fell by 4.94 points in 1971 (from 1970) and by 3.97 points in 1976 (from 1974). LECG attributes the former entirely to the impact of PTAR three-hour network restriction. LECG attributes the latter to the adoption of PTAR off-network restriction. LECG Study at 50, Fig. IV.1.

¹⁸⁷ See LECG Study at 50-52. LECG plots average aggregate ratings for each year in the 1966-1976 period in Figure IV.1 (at 50). They identify drops in rating differentials between independents and affiliates with the timing of the adoption of PTAR's two restrictions.

mandated improvements in television equipment design that ameliorated the UHF handicap.¹⁸⁸

90. Indeed, WW employed LECG's econometric model to provide evidence directly at odds with arguments advanced by the rule's proponents. In their reply comments, WW states that their re-analysis of the LECG Study's 1993 data in fact shows that the UHF handicap has been eliminated. When LECG's empirical analysis of the off-network restriction is adjusted to compare the effects of PTAR on established (or experienced) versus marginal (newer or younger) independent stations, WW finds that established stations in 1970 were the principal recipients of the benefits of PTAR. However, given the larger audiences made possible by current cable penetration, younger independent stations overcome initial rating problems and achieve any beneficial effects on ratings due to PTAR in less than three years of operation.¹⁸⁹ Even under the LECG model, therefore, according to the Coalition, independent stations have had, in the twenty-five years since PTAR, more than enough time to mature.¹⁹⁰

91. We further observe that while independent stations will be forced to pay competitive prices for off-network programming in the absence of PTAR, they will not necessarily be outbid for such programming.¹⁹¹ As noted, in markets 51-100, 76 percent of syndicated programs aired by network affiliates is first-run rather than off-network. Moreover, in 1993, two of the top five off-network programs broadcast in markets 51-100 were aired more often on independent stations than on affiliates.¹⁹² It is also unlikely that all network affiliates in a market will flock to off-network shows, given the incentive to counter-program with different program formats. In addition, in the event the networks and their affiliates opt to run network programming during the access hour, off-network fare will continue to be available to independents. Finally, in the event an off-network program is displaced from an independent station, the station can turn to first-run syndicated programming.¹⁹³ First-run programming can generate higher ratings than off-network shows,

¹⁸⁸ LECG argues that they tested for and rejected the importance of cable growth in their regression analysis. They made no such test in their Study at 50-52 regarding their examination of ratings differentials over the period 1966-1976 as displayed in Figure IV.1 at 50.

¹⁸⁹ See WW Reply Comments at 23, 30-31.

¹⁹⁰ See Coalition Reply Comments at 26-27.

¹⁹¹ See WW Reply Comments at 12-16.

¹⁹² Coalition Reply Comments at 20-21.

¹⁹³ We recognize that in the fin/syn proceeding we noted that "[w]e also accept the Independent Stations' contention that because of the high cost of first-run programming and the fact that first-run shows cannot be "stripped". . . , first-run material is not a viable alternative to the ratings appeal of popular off-network hits." *Fin/Syn MO&O*, 8 FCC Rcd at 8294, n.64. The record in this proceeding, however, is much more complete on this question than in the fin/syn proceeding. It indicates that

with associated carryover ratings benefits. Many independents air first-run programs in prime time today; for example, among non-Fox independent stations in the top-50 markets, 39 percent of prime time hours were first-run syndication.¹⁹⁴

92. We also note that the argument advanced in favor of giving a competitive advantage to independent stations, taken to its logical conclusion, would suggest that PTAR coverage be redefined so that it applies to *smaller*, and less financially secure, markets. Yet no party has proposed such a result. To the contrary, PTAR benefits appear to flow mainly to the stronger independent stations in the country. In fact, these stations generally have affiliated with one of the new networks or are part of a jointly owned station group. According to NBC, there is not a single independent station in the top 50 markets showing a top-five rated off-network program that is (1) a UHF station that is (2) not affiliated with Fox, UPN, or WB, and/or (3) not owned by a company owning three or more stations.¹⁹⁵ Thus, the impact of repeal of the rule may primarily be felt by the stronger independent stations. In addition, these stations participate in joint purchasing or production arrangements that may ameliorate some of the effects of PTAR's repeal on program prices.

93. *Growth in Numbers of Independents.* One of the reasons that the LECG Study and INTV claim as support for the proposition that repeal of PTAR will substantially hurt UHF independent stations is that the adoption of PTAR allegedly was responsible for significant growth in the number of independent stations, albeit not until 5-15 years later. However, EI shows that LECG's model can be used to demonstrate that PTAR is not responsible for the increase in the number of independent stations.¹⁹⁶ The reason that the parties can reach such contradictory conclusions is that LECG employs two different equations, one of logit form and one of linear form, to link PTAR adoption to growth in the number of independent stations.¹⁹⁷ EI shows that the linear form results in *reduced* numbers of independent stations for 31 years following the adoption of PTAR in 1970, until the number of independent stations increases in the 32nd year, the year 2002.¹⁹⁸ The logit form

first-run syndication does not necessarily suffer a cost disadvantage or a popularity disadvantage to off-network programming. Accordingly, the Commission now sees a considerably greater degree of economic substitutability between first-run and off-network programming.

¹⁹⁴ EI Study at 49-50.

¹⁹⁵ NBC Reply Comments at 13, Exh. A.

¹⁹⁶ See EI Supplementary Study at 6-10.

¹⁹⁷ See EI Supplementary Study at 9-10; LECG Study, Appendix D, Table D.3, at 47.

¹⁹⁸ The linear form relates the number of independent stations to PTAR's adoption as

$$-0.1T71 + 0.00319T71^2.$$

indicates that PTAR will result in an increase, consistent with LECG claims, in the number of independent stations after ten years. EI's explanation for the seemingly anomalous result that PTAR, in LECG's linear model, reduces the number of independent stations is that LECG's model includes meaningless variables and fails to include important ones, such as cable penetration and demand for advertising. EI argues that the latter two variables are likely to have influenced the entry of independent stations.¹⁹⁹ Thus, given the different results obtained by the logit and linear forms that LECG employed, we cannot conclude that PTAR's adoption caused a significant increase in the number of independent stations. Nor can we therefore conclude that PTAR's repeal will cause the large reduction in the number of independent stations claimed by the rule's proponents.

94. *The Impact of PTAR on Profits and Programming.* Even if we assume that LECG is correct in its prediction of a ratings decline for independent stations in the event PTAR is repealed, it has not demonstrated how that would affect independent stations and the future development of new networks. In particular, LECG has not provided any convincing estimate of how a decline in audience share during 1 or 2 hours of prime time, would lead to a large decline in station revenues and a resulting decline in station profits.

95. The LECG Study asserts that the profits of independent stations will drop and some independent stations will exit the market as a result of the repeal of PTAR. Surprisingly, however, it does not quantify the extent to which profits will drop if PTAR is repealed or estimate the number of stations that will exit.²⁰⁰ INTV reports the results of an "informal" survey of 40 independent stations indicating that 16 percent of independent station revenue comes from the prime time access period.²⁰¹ However, this "informal" survey does not appear to be a random survey. We therefore do not know if this revenue estimate is truly representative. Nor does INTV or the LECG Study relate these access period revenues to station profitability. Proponents of the rule have thus not provided any reliable basis to find that the profits of independent stations would decline significantly. More importantly, there is no credible evidence in the record to support these parties' claims that repeal of the rule will so affect the financial health of independent stations as to force stations off the air or undermine their ability to provide public interest programming, including news and other public affairs programming.

96. What the record does show is a generally healthy financial picture for independent

Solving for the number of years required to equate the negative effect of T71 with the positive effect of T71² yields 31.3 years. Thus, EI concludes that PTAR results in a decrease, compared to 1970, in the number of independent stations until 2002, thirty-two (32) years after PTAR adoption.

¹⁹⁹ See EI Supplementary Study at 10.

²⁰⁰ See the LECG Study at 56-57, n.29, and 93-95.

²⁰¹ See INTV Comments at 44.

stations. Profit data published by the National Association of Broadcasters ("NAB") indicate that the average independent station has generally been profitable, at least since the mid-1980s. The average UHF station has been profitable since 1992 after a number of unprofitable years through the 1980s.²⁰² This strong financial picture extends to the independent stations not affiliated with the largest of the new networks, Fox. These stations reported, on average, 1993 profits of four million dollars per station. UHF non-Fox affiliated independents reported average annual profits of \$1.5 million per station in 1993.²⁰³ Also, these average profits understate profitability in the largest markets, those to which PTAR applies.²⁰⁴

97. *Conclusions.* We thus conclude that PTAR is not necessary to provide independent stations a competitive advantage relative to the Top 50 Market Affiliates. Independent stations may face greater competition in programming the access hour without PTAR. But there is no reliable evidence that this will so jeopardize the financial health of independent stations as to implicate public interest concerns, particularly those relating to outlet diversity.

98. We also note that the application of PTAR has become increasingly overbroad and inequitable. Of the 278 "independent" stations in the PTAR Top 50 Markets, 54 derive no benefit from PTAR because they are foreign language, religious, or home shopping stations.²⁰⁵ Of the remaining 223 stations, 41 are VHF stations that cannot claim any signal disadvantage specifically warranting PTAR protection. (Indeed, these VHF independents appear to be on average financially stronger than affiliates of the three networks.²⁰⁶) Of the remaining 182 UHF independent stations, 32 are affiliated with or owned by Fox, which has developed as a strong fourth network. In addition, 43 of these remaining 150 independent

²⁰² Entry by 249 commercial UHF stations occurred between 1984 and 1992. This increased the total number of commercial UHF stations from 318 to 567, or by 78 percent. It is not surprising that these new and inexperienced stations would have likely lost money for some years and thereby lowered the overall average profitability for all UHF independents. See *Television & Cable Factbook*, Vol. 62 (Stations) at I-41 (1994).

²⁰³ NAB, *1993 Television Financial Report* 173 (1994).

²⁰⁴ See NAB, *1993 Television Financial Report*. Pre-tax profits for independent stations in all ADI Markets in 1992 averaged \$2.0 million. For ADI Markets 1-10, independents averaged \$7.4 million.

²⁰⁵ These Commission totals are based on data for 1994 taken from *Investing in Television: 1995 Market Report*.

²⁰⁶ EI Supplementary Study at 23 (independent VHF stations "have a higher cash flow than the average ABC, CBS or NBC affiliate in the top-50 markets"). EI bases this finding on data from Table A-12 of the EI Study, at 74, which in turn is drawn from NAB's 1994 Television Financial Report.