

**THE TYING OF MOBILE HOME SALES AND MOBILE HOME LOT RENTALS:  
DEFINING MARKETS AND ASSESSING PRODUCT SEPARABILITY**

**By:**

**Roger D. Colton  
Fisher, Sheehan & Colton  
Public Finance and General Economics (FSC)  
34 Warwick Road, Belmont, MA 02178  
617-484-0597 (phone) \*\*\* 617-484-0594 (FAX)  
rcolton101@aol.com (e-mail)**

**June 1998**

---

Fisher, Sheehan & Colton, Public Finance and General Economics (FSC) has reviewed the tying of mobile home sales to the rental of mobile home park lots/pads by LaPierre Enterprises *et al.* (hereafter collectively referred to as LaPierre). The purpose of this review is:

1. To define the relevant product market within which to evaluate the tying arrangements challenged by complainants;
2. To define the relevant geographic market within which to evaluate the tying arrangements challenged by complainants;
3. To assess whether mobile homes and mobile home park pads/lots are "separable" products, or whether they are inseparable and thus not subject to tying; and
4. To assess the market power of LaPierre within the confluence of the relevant product and geographic markets that are identified.

As part of this report, I have attached (as Appendix A) a vitae which includes a list of my publications as well as a list of federal and state judicial and administrative proceedings in which I have participated as an expert witness.

## **1 RELEVANT PRODUCT MARKET**

The relevant product market to use in this litigation involves new mobile homes sold for location in mobile home parks.

In seeking to identify the relevant product market, the broad empirical test I apply involves an inquiry into the extent to which, if at all, various products are functionally interchangeable. If products are *not* functionally interchangeable, they belong in separate product markets.

Even at this level of analysis, the extent of functional interchangeability frequently represents more of a conclusion than an identification of objective characteristics. The specific factors that I have used to assess the extent of functional interchangeability, therefore, include:

- o The end use for which the product is procured;
- o The differentials in costs amongst alternatives;
- o Whether alternative products serve distinct customers;
- o The extent to which there are physical similarities or dissimilarities;
- o Whether there is an industry recognition of alternative products as being in separate product markets; and
- o Whether price and demand interrelations exist showing an interchangeability between alternatives.

I have considered whether various housing alternatives are in the same product market as new mobile homes sold for location in mobile home parks. The product options I have considered include: (a) rental properties; (b) owner-occupied single family housing; (c) used mobile homes; and (d) condominiums.

In considering the empirical factors I have articulated above, I have reached the following conclusions based upon the following analysis:

### ***1.1 The end use for which a product is procured:***

When consumers search for housing, they search for more than a roof to put over their heads. Housing serves a variety of functions. In the

parlance of economics, the "end-use" of housing is not simply as shelter. To determine whether different types of housing are in the same "product market," therefore, it is necessary to take into consideration the various end-uses to which housing is devoted.

### **1.1.1 Mobile Homes vs. Renter-Occupied Housing**

Because renter-occupied housing and owner-occupied housing do not serve the same end-uses, they are not functionally interchangeable and thus are not in the same product market.

One end-use to which housing is devoted is as a "wealth accumulation" mechanism. As a consumer pays his or her housing costs over the years, the consumer builds an equity interest in the home. The equity interest can serve a variety of functions. It might serve as the stepping stone to a newer, larger, "nicer" home in the future. It might serve as a forced savings against which the consumer may draw in the future to finance higher education costs for children. It might serve as a forced savings against which the consumer may draw in the future to finance living expenses after retirement. Without an equity interest in the home, however, these end-uses cannot be met.

A second end-use to which housing is devoted is as a "wealth transfer" mechanism. This end-use is served in much the same fashion that wealth accumulation is, with a different purpose in mind. Rather than using the home as a means to generate "savings" for future personal use, the home is used as means to transfer wealth to the next generation. Through such a wealth transfer, the children of the consumer are provided an influx of capital upon the death of the consumer.

Aside from the end-uses to which housing is put relating to the value of the consumer's investment in the home, a third end-use for housing is as a place over which to exercise dominion interests. In law and economics, "property" can be viewed as a bundle of sticks representing the various "rights" which a consumer holds relative to the property. A renter, for example, has the right to occupy a housing unit for a term of years (recognizing that it may be months, or month-to-month, etc.). That consumer, for example, not only has the right to occupy the unit, but has the right to exclude others from occupancy. In a rental situation, however, the bundle of sticks is shared with the property owner. The owner, for example, has the power of alienability. The owner is likely even to have the right to control (or at least require prior approval of) the alienability of the sticks which the tenant holds (*e.g.*, the right to sub-let).

The owner of an owner-occupied housing unit has a much larger bundle of sticks. The right to sell the home is one such stick, as is the right to modify the home (either by adding fixtures to it; eliminating rooms or walls; remodelling bathrooms or kitchens; or even removing the home). This right to control is referred to as the consumer's dominion interest. One end-use served by owner-occupied housing is to provide the consumer with dominion over his or her housing unit (*e.g.*, "once I bought my home, for the first time, I could put a nail in the wall without

asking someone's permission").

These different end-uses to which housing is devoted help to demarcate product markets. A consumer who is in the market for a housing unit which can serve the end-uses of wealth accumulation, wealth transfer, or the exercise of dominion interests will not be in the market for rental housing. Because of the different end-uses to which rental housing is devoted, rental housing and owner-occupied housing represent different markets for housing. Because of these different end-uses, rental housing is not functionally interchangeable with owner-occupied housing.

Having concluded that rental housing and owner-occupied housing are separate markets, I will next turn to a determination of whether all types of owner-occupied housing are in the same product market. More specifically, I will assess whether mobile homes sold in parks are in the same product market as site-built owner-occupied housing. I will henceforth refer to site-built housing as "single family housing." By definition, I intend the term "single family housing" to refer exclusively to owner-occupied site-built homes (and, therefore, to exclude mobile homes) for purposes of my discussion below.

### *1.2 Differentials in cost amongst alternatives:*

One relevant factor that distinguishes product markets involves the differential in costs between two products. A substantial differential in cost can place different products into different markets. I have considered the difference in costs between single family homes and mobile homes. I have examined three types of housing costs: (1) monthly mortgage payments; (2) home purchase downpayments; and (3) operating costs (such as utilities).

One of the first steps in obtaining an owner-occupied home is to borrow the money to finance the purchase costs. Conventional mortgages require downpayments of from five percent (5%) to ten percent (10%) of the total purchase price. Acquiring sufficient funds to make a downpayment can be one of the most significant hurdles to homeownership. Because the cost of purchasing a mobile home is so much lower than the cost of purchasing single family housing, downpayments for mobile home sales are accordingly substantially lower as well. In 1990, the median home value for the State of Vermont was \$95,500. Accepting that value as a surrogate for housing sales, and escalating that at the rate of the increase in the Consumer Price Index (CPI-U) for shelter through 1996 yields a sale price of roughly \$115,000. In contrast, the 1996 average sale price for a mobile home in Vermont was \$39,600. The difference in costs would thus be as follows:

**Downpayment:** A five percent downpayment on a single family home would reach \$6,000 while a ten percent downpayment would reach \$12,000 for such a home. In contrast, the similar downpayments on a mobile home loan would reach \$1,980 and \$3,960.

**Monthly payment:** The monthly payment involves an additional step. For the mobile home monthly payment, in addition to the financing costs for the home itself, I have added the lot rental fees for a total monthly payment. Accordingly, the monthly costs would be as follows:

Relative Monthly Costs: Mobile Homes and Single Family Homes (Vermont)						
	Five percent downpayment			Ten percent downpayment		
	Financing	Lot	Total	Financing	Lot	Total
Single family	\$771			\$731		
Mobile home	\$266 /a/	\$197 /b/	\$463	\$252	\$197	\$449
/a/	Financing assumes constant interest rate and term for mobile home and single family home.					
/b/	Weighted lot rentals for Franklin County.					

The higher cost of single family homes is reflected, as well, in the amount of "product" that a consumer expenditure purchases. Not only do mobile homes have lower *overall* costs, but they have lower costs on a per square foot basis as well. 1<sup>vi</sup> presents a comparison of the cost per square foot of single and multi-section manufactured housing versus the cost per square foot of site built housing. 1 leads to the conclusion that consumers looking for lower cost housing can find such housing in mobile homes. Table 1 presents the data underlying 1. As can be seen, the cost per square foot of a single family home has, over a 15+ year period, run nearly twice the cost per square foot of a mobile home.

**Utility payments:** In addition to the financing costs (including lot rental payments), the cost of shelter includes a monthly payment for home utilities as well. Statewide data does not exist for utility expenditures in Vermont by housing type. However, the U.S. Department of Energy (DOE) reports home energy costs by housing type on a national and regional basis. The annual cost of utilities for single family homes is more than \$300 more on average than that for mobile homes. Utility costs are 20% higher for single family

<sup>vi</sup> All figures, and accompanying tables, are attached to the end of this report.

homes. According to the U.S. DOE information, average annual expenditures (1990 dollars escalated to 1996 using the CPI-U for home energy) for total energy would be as follows:

Annual Home Energy Bills by Mobile Home and Single Family Homes	
	Annual
Single family	\$1,843
Mobile home	\$1,511
<b>SOURCE:</b>	
U.S. Dept. of Energy, Energy Information Administration, <i>Household Energy Consumption and Expenditures, 1990, Regional Supplement</i> , Table 1 (New England region) (1993).	

**Summary:** In sum, the market for mobile homes is demarcated by the differential in costs represented by this type of housing. As can be seen from the data above, the downpayments for obtaining a mobile home in the first place makes the mobile home more accessible to consumers with limited incomes (*e.g.*, low-income consumers, fixed income older consumers). In addition, with mobile home monthly housing costs 40% below that of single family housing, and with mobile home monthly home energy bills 20% below that for single family housing, the costs of the two alternatives show that mobile homes and single family homes are not reasonably interchangeable.

### 1.3 *The existence of distinct customers:*

The markets for mobile homes and for single family homes are demarcated by differences in customers as well.

The mobile home market in Vermont, like the rest of the United States, serves the affordable housing market. Vermont's first mobile home park legislation in 1969 recognized this role when it stated that "mobile homes have provided a substantial amount of safe and sanitary new low cost housing, and most of the new housing available to moderate and low-income groups consists of mobile homes." (Verm. Stat. Ann., tit. 10, §§6201 - 6243 (1984 supp. and Supp. 1991) (legislative findings). This finding has been made not only for Vermont specifically, but

for mobile homes generally. Consider that:

- o In 1982, the President's Commission on Housing recognized that "manufactured housing is a significant source of affordable housing for American families, particularly first-time homebuyers, the elderly, and low and moderate-income families." (President's Commission on Housing, *The Report of the President's Commission on Housing* 85 (1982)).
- o More recently, in 1991, a report by the American Association of Retired Persons (AARP) found that mobile homes tend to serve lower income consumers. AARP found that "older residents of manufactured housing tend to have limited financial resources." Almost half have annual incomes below \$10,000 and 81 percent have annual incomes below \$20,000. "The median income of older manufactured home households was \$10,546 in 1987 --57 percent less than median national income (\$24,576) and 38 percent less than the median income of younger manufactured home residents (\$17,128)."

This national data mirrors the data in Vermont. Attached as Appendix B is a compilation of Census data --the most recent data available-- that looks at Vermont's mobile home residents compared to both single family home residents and to residents of all occupied housing in Vermont. Appendix B examines the differences between income and ratio of household income to the federal Poverty Level.

For purposes of making a determination of whether the distinct characteristics of mobile home residents puts mobile homes into a separate market, however, it is as important to determine whether mobile homes are *treated as though* differences exist as it is to determine whether differences *actually* exist. The fact that mobile homes are treated as though they are a market that is directed toward low and moderate income consumers in an "affordable housing" market is first evidenced by the Vermont legislative findings cited above.

Vermont routinely treats mobile homes as a product directed toward the affordable housing market. In the 1995 *Consolidated Plan for 1995* for the State of Vermont, the discussion of occupied mobile homes statewide was presented in the discussion of "affordable housing needs" in the sub-section labelled "low- and moderate-income households." Aside from the substance of the discussion, the very placement of the discussion indicates the recognition of mobile homes as serving low- and moderate-income consumers seeking affordable housing.

In addition, the Vermont *Consolidated Plan* cited goals for its "housing and community development strategy" which included the goals to: "retain the affordable housing stock; increase the availability of permanent housing that is affordable to low-income citizens without discrimination. . ." The *Consolidated Plan* then states that "the strategy and plan which follow identify the State of Vermont's most pressing housing and community development needs and the State's proposed activities in allocating HUD resources to meet those needs during the years 1995 - 1999." The *Consolidated Plan* states:

The over-arching principle which drives all of Vermont's efforts in affordable housing is to continue to strive to achieve perpetual affordability through the use of mechanisms which produce housing resources that remain affordable over time. This principle applies to all affordable housing priorities stated below: . . .address the preservation and production of mobile home parks, including infrastructure improvements and new site developments.

I conclude based upon the above discussion, including the data presented in Appendix B, that the distinct characteristics of mobile home residents in Vermont place mobile homes into a distinct product market. More narrowly, I conclude that the single family housing market and the mobile home markets are not the same, but rather are separate and distinct product markets.

#### ***1.4 Physical similarities and dissimilarities:***

The physical similarities and dissimilarities between alternative products can indicate whether or not products are functionally interchangeable and, as a result, in the same product market. The physical dissimilarities between mobile homes and single family homes place them in separate product markets.

##### **1.4.1 Single Family Homes**

The most distinctive difference between mobile homes and single family homes is the difference in the product purchased. The purchase of a single family home involves the purchase, in fee simple, of both the housing unit and the land on which the housing unit is located. Setting aside the special situation of use restrictions on land, or occupancy restrictions on buildings, the physical nature of the product is a unified whole. In contrast, the mobile home resident may own the actual mobile home, but he or she only *rents* the property. As a result, that resident not only is placed at risk of losing the right to continue to occupy that property at some point in the future, the mobile home tenant never does have the right to control the future price at which the property is offered for consumption. This distinctive physical dissimilarity, unto itself, leads me to the conclusion that mobile homes and single family homes are in separate product markets.

##### **1.4.2 Condominiums**

The physical dissimilarity between mobile homes and condominiums places them in separate product markets. Persons in the market for a mobile home are seeking detached dwelling units. Condominiums do not serve that market. Condominiums are, instead, multi-family dwelling units. People share walls and floors/ceilings. Because of these physical dissimilarities, condominiums and mobile homes are not functionally



interchangeable.

### **1.4.3 New Mobile Homes vs. Used Mobile Homes**

The physical (financial and legal) distinctions between products place new and used mobile homes in separate and distinct product markets. As discussed in detail above in a different context, when a mobile home is sold to a consumer, the consumer is being sold far more than roof over his or her head. With mobile homes in particular, one "thing" that is being sold (one strand in the bundle of sticks) is a warranty for a defect free home. When a mobile home is purchased with financing insured under 12 *U.S.C.* § 1703, HUD provides the consumer with a one-year mobile home warranty backed by the manufacturer. This warranty states that the home conforms to all HUD safety construction standards in effect at the time of construction and ensures that the home is free from defects in material and workmanship. The manufacturer is responsible for repair of defects not caused by abnormal usage or lack of proper maintenance. This warranty is in addition to all other rights that the purchaser may have.

In addition, the sale of new mobile homes is subject to the National Mobile Home Construction and Safety Standards Act of 1974. This Act provides minimum construction and safety standards for all new mobile homes, requires compliance certification, and requires manufacturers to repair or recall mobile homes in violation of these standards. Under the Act, every mobile home sold must be certified as in compliance with minimum construction standards. In addition, the manufacturer must comply with mobile home construction and safety standards, which encompass all equipment and installations in the design, construction, fire safety, plumbing, and heat producing and electrical systems of mobile homes intended to be used as dwelling units.

Finally, the purchase of a new mobile home is covered by the usual warranty provisions of Article 2 of the Uniform Commercial Code (UCC). As such, the usual UCC warranties are applicable, including express warranties and implied warranties of merchantability and fitness for a particular purpose.

Used mobile homes offer none of these protections.

The existence of warranties against defects in materials and workmanship is an important "thing" to be purchased by owners of mobile homes. Because of these additional protections that are purchased along with a new mobile home, but not with a used mobile home, a consumer (particularly a low- or moderate-income consumer) is purchasing a substantively different "product" when he or she purchases a new mobile home. In the case of mobile homes, used goods and new goods are in separate and distinct product markets.

### **1.5 Industry recognition of separate product markets:**

Aside from the housing industry, the financial services industry recognizes the mobile home market as a product market distinct from the single family housing market. Consider:

- o The home insurance industry recognizes mobile homes as a distinct market. Insurance providers do not uniformly provide housing insurance for mobile home owners. Indeed, some insurance providers do not provide mobile home insurance at all, while others specialize in mobile home insurance. That insurance which is provided is written specifically for mobile homes. A generic "homeowner's policy" is not written for owners of mobile homes. For example, windstorm protection is a risk that is generally included in mobile home policies that is *not* included in a homeowner's policy. Mobile home policies tend also to have specific provisions regarding, for example, the type of foundation used for the home, the spacing in a mobile home park, and the like.
- o The lending industry also recognizes mobile homes as a distinct market. As with insurance providers, some lenders do not make loans for mobile home purchases. Loans that *are* made for mobile home sales are not simple home mortgages. Loans for mobile home sales are a distinct lending product. They are generally made at interest rates that exceed the interest rates charged for single family homes. They are also made for terms that are less than single family home mortgages.

In addition, one distinction between mobile homes and single family homes is that mobile homes are not necessarily considered "real estate." Instead of receiving a "deed" for mobile homes, a consumer receives a "bill of sale." Instead of viewing the home as real property, the market views the mobile home as personal property. As a result, lenders frequently view the mobile home more as an automobile purchase than as a single family home purchase.

Based on the above observations, my ultimate conclusion is that mobile homes are recognized as a product market separate and distinct from the single family home market. The financing industry, as well as the insurance industry, both view the mobile home market as distinct from the single family home market.

### **1.6 Price and demand interrelationships:**

The price and supply of single family homes appears to have no impact on the demand for, or price of, housing units in the mobile home market. If mobile homes and single family homes were functionally interchangeable, as the price for Product A (single family homes)

increased, the demand for Product A would decrease and the demand for Product B (mobile homes) would increase as consumers substituted one product for the other. In this case, if single family homes and mobile homes were in the same product market, we would see this substitution effect. 2 compares the price and sales of "site built homes" and mobile homes for the years 1980 through 1996. In 2, the price of site built homes is set forth (in dollars) on Y<sub>2</sub>. The number of mobile home units sold is set forth on Y<sub>1</sub>. While the price of site built homes steadily increases over the 15-year period, the demand for mobile home substantially varied. The data underlying 2 are presented in Table 2.

The sales price of housing is but one factor in determining the total cost of housing to a consumer. One additional contributing factor to housing cost is the interest rate paid. Given the lower price of mobile homes, and thus the less capital intensive nature of a mobile home purchase, it should be expected that as interest rates increase, even if the price of site built homes remained the same or decreased, it would be possible to identify a switch from site built homes to mobile homes if those two products were in the same product market. As capital costs increase, the rational consumer would mitigate those costs by substituting an equivalent product of a less capital intensive nature. 3 shows, however, that no such relationship exists between mobile home sales and mortgage interest rates.

The impact of interest rates on single family home affordability is clearly not illusory or hypothetical. The U.S. Census Bureau periodically reports the "effects of changes in interest rates on affordability status of families and unrelated individuals" for different priced housing. In its most recent report (1993 data), the Census found that an increase in interest rates would have substantial impacts on reducing housing affordability nationwide. As interest rates increase from the current rate, millions fewer consumers would have the ability to afford the purchase of a median-priced home.

Effect of Interest Rates on Affordability Status of Families and Unrelated Individuals for a Median-Priced Home Using Conventional, Fixed-Rate 30-Year Financing		
Change in interest rate	Cannot Afford Median-Priced Home in Area (in thousands)	
	Number	Percent
Current Rate	35,329	49.5%

Rate 0.5 percent higher	35,644	50.0%
Rate 1.0 percent higher	36,048	50.5%
Rate 2.0 percent higher	36,818	51.6%
Rate 3.0 percent higher	37,466	52.5%

In light of these impacts, if mobile homes were in the same product market, they would be a substitute for less affordable median-priced housing since the cost of the mobile home, itself, is less than a single family unit and the rental price of the lot would not be subject to variations based on changes in market interest rates. As 3 shows, however, there is no substitution effect that can be seen arising from higher interest rates (and no reverse substitution effect from low interest rates). The data underlying 3 are set forth in Table 3.

This data supports the conclusion that mobile homes and single family homes are not in the same product market.

## 2 GEOGRAPHIC MARKETS

A geographic market is generally defined to be the geographic area in which the product or products offered by the seller are traded. The geographic market is the market in which the seller effectively competes with other individuals selling the same product. A buyer is in the geographic market if in contemplating a purchase, the buyer would not consider another alternative.

The relevant geographic market in this proceeding is, at its broadest, Franklin County. An even more realistic determination of the geographic market is St. Albans standing alone.

The first step of the geographic market analysis is to consider the area within which residents of Town and Country mobile home park might live. We know from the data presented below that, as a general rule, more than half of *all* St. Albans residents work in St. Albans (1,851 of 3,322, or 56%), while nearly 70 percent (2,272 of 3,282) residents of St. Albans work in Franklin County. If one were to broaden the inquiry to all residents of Franklin County, we find that again, more than half of all residents of Franklin County work in their place of residence, while over 70 percent of all Franklin County residents work in Franklin County.

Place of Work for Residents of St. Albans and for Franklin County						
	In Place of Residence			In County of Residence		
	Yes	No	Total	Yes	No	Total
St. Albans	1,851	1,471	3,322	2,272	1,010	3,282
Franklin County	2,858	2,649	5,507	12,943	5,545	18,488

Even these figures should be qualitatively adjusted, however, to consider the geographic market for mobile home parks in particular. We know from my detailed discussion above that the population living in mobile homes does not reflect the population as a whole. Instead, mobile homes tend to serve as affordable housing for low- and moderate-income households. Appendix B provides support for the proposition that this is true for the State as a whole as well as for each region within the State.

Consider the implications of this observation on the place of work for residents of mobile home parks in St. Albans and in Franklin County. We know that:

- o Lower-income persons work lower wage jobs. As a matter of practical economics, therefore, in order to maximize the net economic benefits of employment, these persons will tend to live closer to their place of employment than the population as a whole. It makes less sense for a low wage employee to commute out of county to go to work than it does for an employee earning a higher wage.
- o Lower-income persons tend to work disproportionately in jobs requiring less specialty in the skills brought to the place of employment. As a result, it will be less likely that that person will be required to travel longer distances in order to locate a place of work that matches the specific skill brought to bear on the job.
- o Lower-income persons tend to have older automobiles than the population as a whole. These automobiles tend to have higher operating costs. Accordingly, in order to maximize the net economic benefits of employment, these persons will tend to live closer to their place of employment than the population as a whole.

Because of these factors, persons living in mobile homes will tend to have more localized employment than the population as a whole.

As can be seen, within the population as a whole, persons living in Franklin County generally (and in St. Albans specifically) tend to live in the same community in which they work. In addition, within the population as a whole, persons living in Franklin County generally (and in St. Albans in particular) tend to live in the same county in which they work.

Because the population of persons who live in mobile home parks tends to be lower-income, and because lower-income workers tend to have even more localized employment than the population overall, persons who work in St. Albans and who are in the market for a mobile home will be even more likely to shop for mobile home parks in their local community; they will not consider mobile home parks outside St. Albans as an alternative. In addition, persons who work in Franklin county and who are in the market for a mobile home will be more likely to shop for mobile home parks in Franklin County; they will not consider mobile home parks outside Franklin County as an alternative.

Taking the place of employment as the limiting factor on where consumers will shop for alternatives, the relevant geographic market for mobile home park lots is, at its narrowest, St. Albans and is, at its widest, Franklin County.

As a check on the observation that consumers shopping for mobile home lots will shop within the county, I reviewed a sample of mobile home sales in a Vermont community. In this review, sales of new homes to be located in a mobile home park were deemed to be reasonable surrogates for consumers who were shopping for mobile home park lots. The Town of Berlin was chosen because of the number of mobile home sales recorded with its Town Administrator, because of the number of mobile home parks within the community, and because the size and nature of the town and the county in which it was located would be conducive to mobility into and out of the county.

I reviewed 37 bills of sale for the year 1997. Of these 37 bills of sale, 12 were for the sale of new homes. Of those 12, three were excluded as *not* being located in mobile home parks. The nine new mobile home sales for location on mobile home parks in 1997 covered five different mobile home parks. Of the nine bills of sale reviewed, the purchaser of the mobile home came from within the county all nine times. While in only one transaction did the purchaser reside in the same community where the mobile home park was located where the mobile home was ultimately to be placed, in an additional five transactions, the purchaser/mobile home park location involved Barre/Berlin. One sale involved an out-of-state purchaser buying a mobile home for placement in Barre.

This data provides corroborative support for my conclusions based on the work-place analysis presented above. If the data would have indicated that new mobile homes being placed in mobile home parks were being purchased by consumers from a wide geographic area, I would have found it necessary to re-examine the foundation of my work-place analysis. The Berlin experience, however, which I have no

reason to believe is unique or any different from the experience of other communities, is supportive of my conclusions as to the appropriate geographic market for this proceeding.

### **3 PRODUCT SEPARABILITY: MOBILE HOMES AND MOBILE HOME LOTS/PADS**

One inquiry to be made in a case of unlawful tying involves a determination of whether the tied product and the tying product are such an inseparable part of each other that the entire transaction could be considered to involve only a single product. My empirical review of this question in this case leads me to the conclusion that mobile homes (the tied product) and mobile home park pads (the tying product) are not a single, inseparable product.

The empirical inquiry I have made into whether mobile homes and mobile home park pads are inseparable products is from the seller's perspective. The following questions present relevant factors to be considered:

- o Does the seller or its competitors offer similar components separately and not exclusively as a single unit?
- o Are the items bought and sold in variable proportions?
- o Does the seller charge separately for each component or a lump sum for the entire package?
- o Does the seller participate for profit in the tied market?

The results of my inquiry are as follows:

- o **Offer of components separately or exclusively as a single component:** Mobile homes and mobile home park pads are offered as separate components throughout the mobile home park industry. The separability of the products, for example, is recognized by the periodic report prepared by the Vermont Department of Housing and Community Affairs on "registration of mobile home parks." This DHCA report presents an inventory of mobile home lots in the state of Vermont. A variety of other observations, outside the most simple observation that sales of mobile homes occur without being tied to lot rentals, supports this conclusion as well. The fact that mobile homes not sold in combination with a lot are considered personal property while mobile homes sold with land are considered realty establishes the separability of the products. The fact that different financing products are available if mobile homes are sold with lots or not establishes the separability of the products. The fact that mobile home dealers (and brokers) exist that are not vendors of

the property on which the homes are to be placed establishes the separability of the product. The fact that the two national associations of entities involved with manufactured homes have separate memberships for vendors of the homes and for community operators establishes the separability of the product.

- o **Does the seller charge separately for each component or a lump sum for the entire package:** A separate but related inquiry is into whether the seller charges separately for each component of the package, or whether the seller instead charges a lump sum for the entire package. If the product is sold as a lump sum, it *might* be concluded that the tied product is simply an ancillary product that enhances the attractiveness or competitiveness of the tying product. That is not the case with mobile homes. Mobile homes and mobile home lots are priced and sold separately. On the one hand, state and federal data for mobile home sales, for example, exclude lot rentals from the price reporting. On the other hand, as discussed elsewhere, in Vermont in particular, the mobile home park lot/pad rental price is separately charged, and reported, by the Vermont Department of Housing and Community Affairs. LaPierre, in particular, concedes that it charges separately for mobile homes and for mobile home lots/pads.

Not only are mobile home park lots charged for separately, but mobile home park lots and mobile homes are priced on an entirely different basis. While mobile homes are sold, mobile home lots are leased. This fact, standing alone, is strong evidence for the conclusion that mobile homes and mobile home park lots are not a single, inseparable, product.

- o **Are the items bought and sold in variable proportions:** If the tied product (mobile homes) and the tying product (mobile home lots/pads) are items that are bought and sold in variable proportions, the unit should be found to be two separate products. In this case, mobile homes and mobile home lots/pads are, indeed, sold in variable proportions. While each mobile home uses only one lot, any particular lot can use, over time, two or more mobile homes. Mobile home lots/pads are "sold" in terms of years. Mobile Home A, in other words, can sit on a lot/pad that is rented for ten years and then be replaced by a different mobile home on the same lot. Mobile Home B can sit on a lot for 20 years and then be replaced on that same lot. Mobile Home C can sit on a lot for 30 years and then be replaced. With a mobile home, there is no requirement that a buyer "purchase" the rental of the mobile park lot/pad in uniform amounts. The consumers of mobile home park lots/pads buy and use them in variable proportion.

Cost savings to a producer can only be generated if the items in question are used in fixed proportion to each other. If the combined sale of the two products does not result in production savings, there is no economic justification for considering the two products to be inseparable.



- o **Does the seller participate for profit in the tied market:** If a seller does not participate for-profit in both markets, it is reasonable to conclude that the seller is not attempting to foreclose competition in the tied market. A reasonable extension of this observation is that, therefore, the seller is only engaging in a form of indirect price competition through enhancement of the tying product. Indirect competition would occur by the seller seeking to use the ancillary (tied) product to enhance the competitiveness of the tying product. In this case, however, LaPierre is making a considerable profit on the sale of mobile homes. Indeed, the premium which LaPierre is charging over what consumers could have paid in the competitive market is what gave rise to this litigation. That premium ranges from 45 percent of the book value of the mobile home and up.

If the seller is participating for profit in each market, it is reasonable to believe that, in the absence of the tying arrangement, competitors would exist to enter each specific market in which a profit can be made. Since market entry could occur with respect to either product standing alone, and since no production efficiencies can arise from joint production (since the two products are not sold in direct proportion to each other), no reason exists for a competitor to enter *both* markets in order to enter one.

Upon a review of the empirical factors that are relevant to a determination of whether or not mobile homes and mobile home lots/pads are separable products, my conclusion is that the mobile home themselves, are a separate and distinct product from the lots/pads on which they ultimately rest.

#### **4 THE POSSESSION OF MARKET POWER**

This section of my analysis considers whether LaPierre has sufficient market power to exercise its tying arrangement in a manner that is oppressive to consumers and/or anticompetitive to the marketplace. Making this inquiry does not necessarily involve making a determination that LaPierre has any particular market share. Market power and market share are not coterminous. Moreover, making this determination of market power certainly does not require a finding of monopoly power or even dominant power.

The empirical issue before me with respect to market power is thus as follows: does LaPierre have sufficient economic power over the tying product such as would induce an appreciable number of buyers to accept a burdensome tie. The following factors can be used to show market power in this regard:

- o Market power can be shown by the product's uniqueness or desirability;
- o Market power may be inferred from the acceptance by a large number of buyers of a burdensome or uneconomic tie;

- o Market power is inferred when one can raise prices above the competitive level without losing all of one's business;

#### **4.1 Demand for Mobile Home Spaces in Vermont**

An analysis of the market power of LaPierre over the rental of mobile home lots --it is important to remember that the market power that I am assessing is over the *tying* product, *i.e.*, the mobile home lot-- begins with an assessment of the demand for mobile home lots in Vermont.

According to the Vermont State *Consolidated Plan*, as of the 1990 Census, there were 18,644 occupied mobile homes statewide. The *Consolidated Plan* estimated the 1994 demand for mobile homes at nearly 20,400 (an increase of roughly 9.4 percent over four years). The 1999 projected demand for mobile homes is projected to reach 23,000 (a total increase in demand of 23 percent since 1990).

#### **4.2 Supply of Mobile Home Spaces in Vermont**

There is a substantial shortage of mobile home spaces relative to the demand for mobile homes in Vermont. Consider, for example, that the *Consolidated Plan* reports that the potential demand for mobile homes in mobile home parks is estimated at 7,749 to 8,156. In contrast, in 1993, the State had roughly 6,896 lots in mobile home parks, a shortage of roughly 12.4 to 18.3 percent of the demanded spaces.<sup>121</sup>

Even this shortage of supply relative to demand does not fully indicate the market power of mobile home park owners and operators such as LaPierre over consumers, however. Merely because a space exists in a mobile home park does not mean that space is either vacant or available.

According to the Department of Housing and Community Affairs *1995 Registration of Mobile Home Parks* (January 1996), only 2.9% of the available mobile home lots in 1995 were available to mobile home owners. To use a conservative estimate of the market power available to mobile home lot owners over consumers seeking mobile home lots, therefore, it is possible to compare the available space to the unmet demand. Using the lower 1993 unmet demand figure and the higher 1995 vacancy figure, there are 217 lots available for an unmet demand of between 853 and 1,260 mobile home lot consumers.

---

<sup>121</sup> While the number of mobile home lot spaces may have since increased, no corresponding updated figure for demand for spaces in mobile home lots has been developed.

Franklin County is merely reflective of this mismatch. According to the DHCA's 1995 report, Franklin County had 12 vacant mobile home lots in 1995 (a vacancy rate of 2.5%).

The supply of mobile home lots is not likely to increase in the near future to alleviate or ameliorate the market power possessed as a result of this mismatch between demand and supply. According to DHCA, "relatively few mobile home parks have been developed since 1980 (25 parks of the 215 reporting a date of establishment). In fact, development peaked in the 1960's and dropped sharply after 1970." Only nine mobile home parks were developed in Vermont from 1990 through 1995. Only 16 mobile home parks were developed in the 10 years preceding that (1980 - 1989).

### ***4.3 Price of Mobile Home Lots in Vermont***

The presence of market power over the tying product (the mobile home lots/pads) can be inferred from a situation where the seller can raise prices without significantly losing business. According to the DHCA, statewide median rents for mobile home park lots increased from \$125 in 1988 to \$200 in 1995, an increase of 60 percent. In contrast:

- o Had rents remained consistent with the overall cost of living, they would have increased to \$159, an increase of 27 percent;
- o Had rents remained consistent with the average price of mobile homes in Vermont, they would have increased to \$179, an increase of 43 percent.
- o Had rents remained consistent with the average price of rental property for primary residences, they would have increased to \$153, an increase of 23 percent.

In Franklin County specifically, the lot rental increases were even higher. According to DHCA, Franklin County had an average lot rental increase of 76 percent. LaPierre had an average lot rental increase of 54%.

It is not likely that mobile home park lot rents increased to reflect substantially increased operating or capital costs. The history of mobile home park development in Vermont shows that most such parks in the State are 30 or more years old. Only nine of the 215 parks have been developed in the five years 1990 - 1995. Accordingly, one of the major operating costs, the financing costs for land acquisition, should be nearly completely amortized by this time. In any event, it is likely that the financing of mobile home park land acquisition is a fixed cost, not

one that will support an increase in lot rents of twice to three times the cost of living.

Development of Mobile Home Parks in Vermont	
Period Developed	Parks Developed
Prior to 1950	6
1950 - 1959	38
1960 - 1969	101
1970 -1979	45
1980 - 1989	16
1990 - 1995	9
Total	215

#### **4.4 The Sale Price of Mobile Homes**

The ability of the sellers to extract a premium on the sale of the tied product is further evidence of the market power possessed by LaPierre. The precise level of the premium, however, is not the fact which establishes market power. It is the *existence* of the premium, not its magnitude, which establishes market power. A premium of \$20,000 may indicate a greater degree of market power than a premium of \$15,000, but both are evidence that sufficient market power exists to support an unlawful tying arrangement.

In making this analysis, I rely upon information provided by LaPierre's own reports of sales prices and book values. According to Arthur Woolf's evidence, in the years 1991 through 1997, Town and Country Estates had 50 sales of new mobile homes placed in the park. The average selling price was \$50,992 with an average NADA book value of \$35,123. This gives an excess premium for new mobile homes of \$15,869. The excess premium collected by Town and Country was thus more than 45 percent.

Claims that the premium exacted by LaPierre simply reflect a "site premium" as recognized by the NADA "community rating" system are not

well-grounded. The "community ratings" provided by NADA --which I have attached as Appendix C-- are as follows:

NADA "Community Ratings"		
Rating	Adder	Description
Unique	20%	Ultimate amenities and very desirable, found in limited market areas.
Excellent	18%	Better than most MHC, but not the ultimate found in some states.
Standard	15%	Generally most common upscale MHC, found in majority of states.
Fair	5%	Below standard MHC, but may be all that is available.
Poor	5%	Simply a Minimum Standard Rental/Lease location

LaPierre's own evidence suggests that the excess price which is charged for each mobile home over the NADA book value is far greater than that identified by NADA as being attributable to a "site premium." As Dr. Woolf identifies, the site premium collected in the transactions he studied in St. Albans were across-the-board. As NADA describes, however, the "unique" adder involves "ultimate amenities" and is "found in limited market areas"; the "excellent" adder is "better than most MHC [manufactured home communities], but not the ultimate. . ."; even the standard applies not to the "average" community, but rather to the "most common *upscale* MHC. . ." The fact that the premiums exacted in Franklin County do not involve these limited situations where community rating adders are appropriate is indicative of the fact that they do not represent the site premiums suggested by Dr. Woolf.

Even if I were to accept the "standard" community rating adder, simply for the sake of analysis, the excess prices extracted from consumers becomes evident. The premium collected by Town and Country would be more than three times that to be expected as a site premium (45% vs. 15%). Moreover, the fifteen new mobile homes located in other parks in St. Albans sold for an average site premium of \$13,182 on an average book value of \$27,450. This represents a "site premium" of nearly 50 percent.

Finally, even if I were to accept the "unique" community rating adder, simply for the sake of analysis, the new mobile homes sold for location in parks in St. Albans are, *on average*, selling for more than twice the site premium that is based on "ultimate amenities."

In sum, the extraction of excess prices is one piece of evidence of the possession of market power. The facts before us demonstrate that even

taking into account a "site premium" for "upscale" mobile home parks, defendants are charging more than twice what could normally be expected in a competitive market. And, to emphasize again, that is the most conservative of assumptions. Given the across-the-board collection of such site premiums, which would normally be reserved only to the higher quality, "upscale" communities, I conclude that the excess prices being extracted from consumers are not site premiums at all, but rather are excessive prices supported through the possession of market power over mobile home park lots.

#### **4.5 *Uniqueness or Desirability of Vacant Mobile Home Lots***

Given the above facts, the newly developed Town and Country Estates provided a new supply of mobile home pads that were both unique in their vacancy and desirable due to the high unmet demand. These two qualities provide LaPierre with market power over the mobile home lots as the tying product. Consider that in 1994 and 1995, the largest share of Franklin County mobile home park lots available for rent was located at Town and Country. At Town & Country, however, sites were available only on the condition that the consumer buy a home from the park owner or from a designated dealer. In 1994, the Department of Housing and Community Affairs survey of mobile home park operators showed that Town & Country contained 28 of the 53 unoccupied lots in Franklin County. Of the other unoccupied lots, however, 13 had been closed, one was not properly permitted, two had abandoned homes still on them, and one was being used for a garage. Given the unavailability of other lots, LaPierre controlled 28 of the 36 vacant lots in Franklin County. As of the 1995 survey, Town & Country still had 20 lots available for rent, out of a county-wide total of 32.

#### **4.6 *Factor Not Relevant to Establishing Market Power***

One factor that I have *not* considered in my analysis of market power deserves specific attention. This factor involves the sale of mobile homes. The question in a tying case is whether the seller possesses market power over the tying product. The possession of market power over the tied product does not inform the empirical inquiry into market power. In this case, the tying product is mobile home lots. Accordingly, I have not considered the market position of defendants relative to the sale of mobile homes. Such an inquiry would provide no useful information as to the ability of LaPierre to engage in tying.

#### **4.7 *Summary***

In sum, the above analysis leads me to conclude that LaPierre possesses market power within the tying market (*i.e.*, mobile home lot rentals). The existence of that market power provides LaPierre with the power to successfully tie the sale of mobile homes to the rental of mobile home lots and to exact unreasonable price premiums as a result.

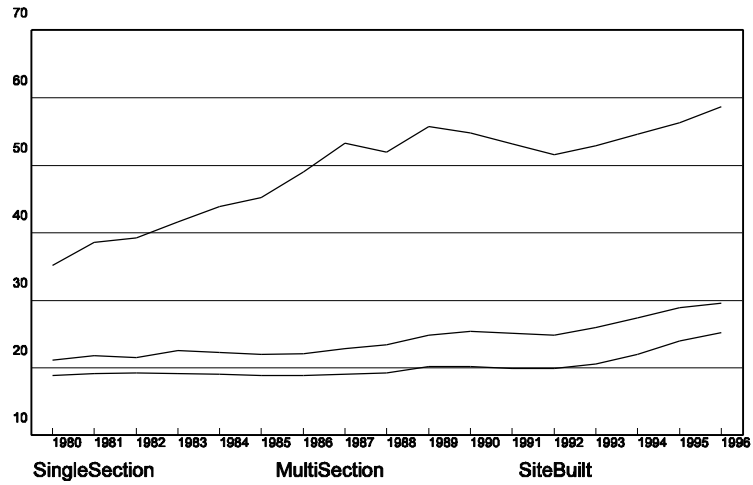
## 5 SUMMARY AND CONCLUSIONS

My conclusions are:

1. The relevant product market to use in this litigation involves new mobile homes sold for location in mobile home parks.
2. The relevant geographic market to use in this litigation involves Franklin County at its broadest, and St. Albans standing alone even more reasonably.
3. Mobile homes (the tied product in this analysis) and mobile home park pads (the tying product in this analysis) are not a single, inseparable product.
4. LaPierre possesses market power within the tying market (*i.e.*, mobile home lot rentals). The existence of that market power provides LaPierre with the power to successfully tie the sale of mobile homes to the rental of mobile home lots and to exact unreasonable price premiums as a result.

# HousingPrice:PerSquareFoot

1980-1996



Dollars

Figure 1:



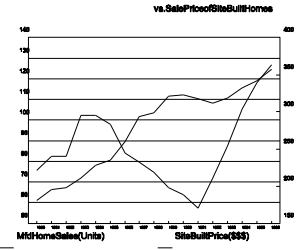
Table 1:  
Cost per Square Foot  
Manufactured Housing vs. Site Built Housing

	Manufactured Housing		Site Built /a/
	Single Section	Multi Section	
1980	\$18.86	\$21.11	\$35.13
1981	\$19.13	\$21.79	\$38.60
1982	\$19.22	\$21.52	\$39.25
1983	\$19.13	\$22.59	\$41.65
1984	\$19.03	\$22.27	\$43.87
1985	\$18.84	\$21.97	\$45.18
1986	\$18.84	\$22.08	\$49.05
1987	\$19.07	\$22.82	\$53.33
1988	\$19.18	\$23.41	\$51.95
1989	\$20.21	\$24.79	\$55.80
1990	\$20.20	\$25.42	\$54.80
1991	\$19.90	\$25.10	\$53.20
1992	\$19.90	\$24.88	\$51.59
1993	\$20.56	\$25.97	\$52.88
1994	\$22.03	\$27.41	\$54.65
1995	\$23.95	\$28.96	\$56.28
1996	\$25.18	\$29.56	\$58.66

NOTES:

/a/ Excludes cost of land.

MfdHousingShipments(Units)



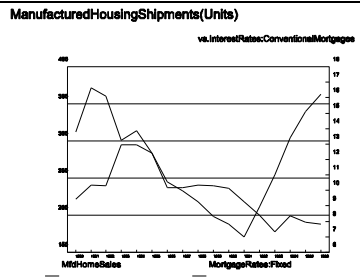
Units

Units

Figure 2

Table 2:  
Mobile Home Shipments and Price for Site Built Homes  
1980 - 1996

Year	Mobile Home Shipments	New Site Built Homes	Site Built Sales Price
1980	221,091	545,000	\$61,120
1981	240,313	436,000	\$66,400
1982	239,808	412,000	\$67,120
1983	295,079	623,000	\$71,840
1984	294,993	639,000	\$78,080
1985	283,489	688,000	\$80,640
1986	244,660	750,000	\$89,520
1987	232,598	671,000	\$101,600
1988	218,429	676,000	\$103,650
1989	198,254	650,000	\$111,600
1990	188,172	534,000	\$112,350
1991	170,713	507,000	\$110,400
1992	210,787	610,000	\$108,075
1993	254,276	666,000	\$110,775
1994	303,932	670,000	\$115,575
1995	339,601	667,000	\$119,025
1996	363,411	757,000	\$124,650



Units  
Percent

Figure 3:

Table 3:

	Mobile Home Shipments	Mortgage Interest Rates
1980	221,091	13.77
1981	240,313	16.64
1982	239,808	16.09
1983	295,079	13.23
1984	294,993	13.87
1985	283,489	12.42
1986	244,660	10.18
1987	232,598	10.20
1988	218,429	10.33
1989	198,254	10.32
1990	188,172	10.13
1991	170,713	9.25
1992	210,787	8.40
1993	254,276	7.33
1994	303,932	8.36
1995	339,601	7.95
1996	363,411	7.81

**ROGER D. COLTON**

**BUSINESS ADDRESS:**

Fisher Sheehan & Colton  
Public Finance and General Economics  
34 Warwick Road, Belmont, MA 02178  
617-484-0597 \*\*\* 617-484-0594 (FAX)  
rcolton101@aol.com (E-MAIL)

**EDUCATION:**

J.D. (Order of the Coif), University of Florida, 1981

M.A. (Economics), McGregor School, Antioch University (1993)

B.A., Iowa State University (1975)

**PROFESSIONAL EXPERIENCE:**

**Fisher, Sheehan and Colton, Public Finance and General Economics:** 1985 - present.

As a co-founder of this public interest economics consulting partnership, Colton provides services in a variety of areas, including: regulatory economics, poverty law and economics, public benefits, environmental and natural resource economics, fair housing, community development, energy efficiency, utility law and economics (energy, telecommunications, water/sewer), government budgeting, health care economics, and planning and zoning.

Colton has testified in state and federal courts in the United States and Canada, as well as before regulatory bodies in more than two dozen

states. He is particularly noted for creative program design and implementation within tight budget constraints. Colton has published seven books and more than 50 journal articles on a wide range of legal and economic subjects.

**National Consumer Law Center (NCLC):** 1986 - 1994

As a staff attorney with NCLC, Colton worked on low-income energy and utility issues. He pioneered cost-justifications for low-income affordable energy rates, as well as developing models to quantify the non-energy benefits (*e.g.*, reduced credit and collection costs, reduced working capital) of low-income energy efficiency. He designed and implemented low-income affordable rate and fuel assistance programs across the country. Colton was charged with developing new practical and theoretical underpinnings for solutions to low-income energy problems.

**Community Action Research Group (CARG):** 1981 - 1985

As staff attorney for this non-profit research and consulting organization, Colton worked primarily on energy and utility issues. He provided legal representation to low-income persons on public utility issues; provide legal and technical assistance to consumer and labor organizations; and provided legal and technical assistance to a variety of state and local governments nationwide on natural gas, electric, and telecommunications issues. He routinely appeared as an expert witness before regulatory agencies and legislative committees regarding energy and telecommunications issues.

**PROFESSIONAL AFFILIATIONS:**

- Member: Board of Directors, Vermont Energy Investment Corporation.
- Member: Board of Directors, Affordable Comfort, Inc.
- Member: Editorial Advisory Board, International Library, *Public Utility Law Anthology*.
- Member: Fair Housing Commission (Belmont, MA).
- Member: ASHRAE Guidelines Committee, GPC-8, *Energy Cost Allocation of Comfort HVAC Systems for Multiple Occupancy Buildings*
- Member: National Advisory Committee, U.S. Department of Housing and Urban Development, Calculation of Utility Allowances for Public Housing.



Member: National Advisory Committee, U.S. Department of Health and Human Services, Administration for Children and Families, Performance Goals for Low-Income Home Energy Assistance.

**PROFESSIONAL ASSOCIATIONS:**

National Association of Housing and Redevelopment Officials (NAHRO).

Association for Enterprise Opportunity.

Association of Energy Engineers, Energy Marketing Section.

Iowa State Bar Association.

Association for Institutional Thought.

National Community Reinvestment Coalition.

National Association of Human Rights Workers.

National Association for Health Services Research.

**BOOKS**

Colton. *Funding Stranded Benefits for Low-Income Consumers in a Restructured Electric Industry: A State Data Book*, Fisher, Sheehan and Colton, Public Finance and General Economics: Belmont, MA (1996).

Colton. *Funding Fuel Assistance: State and Local Strategies to Help Pay Low-Income Home Energy Bills*, Fisher, Sheehan and Colton, Public Finance and General Economics: Belmont, MA (1996).

Colton and Sheehan. *The Other Part of the Year: Low-Income Households and Their Need for Cooling: A State-by-State Look at Low-Income Summer Electric Bills*, Fisher, Sheehan & Colton, Public Finance and General Economics: Belmont, MA. (1994).

Colton. *Energy Efficiency and the Low-Income Consumer: Planning, Designing and Financing*, Fisher, Sheehan & Colton, Public Finance and General Economics: Belmont, MA. (1994).

Colton and Sheehan. *On the Brink of Disaster: A State-by-State Look at Low-Income Winter Natural Gas Heating Bills*, Fisher, Sheehan & Colton, Public Finance and General Economics: Scappoose, OR. (1994).

Colton, *et al.*, *Tenants' Rights to Utility Service*, National Consumer Law Center: Boston (1994)

Colton, *The Regulation of Rural Electric Cooperatives*, National Consumer Law Center: Boston (1992).

**JOURNAL PUBLICATIONS*****Published***

R.Colton and S.Colton. "The Interaction of Price and Service Changes in a Mergers and Acquisitions Environment," *Health Affairs* (publication anticipated: August 1998).

Colton. "Supportive Housing Facilities as "Low-Income Residential" Customers for Energy Efficiency Purposes," *Journal of Housing and Community Development Law* (American Bar Association) (publication anticipated Summer 1998).

Colton, Frisof and King. "Lessons for the Health Care Industry from America's Experience with Public Utilities." *Journal of Health Policy and Law* (Jan. 1998).

- Colton (Spring 1997). "Fair Housing and Affordable Housing: Availability, Distribution and Quality." *Colloqui* (Cornell University journal of planning).
- Colton, (January/February 1997). "Competition Comes to Electricity: Industry Gains, People and the Environment Lose," *Dollars and Sense*.
- Colton (Sept. 1996). "The Road Oft Taken: Unaffordable Home Energy Bills, Forced Mobility And Childhood Education in Missouri." 2 *Journal on Children and Poverty* 23.
- Colton and Sheehan. (Dec. 1995). "Utility Franchise Charges and the Rental of City Property." 72 *New Jersey Municipalities* 9:10.
- Colton. (Dec. 1995). "Arguing Against Utilities' Claims of Federal Preemption of Customer-Service Regulations." 29 *Clearinghouse Review* 772.
- Colton and Labella. (Sept. 1995). "Landlord Failure to Resolve Shared Meter Problems Breaches Tenant's Right to Quiet Enjoyment." 29 *Clearinghouse Review* 536.
- Colton and Morrissey. (July 1995). "Tenants' Rights to Pretermination Notice in Cases of Landlords' Nonpayment of Utilities". 29 *Clearinghouse Review* 277.
- Colton. (January 1995). "The Perverse Incentives of Fair Market Rents." 52 *Journal of Housing and Community Development* 6.
- Colton (1994). "Energy Efficiency and Low-Income Housing: Energy Policy Hurts the Poor." XVI *ShelterForce: The Journal of Affordable Housing Strategies* 9.
- Colton (1994). "The Use of Consumer Credit Reports in Establishing Creditworthiness for Utility Deposits." *Clearinghouse Review*.
- Colton (1994). "Institutional and Regulatory Issues Affecting Bank Product Diversification Into the Sale of Insurance," *Journal of the American Society of CLU and ChFC*.
- Colton. (1993). "The Use of State Utility Regulations to Control the 'Unregulated' Utility." 27 *Clearinghouse Review* 443.
- Colton and Smith. (1993). "The Duty of a Public Utility to Mitigate 'Damages' from Nonpayment through the Offer of Conservation Programs." 3 *Boston University Public Interest Law Journal* 239.
- Colton and Sheehan. (1993). "Cash for Clunkers Program Can Hurt the Poor," 19 *State Legislatures: National Conference of State Legislatures* 5:33.
- Colton. (1993). "Consumer Information and Workable Competition in the Telecommunications Industry." XXVII *Journal of Economic Issues* 775.

Colton and Sheehan. (1992). "Mobile Home Rent Control: Protecting Local Regulation," *Land Use Law and Zoning Digest*.

Colton and Smith. (1992 - 1993). "Co-op Membership and Utility Shutoffs: Service Protections that Arise as an Incident of REC `Membership.'" 29 *Idaho Law Review* 1, reprinted, XV *Public Utilities Law Anthology* 451.

Colton and Smith. (1992). "Protections for the Low-Income Customer of Unregulated Utilities: Federal Fuel Assistance as More than Cash Grants." 13 *Hamline University Journal of Public Law and Policy* 263.

Colton. (Jan./Feb. 1992). "CHAS: The Energy Connection," 49 *The Journal of Housing* 35, reprinted, 19 *Current Municipal Problems* 173.

Colton. (March 1991). "A Cost-Based Response to Low-Income Energy Problems." *Public Utilities Fortnightly*.

Colton. (1991). "Protecting Against the Harms of the Mistaken Utility Undercharge." 39 *Washington University Journal of Urban and Contemporary Law* 99, reprinted, XIV *Public Utilities Anthology* 787.

Colton. (1990). "Customer Consumption Patterns within an Income-Based Energy Assistance Program." 24 *Journal of Economic Issues* 1079

Colton. (1990). "Heightening the Burden of Proof in Utility Shutoff Cases Involving Allegations of Fraud." 33 *Howard L. Review* 137.

Colton. (1990). "When the Phone Company is not the Phone Company: Credit Reporting in the Post-Divestiture Era." 24 *Clearinghouse Review* 98.

Colton. (1990). "Discrimination as a Sword: Use of an `Effects Test' in Utility Litigation." 37 *Washington University Journal of Urban and Contemporary Law* 97, reprinted, XIII *Public Utilities Anthology* 813.

Colton. (1989). "Statutes of Limitations: Barring the Delinquent Disconnection of Utility Service." 23 *Clearinghouse Review* 2.

Colton & Sheehan. (1989). "Raising Local Revenue through Utility Franchise Fees: When the Fee Fits, Foot It." 21 *The Urban Lawyer* 55, reprinted, XII *Public Utilities Anthology* 653, reprinted, Freilich and Bushek (1995). *Exactions, Impacts Fees and Dedications: Shaping Land Use Development and Funding Infrastructure in the Dolan Era*, American Bar Association: Chicago.

Roger Colton. (1989). "Unlawful Utility Disconnections as a Tort: Gaining Compensation for the Harms of Unlawful Shutoffs." 22 *Clearinghouse Review* 609.

Colton, Sheehan & Uehling. (1987). "Seven cum Eleven: Rolling the Toxic Dice in the U.S. Supreme Court," 14 *Boston College Environmental L. Rev.* 345.

- Colton & Sheehan. (1987). "A New Basis for Conservation Programs for the Poor: Expanding the Concept of Avoided Costs," 21 *Clearinghouse Review* 135.
- Colton & Fisher. (1987). "Public Inducement of Local Economic Development: Legal Constraints on Government Equity Funding Programs." 31 *Washington University J. of Urban and Contemporary Law* 45.
- Colton & Sheehan. (1986). "The Illinois Review of Natural Gas Procurement Practices: Permissible Regulation or Federally Preempted Activity?" 35 *DePaul Law Review* 317, reprinted, IX *Public Utilities Anthology* 221.
- Roger Colton. (1986). "Utility Involvement in Energy Management: The Role of a State Power Plant Certification Statute." 16 *Environmental Law* 175, reprinted, IX *Public Utilities Anthology* 381.
- Colton. (1986). "Utility Service for Tenants of Delinquent Landlords," 20 *Clearinghouse Review* 554.
- Colton. (1985). "Municipal Utility Financing of Energy Conservation: Can Loans only be Made through an IOU?". 64 *Nebraska Law Review* 189.
- Colton. (1985). "Excess Capacity: A Case Study in Ratemaking Theory and Application." 20 *Tulsa Law Journal* 402, reprinted, VIII *Public Utilities Anthology* 739.
- Colton. (1985). "Conservation, Cost-Containment and Full Energy Service Corporations: Iowa's New Definition of `Reasonably Adequate Utility Service.'" 34 *Drake Law Journal* 1.
- Colton. (1984). "Prudence, Planning and Principled Ratemaking." 35 *Hastings Law Journal* 721.
- Colton. (1983). "Excess Capacity: Who Gets the Charge from the Power Plant?" 33 *Hastings Law Journal* 1133.
- Colton. (1983). "Old McDonald (Inc.) Has a Farm. . . Maybe, or Nebraska's Corporate Farm Ban; Is it Constitutional?" 6 *University of Arkansas at Little Rock Law Review* 247.
- Colton. (1982). "Mandatory Utility Financing of Conservation and Solar Measures." 3 *Solar Law Reporter* 167.
- Colton. (1982). "The Use of Canons of Statutory Construction: A Case Study from Iowa, or When Does `GHOTTI' Spell `Fish'?" 5 *Seton Hall Legislative Journal* 149.

Colton. (1977). "The Case for a Broad Construction of 'Use' in Section 4(f) of the Department of Transportation Act." 21 *St. Louis Law Journal* 113.

### **INVITED PAPERS**

Colton, *Communities and Age-Sensitive Planning*, Pratt Institute Symposium on Community Planning, New York City (February 1998).

Colton, *Electric Industry Restructuring and Universal Service for Low-Income Consumers: Lessons from State Health Insurance Purchasing Cooperatives*, National Community Action Foundation (July 1997).

Colton, *The Regulation of Industries Affected with the Public Interest: Lessons for Health Care?*, Universal Health Care Action Network (December 1996).

Colton, *Financing Energy Efficiency in Affordable Housing Programs*, National Association of Housing and Redevelopment Officials (October 1996).

Colton, *Changing Paradigms for Delivering Energy Efficiency to the Low-Income Consumer by Competitive Utilities: The Need for a Shelter-Based Approach*, National Association of State Energy Officials (May 1996).

Colton, *Prepayment Meters and the Low-Income Consumer*, Hydro-Quebec Symposium on Quality Service to Customers, Montreal (May 1995).

Colton and Sheehan, *Linked Deposits as a Utility Investment in Energy Efficiency for Low-Income Housing*, National Regulatory Information Conference (April 1994).

Colton, Sachs and DeBarros, *Models of Public and Private Investment in Energy Efficiency for Low-Income Housing*, American Council for an Energy Efficient Economy Summer Study on Energy Efficiency in Buildings (August 1994).

Colton, *Universal Residential Telephone Service: Needs and Strategies*, presented to the 105th National Meeting of the National Association of Regulatory Utility Commissioners (1993).

Colton and Sheehan, *Securing Private Investment in Low-Income Energy Efficiency: Breaking the Reliance on Government and Utility Programs*, presented to 16th World Energy Engineering Conference (1993).

Colton and Sheehan, *Improving Assisted Housing Affordability by Financing Energy Efficiency Improvements*, presented to 1993 Annual Meeting of the National Association of Housing and Redevelopment Officials (1993).

Colton and Sheehan, *The Economics of Pursuing Energy Efficiency in Affordable Housing*, presented to the *14th International Making Cities Livable Conference* (1993).

### **OTHER PUBLICATIONS**

Colton. *The Connection Between Affordable Housing and Educational Excellence in Belmont* (April 1998).

Colton. *The Obligation to Serve and a Restructured Electric Industry*, prepared for U.S. Department of Energy, Oak Ridge National Laboratory (June 1997).

Colton. *Rental Housing Affordability in Burlington, Vermont: A Report to the Burlington City Council*. (January 1997).

Colton. *Setting Income Eligibility for Fuel Assistance and Energy Efficiency Programs in a Competitive Electric Industry: The Marginal Impacts of Increasing Household Income* (October 1996).

Colton. *Fair Housing and Affordable Housing in Belmont, Massachusetts: Data on Availability, Distribution and Quality* (October 1996).

Colton and Sheehan. *Fair Housing Analysis of Impediments Study for Washington County (Oregon)*. (July 1996).

Colton. *Structuring a Low-Income "Wires Charge" for New Jersey*, prepared for Citizens Against Rate Escalation (CARE) (August 1996).

Colton. *Structuring a Low-Income "Wires Charge" for Kentucky*, prepared for Louisville Legal Aide Association (August 1996).

Colton. *Structuring a Low-Income "Wires Charge" for Iowa*, prepared for Iowa Bureau of Human Resources, Office of Weatherization (July 1996).

Colton. *Structuring a Low-Income "Wires Charge" for Montana*, prepared for Energy Share of Montana (July 1996).

Colton. *Structuring a Low-Income "Wires Charge" for Oklahoma*, prepared for Oklahoma State Association of Community Action Agencies (June 1996).

Colton. *Structuring a Low-Income "Wires Charge" for Ohio*, prepared for Ohio Legal Services Corporation (June 1996).

Colton. *Structuring a Low-Income "Wires Charge" for Indiana*, prepared for Indiana Citizen Action Campaign (May 1996).

Colton. *Shawmut Bank and Community Reinvestment in Boston: Community Credit Needs and Affordable Housing* (February 1996).

- Colton. *Understanding "Redlining" in a Competitive Electric Utility Industry* (December 1995).
- Colton. *Energy Efficiency as a Credit Enhancement: Public Utilities and the Affordability of First-Time Homeownership* (October 1995).
- Colton. *Competition in the Electric Industry: Assessing the Impacts on Residential, Commercial and Low-Income Customers*, prepared under contract to the National Association of Regulatory Utility Commissioners (October 1995).
- Colton. *Performance-Based Evaluation of Customer Collections in a Competitive Electric Utility Industry* (August 1995).
- Colton. *Poverty Law and Economics: Calculating the Household Budget*, prepared for presentation to National Legal Aid and Defender Association, Substantive Law Training (August 1995).
- Colton. *The Need for Regulation in a Competitive Electric Utility Industry* (July 1995).
- Colton. *Rewriting the Social Compact: A Competitive Electric Industry and its Core Customers* (July 1995).
- Colton. *The Road Oft Taken: Unaffordable Home Energy Bills, Forced Mobility, and Childhood Education in Missouri*, prepared for the Missouri Association of Head Start Directors (June 1995).
- Colton. *Models of Low-Income Utility Rates*, prepared under contract to Washington Gas Company (November 1994) (revised June 1995).
- Colton. *Beyond Social Welfare: Promoting the Earned Income Tax Credit (EITC) as an Economic Development Strategy by Public Utilities* (May 1995).
- Colton. *Should Regulation of Electricity Depend on the Absence of Competition?*(April 1995).
- Colton. *Comprehensive Credit and Collection Strategies in a Competitive Electric Utility Industry*, prepared under contract to Hydro-Quebec (April 1995).
- Colton. *Economically Stranded Investment in a Competitive Electric Industry: A Primer for Cities, Consumers and Small Business Advocates* (February 1995).
- Colton. *Competitive Solicitation as an Integrated Resource Planning Model: Its Competitive Impacts on Small Businesses Serving Low-Income Households*, prepared under contract to the Arkansas State Weatherization
- Colton. *Reviewing Utility Low-Income DSM Programs: A Suggested Framework for Analysis* (February 1995).



Colton. *Least-Cost Integrated Resource Planning in Arkansas: The Role of Low-Income Energy Efficiency* prepared under contract to the Arkansas State Weatherization Assistance Program (January 1995).

Colton. *Addressing Low-Income Inability-to-Pay Utility Bills During the Winter Months On Tribal Lands Served By Electric Co-ops: A Model Tribal Winter Utility Shutoff Regulation* (December 1994).

Colton. *An Earned Income Tax Credit Utility Intervention Kit* (December 1994).

Colton. *Telecommunications Credit and Collections and Controlling SNET Uncollectibles*, prepared under contract to the Connecticut Office of Consumer Counsel (November 1994).

Colton. *Customer Deposit Demands by U.S. West: Reasonable Rationales and the Proper Assessment of Risk*, prepared on behalf of the Staff of the Washington Utilities and Transportation Commission (August 1994).

Colton. *Credit and Collection Fees and Low-Income Households: Ensuring Effectiveness and Cost-Effectiveness*, prepared on behalf of the Missouri Office of Public Counsel (July 1994).

Colton. *Weatherization Assistance Program Evaluations: Assessing the Impact on Low-Income Ability-to-Pay* (July 1994).

*DSM Planning in a Restrictive Environment* (July 1994).

**Part 1: Why Ramping Down DSM Expenditures Can Be "Pro" DSM**

**Part 2: Low-Income Opposition to DSM: Ill-Defined and Misguided**

**Part 3: Low-Income DSM Expenditures as a Non-Resource Acquisition Strategy: The Potential for Niche Marketing**

Colton. *Loan Guarantees as a Utility Investment in Energy Efficiency for Low-Income Housing* (April 1994).

Colton and Sheehan. *"Linked Deposits" as a Utility Investment in Energy Efficiency for Low-Income Housing* (April 1994).

Colton. *Securitizing Utility Avoided Costs: Creating an Energy Efficiency "Product" for Private Investment in WAP* (April 1994).

Colton and Sheehan. *Economic Development Utility Rates: Targeting, Justifying, Enforcing*, prepared under contract to Texas ROSE (February 1994).

Colton and Sheehan. *Affordable Housing and Section 8 Utility Allowances: An Evaluation and a Proposal for Action:*

Part I: *Adequacy of Annual Allowances* (September 1993).

Part II: *Adequacy of Monthly Allowances* (September 1993).

Colton and Sheehan. *Identifying Savings Arising From Low-Income Programs* (April 1993).

Colton. *Low-Income Programs And Their Impact on Reducing Utility Working Capital Allowances* (April 1993).

Colton, *et al.* *An Assessment of Low-Income Energy Needs in Washington State*. Prepared under contract to the Washington state Department of Community Development. (November 1995).

Colton, *et al.* *Funding Social Services Through Voluntary Contribution Programs: A Proposal for SNET Participation in Funding INFOLINE's Information and Referral Services in Connecticut*. Prepared under contract with United Way of Connecticut. (October 1993).

Colton. (1993). *Public Utility Credit and Collection Activities: Establishing Standards and Applying them to Low-Income Utility Programs*. Prepared under contract to the national office of the American Association of Retired Persons. April.

Colton. (1992). *Filling the Gaps: Financing Low-Income Energy Assistance in Connecticut*. Prepared under contract to the Connecticut State Department of Human Resources. September.

Colton and Quinn. (1992). *The Impact on Low-Income People of the Increased Cost for Basic Telephone Service: A Study of Low-income Massachusetts Resident's Telephone Usage Patterns and Their Perceptions of Telephone Service Quality*. Prepared under contract to the Massachusetts Office of the Attorney General. July.

Colton and Quinn. (1991). *The ABC's of Arrearage Forgiveness*. Prepared with a grant from the Mary Reynolds Babcock Foundation. November.

Colton and Levinson. (1991). *Energy and Poverty in North Carolina: Combining Public and Private Resources to Solve a Public and Private Problem*. Prepared under contract to the North Carolina General Assembly. May.

Colton. (1991). *The Percentage of Income Payment Plan in Jefferson County, Kentucky: One Alternative to Distributing LIHEAP Benefits*. Prepared with funds provided by the City of Louisville, Kentucky and the Louisville Community Foundation. May.

Colton. (1991). *The Energy Assurance Program for Ohio: A Cost-Based Response to Low-Income Energy Problems*. Prepared for Cincinnati Legal Aid Society, Dayton Legal Society, and Cleveland Legal Aid Society. April.

- Colton. (1991). *Utility-Financed Low-Income DSM: Winning for Everybody*. Prepared with funds provided by the Public Welfare Foundation and the Mary Reynolds Babcock Foundation. April.
- Colton. (1991). *Percentage of Income Payment Plans as an Alternative Distribution of LIHEAP Benefits: Good Business, Good Government, Good Social Policy*. Prepared under contract to the New England Electric System (NEES). March.
- Colton. (1991). *The Forced Mobility of Low-Income Customers: The Indirect Impacts of Shutoffs on Utilities and their Customers*. January.
- Colton. (1990). *Controlling Uncollectible Accounts in Pennsylvania: A Blueprint for Action*. Prepared under contract to the Pennsylvania Office of Consumer Advocate. December.
- Colton. (1990). *Nonparticipation in Public Benefit Programs: Lessons for Fuel Assistance*. November.
- Colton. (1990). *Why Customers Don't Pay: The Need for Flexible Collection Techniques*. Prepared under contract to the Philadelphia Public Advocate. October.
- Colton. (1990). *A Regulatory Response to Low-income Energy Needs in Colorado: A Proposal*. Prepared for the Legal Aid Society of Metro Denver. September.
- Colton. (1990). *Determining the Cost-Effectiveness of Utility Credit and Collection Techniques*. Prepared with funds provided by the Mary Reynolds Babcock Foundation. July.
- Colton. (1990). *Energy Use and the Poor: The Association of Consumption with Income*. June.
- Colton. (1989). *Identifying Consumer Characteristics Which are Important to Determining the Existence of Workable Competition in the Interexchange Telecommunications Industry*. Prepared under contract to the Office of Public Counsel of the Florida Legislature. December.
- Colton. (1989). *The Interexchange Telecommunications Industry: Should Regulation Depend on the Absence of Competition*. Prepared under contract to the Office of Public Counsel of the Florida Legislature. December.
- Colton. (1989). *Fuel Assistance Alternatives for Utah*. Prepared under contract to the Utah State Energy Office. July.
- Colton. (1989). *Losing the Fight in Utah: High Energy Bills and Low-Income Consumers*. Prepared under contract with the Utah State Energy Office. July.
- Colton. (1989). *The Denial of Local Telephone Service for Nonpayment of Toll Bills: A Review and Assessment of Regulatory Litigation* (2d ed.). January.

## COLTON TESTIMONY EXPERIENCE

## 1988 - PRESENT

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
Re. Restructuring Plan of Virginia Electric Power	Witness	VMH Energy Services, Inc.	Consumer protection/basic generation service	Virginia	98
Mackey v. Spring Lake Mobile Home Estates	Witness	Timothy Mackey	Mobile home fees	State ct: Illinois	98
Re. Restructuring Plan of Atlantic City Electric	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97-98
Re. Restructuring Plan of Jersey Central Power & Light	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97-98
Re. Restructuring Plan of Public Service Electric & Gas	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97-98
Re. Restructuring Plan of Rockland Electric	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97-98
Appleby v. Metropolitan Dade County Housing Agency	Witness	Legal Services of Greater Miami	HUD utility allowances	Fed. court: So. Florida	97 - 98
Re. Restructuring Plan of PECO Energy Company	Witness	Energy Coordinating Agency of Philadelphia	Universal service	Pennsylvania	97
Re. Atlantic City Electric Merger	Witness	New Jersey Division of Ratepayer Advocate	Low-income issues	New Jersey	97
Re. IES Industries Merger	Witness	Iowa Community Action Association	Low-income issues	Iowa	97
Re. Natural Gas Competition in Wisconsin	Witness	Wisconsin Community Action Association	Universal service	Wisconsin	96
Re. Baltimore Gas and Electric Merger	Witness	Maryland Office of Peoples Counsel	Low-income issues	Maryland	96
Re. U.S. West Request for Full Toll Denial	Witness	Colorado Office of Consumer Counsel	Telecommunications regulation	Colorado	96
Re. Northern States Power Merger	Witness	Energy Cents Coalition	Low-income issues	Minnesota	96
Re. Public Service Co. of Colorado Merger	Witness	Colorado Energy Assistance Foundation	Low-income issues	Colorado	96
Re. Massachusetts Restructuring Regulations	Witness	Fisher, Sheehan & Colton	Low-income issues/energy efficiency	Massachusetts	96
Re. FERC Merger Guidelines	Witness	National Coalition of Low-Income Groups	Low-income interests in mergers	Washington D.C.	96
Re. Joseph Keliikuli III	Witness	Joseph Keliikuli III	Damages from lack of homestead	Honolulu	96
Re. Theresa Mahaulu	Witness	Theresa Mahaulu	Damages from lack of homestead	Honolulu	95
Re. Joseph Ching, Sr.	Witness	Re. Joseph Ching, Sr.	Damages from lack of homestead	Honolulu	95
Joseph Keaulana, Jr.	Witness	Joseph Keaulana, Jr.	Damages from lack of homestead	Honolulu	95
Re. Utility Allowances for Section 8 Housing	Witness	National Coalition of Low-Income Groups	Fair Market Rent Setting	Washington D.C.	95

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
Re. PGW Customer Service Tariff Revisions	Witness	Philadelphia Public Advocate	Credit and collection	Philadelphia	95
Re. Customer Responsibility Program	Witness	Philadelphia Public Advocate	Low-income rates	Philadelphia	95
Re. Houston Lighting and Power Co.	Witness	Gulf Coast Legal Services	Low-Income Rates	Texas	95
Re. Request for Modification of Winter Moratorium	Witness	Philadelphia Public Advocate	Credit and collection	Philadelphia	95
Re. Dept of Hawaii Homelands Trust Homestead Production	Witness	Native Hawaiian Legal Corporation	Prudence of trust management	Honolulu	94
Re. SNET Request for Modified Shutoff Procedures	Witness	Office of Consumer Counsel	Credit and collection	Connecticut	94
Re. Central Light and Power Co.	Witness	United Farm Workers	Low-income rates/DSM	Texas	94
Blackwell v. Philadelphia Electric Co.	Witness	Gloria Blackwell	Role of shutoff regulations	Penn. courts	94
U.S. West Request for Waiver of Rules	Witness	Wash. Util. & Transp. Comm'n Staff	Telecommunications regulation	Washington	94
Re. U.S. West Request for Full Toll Denial	Witness	Colorado Office of Consumer Counsel	Telecommunications regulation	Colorado	94
Washington Gas Light Company	Witness	Community Family Life Services	Low-income rates & energy efficiency	Washington D.C.	94
Clark v. Peterborough Electric Utility	Witness	Peterborough Community Legal Centre	Discrimination of tenant deposits	Ontario, Canada	94
Dorsey v. Housing Auth. of Baltimore	Witness	Baltimore Legal Aide	Public housing utility allowances	Federal district court	93
Penn Bell Telephone Co.	Witness	Penn. Utility Law Project	Low-income phone rates	Pennsylvania	93
Philadelphia Gas Works	Witness	Philadelphia Public Advocate	Low-income rates	Philadelphia	93
Central Maine Power Co.	Witness	Maine Assn Ind. Neighborhoods	Low-income rates	Maine	92
New England Telephone Company	Witness	Mass Attorney General	Low-income phone rates	Massachusetts	92
Philadelphia Gas Co.	Witness	Philadelphia Public Advocate	Low-income DSM	Philadelphia	92
Philadelphia Water Dept.	Witness	Philadelphia Public Advocate	Low-income rates	Philadelphia	92
Public Service Co. of Colorado	Witness	Land and Water Fund	Low-income DSM	Colorado	92
Sierra Pacific Power Co.	Witness	Washoe Legal Services	Low-income DSM	Nevada	92
Consumers Power Co.	Witness	Michigan Legal Services	Low-income rates	Michigan	92
Columbia Gas	Witness	Penn. State Office of Consumer Advocate (OCA)	Energy Assurance Program	Pennsylvania	91
Mass. Elec. Co.	Witness	Mass Elec Co.	Percentage of Income Plan	Massachusetts	91

CASE NAME	ROLE	CLIENT NAME	TOPIC	JURIS.	DATE
AT&T	Witness	TURN	Inter-LATA competition	California	91
Generic Investigation into Uncollectibles	Witness	Penn OCA	Controlling uncollectibles	Pennsylvania	91
Union Heat Light & Power	Witness	Kentucky Legal Services (KLS)	Energy Assurance Program	Kentucky	90
Philadelphia Water	Witness	Philadelphia Public Advocate (PPA)	Controlling accounts receivable	Philadelphia	90
Philadelphia Gas Works	Witness	PPA	Controlling accounts receivable	Philadelphia	90
Mississippi Power Co.	Witness	Southeast Mississippi Legal Services Corp.	Formula ratemaking	Mississippi	90
Kentucky Power & Light	Witness	KLS	Energy Assurance Program	Kentucky	90
Philadelphia Electric Co.	Witness	PPA	Low-income rate program	Philadelphia	90
Montana Power Co.	Witness	Montana Ass'n of Human Res. Council Directors	Low-income rate proposals	Montana	90
Columbia Gas Co.	Witness	Penn. OCA	Energy Assurance Program	Pennsylvania	90
Philadelphia Gas Works	Witness	PPA	Energy Assurance Program	Philadelphia	89
Southwestern Bell Telephone Co.	Witness	SEMLSC	Formula ratemaking	Mississippi	90
Generic Investigation into Low-income Programs	Witness	Vermont State Department of Public Service	Low-income rate proposals	Vermont	89
Generic Investigation into Dmnd Side Management Measures	Consultant	Vermont DPS	Low-income conservation programs	Vermont	89
National Fuel Gas	Witness	Penn OCA	Low-income fuel funds	Pennsylvania	89
Montana Power Co.	Witness	Human Resource Develop. Council District XI	Low-income conservation	Montana	88
Washington Water Power Co.	Witness	Idaho Legal Service Corp.	Rate base, rate design, cost-allocations	Idaho	88



1. My name is Roger D. Colton. I am a principal in the firm Fisher, Sheehan and Colton, Public Finance and General Economics (FSC), 34 Warwick Road, Belmont, Massachusetts, 02178.
2. Attached is a copy of the document titled *The Tying of Mobile Home Sales and Mobile Home Lot Rentals: Defining Markets and Assessing Product Separability* (June 1998). This document was prepared by me or under my personal supervision.
3. The facts set forth in this document are true and correct to my best information and belief.

Further affiant sayeth not.

---

Roger D. Colton  
Fisher, Sheehan and Colton  
Public Finance and General Economics  
34 Warwick Road, Belmont, MA 02178  
617-484-0597 (voice)

Sworn to and subscribed before me this \_\_\_\_\_ day of June, 1998, after the affiant produced the following identification: U.S. passport.

---

Anne L. Lougée

My commission expires: \_\_\_\_\_