

**THE LOW-INCOME INTEREST
IN ELECTRIC AND NATURAL GAS UTILITY
MERGERS AND ACQUISITIONS¹¹**

By:

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June 1997

One concern of low-income consumers today is that electric policy development fails to adequately consider impacts on low-income households. Particularly with respect to electric mergers, there are four concerns:¹²

- o First, low-income customers tend to be disproportionately adversely affected by electric policies. While low-income customers tend to use less electricity than the average residential customer, the burden which electric bills represent as a percentage of income is far greater. As a result, in considering the public interest aspects of electric mergers, incorporating a concern about the impacts on universal service is necessary and appropriate.
- o Second, most analysts today tend to assess the propriety of proposed mergers in terms of their impact on competition. In turn, the impact on competition is viewed almost exclusively from the perspective of the firm. In reality, however, whether or not competition exists in a particular market is affected as much by customer characteristics as by characteristics of the firm. A consideration of competition in the context of a proposed merger, therefore, should take into account the impacts of customer characteristics.

¹¹ This paper is based on May, 1996 comments that Fisher, Sheehan and Colton, Public Finance and General Economics (FSC) presented to the Federal Energy Regulatory Commission (FERC) on behalf of the following organizations: (1) Alliance for Affordable Energy (New Orleans); (2) Appalachian Peoples' Action Coalition (Athens, OH); (3) Community Education and Protection Association (Philadelphia); (4) Energy Cents Coalition (Minneapolis); (5) Legal Environmental Assistance Foundation (Tallahassee); (6) Policy Initiatives Group, Inc. (Portland, OR); (7) Pennsylvania Utility Law Project (Harrisburg); (8) Salt Lake Area Community Action Program (Salt Lake City); (9) Vermont Energy Investment Corporation (Burlington); and (10) Vermont Low-Income Advocacy Council (Montpelier, VT).

¹² Henceforth, references to "electric mergers" are intended to refer to both electric and/or natural gas mergers.

- o Third, in assessing competition within the context of a proposed merger, regulators should bear in mind that *industries* are not competitive, *markets* are. Moreover, companies are not competitive, markets are. In assessing the impacts of a merger on competition, therefore, regulators should first identify the relevant markets that will be affected. A determination that a merger will not have anti-competitive or other harmful impacts must be made for each discrete market.
- o Finally, mergers are often "sold" as vehicles through which the applicants can achieve cost savings and, by extension, generate reduced rates. The "efficiencies" which underlie claims of cost savings, however, frequently do not represent true efficiencies but instead represent reductions in service. These reductions in service often disproportionately redound to the detriment of low-income consumers. Claimed cost savings resulting from a merger should not be considered if they do not result from efficiency improvements, but instead represent reductions in service.

The following discussion elaborates on these concerns and proposes "rules" to be applied in an electric utility merger proceeding that will address them.

INTRODUCTION

Mergers of electric utilities generate the potential for substantial harms to low-income consumers. Regulation often stands as a barrier between the electric industry and the oppression of particularly vulnerable customer classes. The vulnerability of the class may arise because of attributes of the customers, because of attributes of the industry, or because of market failures. Despite this potential for harm, regulatory review of merger proposals generally takes place without adequate consideration of the impacts on residual electric markets. Residual markets are those markets for which little or no effective competition exists.

In the electric industry, the residual market is the residential market generally and the low-income residential market in particular. This market needs public protection. Even if competition exists, in other words, the members of the public may have neither the resources nor the ability to make competition work for them. Even more often, however, the markets are such that no sellers are engaged in active rivalry for the business of these customers. Accordingly, the abuses which such power portends is controlled in large part by public regulation such as that represented by oversight of merger proposals.

In addition, inadequate attention is paid to the impacts of *electric* policy on low-income

households. Instead, the focus of attention for most low-income public policy initiatives today seems to be on low-income *heating* needs. This focus is misplaced. Low-income electric *non*-heating consumption represents roughly 35 - 40 percent of low-income usage and 60 - 65 percent of low-income bills. This is true nationwide as well as for each region of the country.

Heating Usage as Percent of Total Home Energy Usage and Heating Bills as Percentage of Total Home Energy Bills National Data						
	Usage (mmBtu)			Bills (\$\$\$)		
	Total	Heating	Percent	Total	Heating	Percent
All Households	103.9	56.5	54.4%	\$1,255	\$406	32.4%
Low-Income Households	90.9	50.6	55.7%	\$1,062	\$364	34.3%
LIHEAP Recipients	98.7	59.9	60.7%	\$1,067	\$412	38.6%

SOURCE:
Low-Income Home Energy Assistance Program Report to Congress for FY 1993, at 17 and 20 (Oct. 1994).

As can be seen, even for low-income households, heating bills are only roughly 35 - 40 percent of total energy bills. What happens to the price of electricity is thus important to low-income consumers.

Indeed, in many ways, what happens to the price of electricity is even more important to low-income consumers than to other residential consumers. Low-income consumers have less of an ability to withstand fly-ups in price as a result of a public failure to restrain the market power of merged utilities. The mean income for households eligible for LIHEAP based on March 1991 Current Population Survey (CPS) data was \$10,172. The mean household income for LIHEAP recipients (as opposed to those *eligible* to be recipients) was only \$8,257.¹³¹ Given the home energy bills cited above, these households had home energy burdens of 10.5 percent and 12.9 percent respectively, significantly exceeding the roughly four percent burden for residential consumers generally.

In sum, low-income consumers are particularly vulnerable to increases in electric prices. These consumers depend upon public oversight to keep prices within reasonable bounds. To the extent that proposed mergers of electric companies threaten to result in increased prices, low-income consumers will be harmed. The discussion below makes recommendations as to specific criteria appropriate to use in judging whether proposed electric utility mergers should

¹³¹ *Low-Income Home Energy Assistance Program Report to Congress for FY 1993*, at 28 and 29 (Oct. 1994).

be approved as consistent with low-income interests.

A MERGER SHOULD BE JUDGED BY MORE THAN THE PRESENCE OF COMPETITION

Most state statutes provide that a merger is to be approved if regulators find that it will be consistent with the public interest. According to a Ninth Circuit court decision construing the equivalent federal statute, the law provides that there be no "detriment to consumers or investors or to other legitimate national interests."¹⁴¹ A merger approval standard that seeks merely to examine the extent to which a proposed merger will affect competition fails to meet either this "public interest" or the "no detriment" standard. Even assuming that a proposed merger will have no adverse impacts on competition, the further conclusion that the merger is thus consistent with, let alone promotes, the public interest does not *a priori* follow. Moreover, concluding that a merger has no detrimental impact on competition does not necessarily yield the further conclusion that a proposed merger will have no "detriment[al impacts] to consumers. . .or to other legitimate national interests."

In this respect, FERC's antitrust advisor accurately articulated the issue when she stated in 1988:

. . .I found that there was a body of very clear federal court precedent, right up to the Supreme Court, mandating that FERC must consider antitrust policy on its own initiative and balance those antitrust considerations in exercise of its public interest jurisdiction. Its public interest jurisdiction involves such concepts as "just and reasonable," "undue discrimination," and "undue preference" --embodying a broad fairness concept, as well as consumer protection.

. . .in weighing antitrust policies in the public interest determination, the courts have also made clear that the antitrust considerations need not always prevail; they can be outweighed by other legitimate public policy considerations.¹⁵¹

Each of the propositions in this statement is accurate, that: (1) antitrust considerations are not the exclusive grounds upon which to base decisionmaking; (2) that regulatory jurisdiction includes also a "broad fairness concept, as well as consumer protection"; and (3) that these "fairness" and "consumer protection" considerations are not only to be balanced against an antitrust analysis, but sometimes can outweigh the competitive analysis in reaching a decision.

¹⁴¹ *Pacific Power and Light Company v. Federal Power Commission*, 111 F.2d 1014, 1016 (9th Cir. 1940).

¹⁵¹ "Deregulation and Exclusionary Conduct: A Panel Discussion," 57 *Antitrust Law Journal* 723, 734 (1988).

The "Public Interest" is Made Up of More Than Those Factors Which a Competitive Market Will Consider.

Limiting a review of proposed electric utility mergers only to the impact of the merger on competition does not adequately account for the non-economic factors that regulators should consider. These are impacts that might not be of direct concern to business investors, since the business investor does not pay the cost or receive the benefit. These are impacts that might have no easily quantifiable economic value. Some of the impacts that may well be ignored under a merger approval framework that relies exclusively on an impact-on-competition decision rule as the touchstone of acceptability include:

1. **Universal service:** The provision of service to each household is a social goal for essential public services. As a reasonably affluent society, the determination has been made that every household should have services such as housing, telephones, energy, water, banking and insurance. Moreover, there is a value to society as a whole from ensuring universal service. The failure to have such services, in other words, imposes a cost on the public unrelated to the service itself. A competitive firm will not *ipso facto* take the impacts on universal service into consideration in a merger proposal, let alone seek to ensure that universal service is promoted, or at least not harmed, by a merger proposal.

The impacts of a failure to have universally affordable service arise with respect to home energy bills as well. One recent study of more than 800 households with Head Start children in Missouri found that unaffordable utility bills force low-income households into a pattern of frequent mobility, having significant adverse impacts on educational attainment and giving rise to a host of social consequences.¹⁶¹ The study found that almost 40 percent of these households were "frequent movers," over half of whom, in turn, cited unaffordable utility bills as being a primary cause for their most recent move.

According to the study, "the educational impacts of this frequent mobility are dramatic." Amongst the findings cited in the report were:

- o Overall, third-graders who have changed schools frequently are 2.5 times as likely to repeat a grade as third-graders who have never changed schools.
- o Frequently mobile students were 1.5 times more likely than students who have not moved to be low-achievers in reading, and twice as likely to be low-

¹⁶¹ Colton, "The Road Oft Taken: Unaffordable Home Energy Bills, Forced Mobility, and Childhood Education in Missouri," 2 *Journal of Children and Poverty* 23 (Summer 1996).

achievers in math. "Low-achievers" means below grade level.

- o Finally, when children changed schools four or more times, they are more likely to drop out of school.

According to the report, the problems of a lack of adequate education are, not surprisingly, immense. The report cited research which found that "the consequences of [educational] failure follow them for their whole lives. These children are more likely to drop out of school, for example, and high school dropouts are more likely than high school graduates to be arrested and to become unmarried parents." These educational impacts, however, are *precisely* the types of external adverse impacts which, while arising from a lack of universally affordable home energy service, would not be considered by a competitive electric industry. The benefits do not accrue to the industry while the costs are not imposed upon the industry.

2. **Consumer input:** One goal that a merger evaluation based solely on an impact-on-competition decision rule would not consider is the impact of mergers on the democratization of the decisionmaking process. The need for public participation has become even greater as the stakes in this decisionmaking have increased: the offer of services to entire segments of the population; the commitment of billions of dollars to one economic endeavor rather than another. The decisions made by electric utilities affect all of society, including all of its diverse constituent parts. The board of directors of a private electric utility has neither the incentive nor the ability to consider these diverse interests. Whether "economic efficiency" should be sacrificed to some extent (or to what extent) in order to provide high quality rural electric service to an Indian tribe in Utah, for example, is a decision *not* best left to middle class white executives sitting in New York or Atlanta. Mergers are likely to further separate the impacts of decisions from the locus of decisionmaking and, in addition, make public participation in decisionmaking even more difficult than it is today.¹⁷¹

This separation of decisionmaking from the persons who are affected by the decisions will most likely adversely affect low-income consumers. As decisionmaking is concentrated in remote forums, consumers (and particularly *low-income* consumers) have less opportunity to have any say in the processes which affect their lives. The political power of low-income customers is slim under the best of circumstances promoting participation. This is an empirically demonstrable fact, not merely a

¹⁷¹ Low-income advocates might endorse the statement of Jerry Petr in this regard: "* * *those who experience the consequences of policy are expected to be the determiners of whether policy meets acceptable standards of performance in addressing the needs and concerns that led to the policy formation." Petr, "Fundamentals of an Institutionalist Perspective on Economic Policy," 18 *Journal of Economic Issues* 1, 10 (March 1984).

political observation. Substantial research shows that political involvement, efficacy, and a sense of "public self" decreases dramatically for those lower in the spectrum of socio-economic status.¹⁸⁾ Lower socio-economic groups are the least likely group not only to get involved politically, but to speak out --even on their own behalf-- or to be involved in a utility regulatory process. Mergers which further separate the location of decisionmaking both geographically and socially from the affected low-income population create even more insurmountable barriers. Even if no particular merger completely removes electric industry decisionmaking from public accountability, taken together, merger decisions will remove the ability of consumers to affect the decisions of their electric providers.¹⁹⁾

Recommended Merger Criteria.

Given the discussion above, regulators should adopt two rules addressing the impacts of mergers on low-income consumers. The first rule would institutionalize a commitment to universal service in a manner similar to the recent report of Rhode Island collaborative on electric industry restructuring.¹⁰⁾ The rule would state:

Proposed Rule 1: Electricity is an essential product which must be available to all customers. Existing special rates, payment programs, and protections regarding customer service and shutoffs for low-income customers should be included in any merger proposal. Further developments of such rates, programs, and protections to address the goals of universal service should continue after merger.

The second rule would create an enforceable obligation that no approved merger would adversely affect the attainment of universal service. The rule would state:

Proposed Rule 2: No merger shall result in an adverse impact on attaining or maintaining universal service in the territory served by the applicant. Each application must contain an explicit assurance that in the event an adverse

¹⁸⁾ See e.g., Hess and Torney, *The Development of Political Attitudes of Children*, Chicago: Aldine, 1967; Litt, "Civic Education, Community Norms, and Political Indoctrination," *American Sociological Review*, Vol. 28 (1963), pp. 69 - 775; Jones and Grant, *Political Behavior: Choices and Perspectives*, St. Martin's Press: NY (1974); Hirsch *Poverty and Politicization: Political Socialization in an American Sub-Culture*, Free Press: NY (1971); Greenberg, "Orientations of Black and White Children to Political Authority," *Social Science Quarterly*, vol. 51 (1970).

¹⁹⁾ This is what Don Kanel has referred to as the "tyranny of small decisions." Kanel, "Institutional Economics: Perspectives on Economy and Society," 19 *Journal of Economic Issues* 815, 826 (Sept. 1985).

¹⁰⁾ *Report of the Rhode Island Electric Industry Restructuring Collaborative to the Rhode Island Public Utilities Commission* (February 9, 1996).

impact on universal service occurs subsequent to a merger approval, the applicant will, within 180 days of a finding of such an impact, develop and implement an action plan reasonably directed toward reversing the adverse impact.¹¹¹

Through this rule, regulators would adopt the policy that the merged utility is the entity which is ultimately responsible for whether or not it moves toward ensuring universal service in its service territory. While particular public initiatives can help a utility attain that goal, it should be the merged company that bears the ultimate responsibility. The company has (or should have) the knowledge, the incentive, the marketing capability, and the technical capability to move toward universal service. Outside whatever basic programs the company might be required to implement by state regulators, the company will be free to implement whatever programs it deems reasonably necessary to achieve the goal of universal service.

This rule is intended to have several outcomes. First, it will impose upon a merged company an ongoing obligation to devote resources to ensuring universal service to the same extent as it devotes resources and marketing to other aspects of its business. Second, it will impose upon a merged utility an ongoing obligation to assess whether its actions drive the price of electric service beyond the financial means of low-income households. If service becomes unaffordable and low-income penetration accordingly begins to fall, the merged company will be required to develop a scheme to offset the impacts on the poor. Finally, it frees up the merged utility's management to address any ongoing failure to provide universal service in the same fashion as the requests of many merged utilities for alternative regulation are intended to free up those companies in the competitive marketplace. Rather than micromanaging the company's efforts to promote universal service, the rule is saying that merged electric companies will be judged by the outcome, rather than by the effort.

A similar issue was addressed in the *Universal Service Questionnaire Results of the Universal Service Project of the Staff Subcommittee on Communications of NARUC*, presented at the NARUC annual meeting in New York on November 14, 1993. Question 12(a) of that questionnaire asked "In the future, should penalties be considered by regulators for companies who are remiss in the provision of universal service?" Regulators approved of penalties by an 88 percent yes/12 percent no margin.

¹¹¹ This proposal is similar to what the FCC just adopted with respect to universal telecommunications service. According to the Joint Federal-State Board's decision respecting universal service in the implementation of the Telecommunications Act of 1996:

a low or declining penetration rate may be an indicator that rate levels in a jurisdiction are not affordable. In general, we find subscribership levels provide relevant information addressing the basic question of whether consumers have the means to subscribe to telephone service. We find monitoring subscribership to be a tool in evaluating the affordability of rates. It should not, however, be the exclusive tool in measuring affordability. Subscribership levels do not address the second component of the definition of affordability, namely, whether paying the rates charged for services imposes a hardship for those who subscribe. (citations omitted).

EVEN WHEN EVALUATING A MERGER'S IMPACT ON COMPETITION, REGULATORS SHOULD CONSIDER MORE THAN SIMPLY THE PERSPECTIVE OF THE FIRM

In considering the impacts of a proposed merger on competition within the service territory of the merged company, regulators should consider more than the perspective of the firm. In so doing, regulators should adopt merger criteria that go beyond most analysts, who rely almost exclusively on the multiplicity of firms and the implications of such multiplicity in support of their evaluation of whether a proposed merger will result in an adverse impact on competition. The need for this expanded criteria, as well as proposed model language for criteria taking into account consumer-side characteristics, is set forth below.

Consumer-Side Characteristics.

An exclusive focus on the perspective of the firm in assessing what impact a proposed merger will have on competition is inappropriate. Indeed, determining whether workable competition exists sufficient to support a proposed merger depends *as much* on an examination of consumer-side characteristics as it does on structure-conduct-performance issues, the analysis of which is undertaken from the perspective of the firm. Consider, for example, the following:

1. **Elasticity of Demand:** The entire efficacy of arguments that any given market is workably competitive is predicated upon the assumed elasticity of consumer demand. It is this elasticity through which one can measure the extent to which the market offers close substitutes.^{12\} In this inquiry, it is as much the cross-elasticity of demand that is in question as it is a simple price elasticity.^{13\}

Elasticity can serve as a surrogate measure for a number of different situations. It can indicate a lack of meaningful alternatives.^{14\} It can indicate the presence of high search costs associated with gains of uncertain magnitude or duration.^{15\} It can indicate brand loyalty, habit buying or significant product differentiation.^{16\} It can indicate genuine

^{12\} Cochrane and Bell, *The Economics of Consumption*, at 329 (New York 1956).

^{13\} See, Note, "The Market: A Concept in Antitrust," 54 *Columbia Law Review* 580 (1954).

^{14\} See e.g., Pace, "Relevant Markets and the Nature of Competition in the Electric Utility Industry," 16 *Antitrust Bulletin* 725, 728 - 734 (1971). (Residential energy users lack meaningful alternatives).

^{15\} See e.g., Hanson, et al., *Monitoring Competition: A Means of Regulating The Property and Liability Insurance Business*, at 124 - 125, National Association of Insurance Commissioners (May 1974). (hereafter Hanson). (search costs for least-cost property and casualty insurance are high.)

^{16\} An excellent example of price inelasticity attributable to brand loyalty is the inelasticity associated with airline "frequent flyer" programs. See, U.S. General Accounting Office, *Airline Competition: DOT's Implementation of Airline Regulatory Authority*, at 16 (June 1989).

indifference as to price.^{\17\} It is, in other words, extremely difficult to determine whether an inelastic consumer demand is evidence of price indifference or whether it is evidence of some other market failure.^{\18\}

In addition, it is also extremely difficult to determine whether price inelasticity is the cause or the effect of the lack of competition. Do alternatives not exist because consumers are indifferent to price changes or are consumers indifferent to price changes because there are no alternatives? This inability to identify the causal direction of market factors has been found in other aspects of economic analysis.^{\19\} Whatever the direction of the cause-effect relationship, and whether or not a more inelastic demand is indicative of "genuine" consumer price indifference or is evidence of an unrelated market failure, an inelastic consumer demand, by definition, is associated with a less competitive market.

2. **Consumer Hurdle Rates:** A second consumer-side characteristic that interferes with the operation of a competitive market is the existence of high hurdle rates for consumer purchases, particularly among low-income households. Neoclassical price theory assumes that a competitive market operates in a frictionless environment. When price changes occur at the producer level, consumer reaction to those changes is assumed to be instantaneous. Moreover, there is assumed to be no constraint on the consumer's reaction.

In reality, of course, there are substantial constraints on consumer reactions to price changes even when consumers know of the changes and understand their significance. Even setting aside such issues as nonprice competition, habit buying, product differentiation, and the like, and assuming that the consumer knows and wishes to act upon a full knowledge of the extent and implications of a price change, constraints exist. The issue, therefore, is whether these constraints are so significant as to interfere with workable competition.

Information "costs" the consumer time, money, or effort to obtain. When a consumer initially considers a purchase ("I think I should buy a car"), he or she is probably unaware of the various prices offered. The ensuing search is not costless, and the consumer must weigh the potential benefits of seeking the information against the costs. In theory, the larger the dollar amount of the purchase and the greater the range

^{\17\} For example, business airline flyers whose firms pay fares are less responsive to lower fares or improved service.

^{\18\} See e.g., Hirshleifer, *Price Theory and Applications*, at 147 - 149 (2d ed. 1980).

^{\19\} See e.g., Weiss, "Factors in Changing Concentration," 45 *The Review of Economics and Statistics* 70 (Feb. 1963).

of prices, the more the consumer will search. In neoclassical theory, the consumer will search up to the point where the gain from further searching equals the incremental cost of the search.

A consumer's decision to change electric companies involves weighing the costs of the search against the amount of the gain. In one sense, incurring the costs of the change involves the consumer in making an investment in the new electric provider in order to gain a lower priced service. That is the essence of the argument for competition: if one firm in a workably competitive market unreasonably raises its rates, consumers will move to a lower priced firm. Against the investment in the new firm, the consumer must weigh the potential savings. The consumer will only make the investment if the savings results in a desired rate of return. The rate of return necessary to prompt consumer investment in a measure designed to save money is generally referred to as the "hurdle rate." The difference between the current electric service provider and the least-cost provider, in other words, must be sufficient (*i.e.*, must have a substantial enough spread) to meet the customer's hurdle rate. Unless this exists, no consumer action will occur.

The competitiveness of various markets can be determined in part by the class hurdle rate for new investments. No research has been undertaken on consumer hurdle rates for different providers of electric services. On energy *savings* expenditures, however, the residential class has a significant and generally recognized higher hurdle rate than commercial customers. Moreover, even within a customer class, hurdle rates may differ. Most empirical research on consumer discount rates has examined the effects of income on the discount rate. Universally, the research shows that discount rates fall as income increases.^{120\}

The analysis above holds many implications for decisionmakers who are asked to determine whether sufficient competition exists to approve merger proposals. Decisions regarding whether or not to approve a proposed electric utility merger require a determination of whether workable competition exists in the service territories of the affected companies. Unfortunately, decisions to date have been based on a substantially incomplete analysis, looking only at the firms that supply electric service. In fact, determining whether workable competition exists cannot take place in isolation from a detailed examination of the *consumers* who make up the market as well. While unquestionably the characteristics of the firms must be considered, to examine *only* those characteristics is to ignore much of the available relevant information upon which to make a considered decision.

An analysis that looks at consumer characteristics complements rather than supplants other

^{120\} Cambridge Systematics, *Implicit Discount Rates and Consumer Efficiency Choices*, at 34 (Sept. 1982).

currently used analyses. This supplemental approach introduces into the analysis consumer-side characteristics that are too often "forgotten," or in any event underemphasized, in analysis of competition. Implicit is an identification of shortcomings in the contemporary argument over electric industry competition that results from the failure to consider consumer-side issues, not as a political consideration, but as a critical factor in determining the presence or absence of workable competition. These shortcomings should be addressed and redressed.

Recommended Merger Criteria.

Given this discussion, regulators should adopt the following rule:

Proposed Rule 3: In determining whether workable competition exists in any product or geographic market in which electric energy or capacity is offered for sale to wholesale or retail customers, applicants shall provide documentation of such competition for each discrete customer class that is identifiable by characteristics of the customers in that class. This documentation shall identify the customer characteristics that might interfere with the operation of a competitive market and contain an evaluation of the impacts of those customer characteristics on competition.

EVEN WHEN CONSIDERING THE IMPACTS OF THE MULTIPLICITY OF FIRMS, REGULATORS SHOULD CAREFULLY DEFINE WHAT MARKETS ARE SERVED BY THE MERGED COMPANIES AND DETERMINE THE EXISTENCE OF MERGER IMPACTS IN EACH MARKET

Whether the merger evaluation criteria used by regulators appropriately defines the relevant "market" to be considered should be of concern to low-income representatives. Consider that one primary level of inquiry in an analysis of the presence or absence of competition is a market definition. According to one commentator, "a market simply defined is an area within which a group of sellers compete for the patronage of a common group of buyers."^{21\} As this points out, the first two fundamental characteristics involve: (1) that there is a rivalry for the purchase decisions of buyers; and (2) that there be a commonality amongst the sought-after buyers.

Flowing from this observation is the conclusion that a "service" offered by an electric utility and a "market" to be served by that utility are not the same. Residential consumers and business consumers using the "same" electric service nevertheless likely represent two

^{21\} Pace, "Relevant Markets and the Nature of Competition in the Electric Utility Industry," 16 *Antitrust Bulletin* 725, 725 (1971).

different electric markets. Indeed, one of those markets may be competitive while the other is not, even though the service in both is provided by the same firm. In such circumstances, the extent to which there might be workable competition in the business market has no relevance to whether there might *also* be workable competition in the residential market. In order to assess whether workable competition exists, workable competition must be tested in each. Similarly, the presence or absence of either beneficial or harmful merger impacts must be tested in each.

An Appropriate Definition of the Relevant Markets is a Necessary First Step in the Consideration of any Merger Application.

As noted above, merger approvals are based on whether the proposed merger is in the public interest. This standard requires that the merger result in no detriment to consumers or investors or to other legitimate interests. This standard does not require that *new* adverse impacts be *created* by the merger. It is sufficient if adverse impacts will be exacerbated or magnified by the proposed merger. Moreover, the "public interest" standard is not limited to assessing the potential anti-competitive impacts. The "public interest" standard is to assess all adverse impacts created by the merger.

Even more narrowly than the broad "public interest" standard, regulators are faced with the issue of determining the competitive (or anti-competitive) impacts of the proposed merger. Low-income interests are relevant to the determination of anti-competitive impacts arising from the proposed merger as well. In reviewing these potential impacts, regulators should: (1) consider the potential for, and likely impacts of, anti-competitive behavior; (2) ascertain whether potential negative impacts of market power outweigh estimated benefits associated with the merger; and (3) determine whether those negative impacts can be mitigated, either through the proposals advanced by the merger applicants or by some other means.

To consider either or both of these issues, regulators must both: (1) delineate what the relevant markets are, and (2) determine the impacts on each market. The *first* step in assessing impacts, however, is to delineate the relevant markets.

This is not just good policy, it is legally required. A determination of the impacts of a proposed merger cannot occur without a delineation of the relevant markets. In fact, an accurate assessment of the impacts would need to identify the specific markets served by the merging utilities and to assess the impacts of the proposed merger in *each* of those markets.

In this regard, residential consumers represent a "market" which is distinct from other markets which a utility does (or will) serve. Moreover, the low-income population is a distinct market

(or, at the least, a distinct significant sub-market of the residential market).^{122\} This position is not revolutionary. Nor is it subject to honest dispute. Consider that:

At the outset of merger. . .attention focuses on defining the boundaries of markets in which alleged anticompetitive transgressions have occurred or are likely to occur. . .The significance of the market definition issue is straightforward; a court must have a frame of reference within which to isolate and examine competitive effect. That frame of reference is a market--a place where buyers and sellers meet to engage in exchange.^{123\}

The need to consider market definitions does not arise simply in "merger" cases, but in *any* analysis of anti-competitive impacts of business actions. "Definition of the relevant product market is essential to determining whether a firm possesses market power."^{124\} "Proper determination of the relevant market is crucial to any antitrust litigation because it is the first step in measuring a firm's market power."^{125\} Time after time, the Supreme Court (amongst others) has held that the definition of relevant markets is critical to assessing the impacts of, or existence of, anti-competitive behavior.^{126\}

Again, it is important to emphasize that a definition of the relevant markets is not simply necessary public policy, it is a legal requirement. Analysis of the allegedly anticompetitive effect of utility conduct *must* begin with a definition of the market in which that effect is alleged to have occurred.^{127\} Indeed, the U.S. Supreme Court has held that "proper definition of the market is a *'necessary predicate'* to an examination of the competition that may be affected by the horizontal aspects of the merger,"^{128\} and a sound appraisal of the immediate

^{122\} ". . .in its landmark decision interpreting the revitalized merger law after passage of the Cellar-Kefauver Act, *Brown Shoe Co. v. United States*, the Supreme Court expanded the criteria for use in defining or bounding relevant product markets. In *Brown Shoe* the Court introduced the conceptually murky notion of a submarket. . .The Court in *Brown Shoe* was deciding a section 7 Clayton Act case, and the *Brown Shoe* indicia are primarily relevant to merger cases. The indicia have been applied in almost every merger case since *Brown Shoe*. . ." Thomas Dunfee, *et al.*, "Bounding Markets in Merger Cases: Identifying Relevant Competitors," 78 *Nw. U. L. Rev.* 733, 739 (1984) (citations omitted).

^{123\} Thomas Dunfee, *et al.*, "Bounding Markets in Merger Cases: Identifying Relevant Competitors," 78 *Nw. U. L. Rev.* 733 (1984) (citations omitted).

^{124\} Christopher Barbuto, "Toward Convergence of Antitrust and Trade Law: An International Trade Analogue to Robinson-Patman," 62 *Fordham L.Rev.* 2047 (1994).

^{125\} *Id.* (citations omitted).

^{126\} See e.g., *Walker, Inc. v. Food Machinery*, 382 U.S. 172, 177, 86 S.Ct. 347, 15 L.Ed.2d 247 (1965); see also, *Joe Westbrook, Inc. v. Chrysler Corp.*, 419 F.Supp. 824, 844 (N.D.Ga.1976); *Southern Concrete Co. v. United States Steel Corp.*, 394 F.Supp. 362, 379 (N.D.Ga.1975), *aff'd*, 535 F.2d 313 (5th Cir. 1976), cert. denied, 429 U.S. 1096, 97 S.Ct. 1113, 51 L.Ed.2d 543 (1977).

^{127\} *DeVoto v. Pacific Fidelity Life Ins. Co.*, 618 F.2d 1340, 1344 (9th Cir. 1980), cert. denied, 449 U.S. 869 (1980).

^{128\} *Brown Shoe Co. v. United States*, 370 U.S. 294, 335, 82 S.Ct. 1502, 1529, 8 L.Ed.2d 510 (1962).

and future impact of this merger on competition must be based on a "firm understanding of the structure of the relevant market."^{129\} "Without a definition of the relevant market, there is no way to measure [the]. . . ability [of the challenged transaction] to lessen or destroy competition."^{130\}

Business and Residential Customers Served by the Same Utility May Represent Different Markets, One of Which is Competitive and the Other Which is Not

A number of factors distinguish the business from the residential markets in the electric industry, all of which can affect the degree to which, if at all, a merger may affect that market. These include the sophistication of search; a difference in the needs served by the electric usage; differences in the willingness to switch; and differences in the purchase cycles, including the point at which a decision is made on whether or not to switch. Differences in the availability of competitors is another major difference between residential and non-residential markets. Residential and non-residential customers often take electricity from the grid at different voltage levels.

The delineation of an economically relevant market involves an assessment of the degree of product substitutability. A market is an "area of trading," which can be defined geographically or in terms of product differential.^{131\} For goods or service to be in the same "product market," they must be reasonably interchangeable in price, use and quality.^{132\}

It is not simply "helpful," but absolutely necessary to identify the different markets that will be affected by the proposed merger. The significance of a market definition issue is straightforward. Regulators must have a frame of reference within which to isolate and examine the anticipated effects of a proposed merger. That frame of reference is a market. Without a definition of the relevant market, there is no way to identify and measure the impacts --positive or negative-- of the proposed merger.

The market definition should reflect an orientation towards the welfare of consumers. Markets are to be defined from the perspective of consumers because they are the class designed to be protected by a state's merger statute. In this regard, "ratepayers" do not represent a market. "Ratepayers" not only may, but in fact do, consist of multiple markets. Indeed, the merger

^{129\} *United States v. Philadelphia Nat'l Bank*, 374 U.S. 321, 362, 83 S.Ct. 1715, 1741, 10 L.Ed.2d 915 (1963).

^{130\} *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172, 177, 86 S.Ct. 347, 350, 15 L.Ed.2d 247 (1965).

^{131\} Clarke, *Competition as a Dynamic Process*, at 105 (1961).

^{132\} Lipson, "Monopolization: Traditional Standards and Future Directions," 47 *Antitrust Law Journal* 1115, 1117 (1978).

impacts on the low-income market are different, both in kind and in degree, than the impacts, if any, on other markets.

Differences in markets are to be determined through the application of two closely-related tests: functional interchangeability and demand elasticity.¹³³¹ Each will be examined briefly below.

Market differences can be determined through an evaluation of the elasticity of consumer demand.¹³⁴¹ It is this elasticity through which one can measure the extent to which the market offers close substitutes.¹³⁵¹ Residential elasticity of demand differs substantially from the elasticity of demand for other customer classes. Demand elasticity is one of the primary measures by which to distinguish different markets. The elasticity of demand measures the extent to which consumers can, and will, turn to substitutes if the price of a product increases. It considers, for example, the ability of consumers to turn to reasonable alternatives to the product in question. It considers the price sensitivity of the product in question as well. There can be no serious dispute that residential customers generally, and low-income customers in particular, have fewer alternatives, and lower price sensitivity, than large user customers in the commercial and industrial classes.

A second test for a market is whether the services provided are interchangeable between two groups of customers.¹³⁶¹ If they are not, the customers are not in the same market. A leading antitrust case defining the relevant "market" is *United States v. E.I. DuPont De Nemours*.¹³⁷¹ In *DuPont*, the United States charged the company with monopolizing or attempting to monopolize in the cellophane industry. While DuPont produced almost 75 percent of the cellophane in the country, cellophane constituted less than 20 percent of all "flexible

¹³³¹ In deciding the issue of the relevant product market in this case, this court has applied the tests of interchangeability of use, cross-elasticity of demand, and price correlation. These are the principal tests that have been adopted by the Supreme Court, e.g., *Brown Shoe Co. v. United States*, 370 U.S. 294, 325, 82 S.Ct. 1502, 1523-1524, 8 L.Ed.2d 510 (1962); *United States v. E.I. DuPont de Nemours & Co.*, 351 U.S. 377, 76 S.Ct. 994, 100 L.Ed. 1264 (1956) ("Cellophane case"); *United States v. Continental Can Co.*, 378 U.S. 441, 84 S.Ct. 1738, 12 L.Ed.2d 953 (1964); by the Eighth Circuit, *United States v. Empire Gas Corp.*, 537 F.2d 296, 303-04 (8th Cir.1976), cert. denied, 429 U.S. 1122, 97 S.Ct. 1158, 51 L.Ed.2d 572 (1987); *General Industries Corp. v. Hartz Mountain Corp.*, 810 F.2d 795 (8th Cir.1987); by other courts of appeals, *American Crystal Sugar Co. v. Cuban-American Sugar Co.*, 259 F.2d 524 (2d Cir.1958); *SmithKline Corp. v. Eli Lilly & Co.*, 575 F.2d 1056 (3d Cir.), cert. denied, 439 U.S. 838, 99 S.Ct. 123, 58 L.Ed.2d 134 (1978); and also by the 8th Circuit, *Schaben v. Samuel Moore & Co.*, 462 F.Supp. 1321, 1334 (S.D.Iowa 1978), aff'd, 606 F.2d 831 (8th Cir.1979).

¹³⁴¹ *United States v. Archer-Daniels-Midland and Nabisco Brands, Inc.*, 695 F.Supp. 1000 (S.D. Iowa 1987).

¹³⁵¹ If products are in different markets, a price change in "the" good does not affect the amount used of any other good and *vice versa*. See generally, Kaldor, "Mrs. Robinson's 'Economics of Imperfect Competition'," 1 *Economica* 335 (1934); Pfouts and Ferguson, "Market Classification in Theory and Policy," 26 *Southern Economics Journal* 111 (1959).

¹³⁶¹ *United States v. Empire Gas Corp.*, 537 F.2d 296, 303 (8th Cir.1976).

¹³⁷¹ 351 U.S. 377 (1956).

packaging material" sales.^{\38\} The government asserted in *DuPont* that cellophane and other wrapping materials were neither "substantially fungible nor like priced."^{\39\} The U.S. Supreme Court disagreed. The relevant market, the Court said, "depends upon the availability of alternative commodities for buyers: *i.e.*, whether there is a cross-elasticity of demand between cellophane and the other wrappings." The interchangeability, the Court continued, "is largely gauged by the purchase of competing products for similar uses considering the price, characteristics and adaptability of the competing commodities."^{\40\} A "market," the Court concluded, is "composed of products that have reasonable interchangeability for the purpose for which they were produced--price, use and qualities considered."^{\41\}

In the case of electric utility mergers, the service demanded by low-income consumers is different from the service demanded by residential consumers generally.^{\42\} It would, of course, be easy (but erroneous) to conclude that the "service" provided by an electric utility is only the "service" of providing power through the wires to the consumer. This approach, however, is too narrow standing alone. A more accurate approach is to consider an electric utility as a distributor of a "manufactured" product and adopt the manufacturing concepts of "product" and "service." In the manufacturing world, a company's "offering" to its market is composed of both a physical "product" and a "bundle" of related or supporting "services." A simple example would be the appliance manufacturer who offers free delivery, free installation, and a 90-day warranty with the purchase of any appliance. The delivery, installation and warranty comprise the "service" components of this offering. Applying these concepts to an electric utility leads one to define the electric power provided to consumers as the "product" component of the company's market offering. All other components of electric power or supporting the provision of electric power would be the "service" component.

There are a host of service components that low-income consumers use that distinguish them from the residential market generally. Because of high burdens, low-income consumers are more likely to be payment-troubled. The services provided through a utility involving the treatment of payment troubles are most likely to be used by low-income consumers. The services provided through a utility involving the need to make personal contact with the

^{\38\} *Id.*, at 379.

^{\39\} *Id.*, at 380.

^{\40\} *Id.*, at 380 - 381.

^{\41\} *Id.*, at 404.

^{\42\} Robert Harris and Thomas Jorde, "Antitrust Market Definition: An Integrated Approach," 72 *Calif. L. Rev.* 1 (1984). "The court's evaluation of the degree of substitutability should be based on the perspective and perceptions of the buyers, not on an "objective" view of the market. An outside expert, for example, might see no reason why quidgets are not a perfectly good substitute for widgets, and hence would define the market to include both products. If, however, a substantial number of buyers believe that widgets and quidgets are not good substitutes for each other, quidgets should not be included in a *prima facie* definition that includes widgets." *Id.*

company, whether to deal with payment troubles or to make monthly payments, distinguish low-income consumers from the residential class generally. The services involving the provision of information about public bill-paying assistance distinguish low-income consumers from the residential class generally.

Several attributes of low-income consumers are generally accepted. Low-income consumers routinely face unaffordable electric bills. LIHEAP recipients pay a disproportionate amount of their income simply for their electric bills. Utilities engage in substantial collection efforts directed toward their inability-to-pay customers. Low-income consumers have a significantly lower likelihood to have access to banking accounts allowing them to pay their bills by mailing a check. Personal payments involving cash are much more likely within the low-income customer class.

In sum, a state's merger approval criteria should require a finding that the merger will not adversely affect any of the markets served by the merged companies. This determination may not occur for the electric industry as a whole. The presence or absence of workable competition, as well as the presence or absence of either harmful or beneficial merger impacts, must instead be determined for particular markets. Accordingly, in assessing potential merger impacts in the electric market or markets served by electric companies proposing to merge, regulators must first devote their attention to a market definition.^{43\} A market is to be defined first by whether there is rivalry; second by whether there is a common group of buyers; and third, by whether there exist closely substitutable products or services.

The conclusion must be that the "market" to be served by a merged utility is not the same as the "service territory" to be served by that company. There are several different types of markets served by an electric utility. Residential consumers and commercial/industrial consumers represent two very different markets. In addition, residential consumers generally and low-income consumers specifically represent two separate markets. In order to review whether adverse impacts will arise as a result of a proposed merger, it is necessary to consider *each* relevant market. Examples of the disproportionate harms found to result from the proposed Primergy merger (in Minnesota) are set forth in Appendix A. Examples of the disproportionate harms found to result from the proposed IES Industries merger (in Iowa) are set forth in Appendix B.

Recommended Merger Criteria

Given this discussion, the following rule should be adopted regarding the impacts of proposed mergers on consumers. The rule would state:

^{43\} See e.g., *Hanson, supra*, at 122.

Proposed Rule 4: A determination that a merger will not yield harmful impacts must be made for each discrete market served by the applicant(s).

WHEN EXAMINING THE FINANCIAL "SAVINGS" CLAIMED FROM A PROPOSED MERGER, REGULATORS SHOULD DETERMINE WHETHER THE SAVINGS ARE "REAL" SAVINGS OR WHETHER THEY ARE GENERATED BY REDUCTIONS IN SERVICE

One final concern of low-income advocates should focus attention on the tendency of state regulators to consider the reduction of costs asserted to be generated by a merger without regard to the impacts which such cost reduction might have on the quality or level of service provided. In advancing merger proposals, electric utilities have relied upon the unspoken assumption that cost reduction, by definition, is *ipso facto* good and right. Cost reduction, the reasoning goes, is good and right because it allows the company to reduce rates.

Cost Reductions Advanced in Merger Proposals Should Not In Fact Represent Reductions in Service

This assumption should be challenged. Instead, cost reduction is good and right only if customer service is not reduced, regardless of the effect on rates. A two-dimensional model of the interaction of rates and services provides insight into this conclusion.^{44\} This model recognizes that reductions in rates in a mergers and acquisition environment must be balanced by the impacts of such reduced rates on the services which are provided. In the event that such a balancing finds a negative impact on consumers, then no compensating factor will be found to justify the proposed merger. In the event that such a balancing finds a positive impact, then the merger will be approved from the perspective of this particular inquiry.

There are situations, however, where a balancing based on the "average" customer provides inadequate information. Thus, for example, in the matrix below, it might be that an increase in services, accompanied by an increase in prices, would *not* be "neutral" from the perspective of all customers. From the perspective of *low-income* consumers, for example, the attractiveness of the enhanced service is irrelevant if the price makes the service unaffordable.^{45\} At the opposite end of the spectrum, even reduced rates may not be an appropriate compensating factor in the event that services are reduced. Again, from the perspective of low-income customers, for example, reduced rates accompanied by reductions in the availability of customer service centers, deferred payment plans, and the like, may not be an acceptable trade-off.

^{44\} This model was adapted from S.D. Colton (1996). *A Model for Assessing the Interaction of Price and Customer Service Changes in a Mergers and Acquisitions Environment*, Accounting Insights: Plymouth, MN.

^{45\} The classic example of this cell involves many of the "enhanced services" in the telecommunications industry.

The appropriate model to use in assessing the interaction of changes in rates and services is set forth in Illustration 1 below:

**Illustration 1:
Interaction of Changes in Rates & Services**

	Rates Decrease	Rates are Unchanged	Rates Increase
Services Decrease	(1) neutral	(2) negative	(3) negative- negative
Services are Unchanged	(4) plus	(5) neutral	(6) negative
Services Increase	(7) plus-plus	(8) plus	(9) neutral

As this model shows, both rates and services can have one of three possible states: (1) increase; (2) decrease; or (3) remain unchanged. The cells of the model contain the projected benefits for customers. They can be positive, negative or neutral. A "Plus-Plus" indicates a higher level of benefit than simply a "Plus."

Utilities who propose a merger accompanied by some type of "rate freeze" seek to sell the merger as cell #5 in the short-term. Rates are unchanged during the period of the freeze and services are unchanged. Companies generally tend, at a minimum, to sell mergers as cell #4 over the long-term. Rates decline and services are unchanged. While the short-term cell #5 has a neutral impact on customers, the long-term vision of cell #5 is positive.

Experience shows, however, that electric utilities in a competitive world believe in cell #1 as well. In that situation, rates decline and services decline as long as overall customer satisfaction is at acceptable levels for the average customer. The fallacy in this approach, however, is two-fold: (1) not all consumers are "average"; and (2) service reductions tend to disproportionately adversely affect low-income consumers.

Consider one example in particular: the service reductions recently announced by Public Service Company of Colorado (PSCO). In an effort to cut costs and thus "become more competitive," PSCO centralized its customer service operations and closed its regional

customer service centers. The belief of local low-income advocates in Colorado is that this reduction in the number of customer service centers has made it more difficult for low-income customers to make in-person contact with the company. If one assumes that low-income households make a disproportionate number of contacts with the company --an assumption that has an empirical basis-- this reduction will have a disproportionately adverse impact on low-income customers. These personal contacts may be to ask for short-term bill payment extensions, to seek deferred payment arrangements, to discuss medical certificates underlying service termination postponements, to make bill inquiries, to seek information on fuel assistance, or a host of other reasons. It can be empirically established that low-income households have less access to transportation and a greater inability to travel longer distances to make personal contact with the Company.

Even if entire customer service centers are not closed, a reduction in the number of customer service representatives makes it more difficult for low-income customers to contact the company by telephone. The lack of telephone service is directly related to the level of household income. Low-income households who do have a telephone in the home, therefore, must use alternatives such as pay phones, or phones at friends and relatives homes. A reduction of service for these no-telephone households would involve not simply the inability to contact a company representative by telephone, but an inability to contact a representative within a reasonable holding time. "Call back" procedures, also, frequently do not assist these no-phone customers. Elimination or reductions in the staff of special services sections of merged companies would also disproportionately and directly affect low-income households. In particular, elimination of (or reductions in) offices such as PSCO's PAR Unit, which provides personalized attention to low-income payment-troubled accounts, would represent a reduction in service.

Other "efficiency improvements" that, in fact, represent a reduction in service involve proposals to shorten deferred payment arrangements, to shorten the collection cycle, to eliminate winter shutoff protections, to decrease the availability of energy efficiency programs, and the like.

The "Service" Provided by an Electric Company Involves More than the Provision of Electricity

Having concluded that the cost reductions advanced in support of a merger proposal should represent true efficiencies, and not merely reductions in service, it is important to develop a decision rule as to what represents a part of the "service" provided by a local electric company. As discussed above, it might be easiest to begin by saying that the "service" provided by an electric company is the service of providing power through wires to the consumer. This approach has some merit, however, it is too narrow standing alone. Rather than developing a definition of "service" by laundry list, it is necessary to *define* what

constitutes the "service" provided by an electric company. A utility's "service" is defined by reference to the entire product acquisition cycle test.^{46\}

The "product acquisition cycle" test encompasses the entire process of providing electric service to residential ratepayers from beginning to end. The relationship begins with a customer inquiry about obtaining electric service (or with a company solicitation), continues with the provision of the basic electric service, and ends with a final bill or subsequent collection activity. The full customer cycle is set forth in Illustration 2.

To use the product acquisition cycle is not uncommon at all in commercial law. Indeed, from a consumer protection perspective, such an analysis is what lies as the foundation of the Equal Credit Opportunity Act (ECOA). In sum, therefore, if an electric utility activity is part of the product acquisition cycle associated with the provision of electric service to a residential customer, it is part of the "service" being rendered to the customer.

Recommended Merger Criteria

Given this discussion, the following rule should be adopted regarding the impacts of proposed mergers on consumers. The rule would state:

Proposed Rule 5: Claimed cost savings resulting from a merger will not be considered if those savings are accompanied by reductions in service provided to customers or any specifically identifiable group of customers. Claimed benefits accruing in the form of enhancements to service will not be considered if those claimed enhancements are accompanied by increased rates to customers or to any specifically identifiable group of customers.

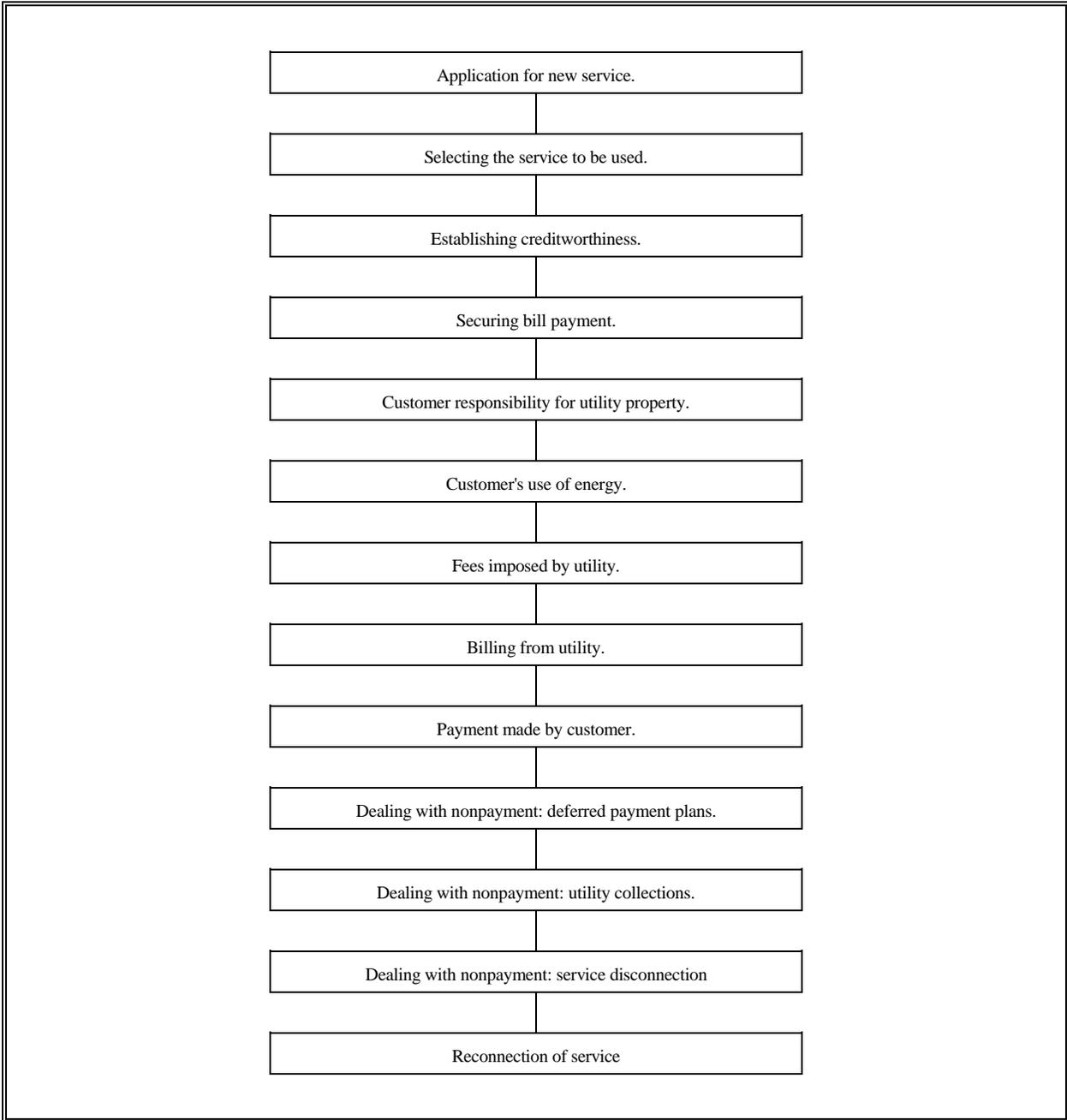
^{46\} This test has been used in other contexts. Based on testimony offered by Roger Colton on behalf of the Massachusetts Attorney General, the Massachusetts Department of Public Utilities found at one point:

In his direct testimony, the Attorney General proposes three tests for defining "service" in the term "quality of service:" (1) the revenue requirement test; (2) the inextricable relationship test; and (3) the product acquisition cycle test. The "product acquisition cycle" test encompasses the entire process of providing telephone service to customers, from beginning to end. "The relationship begins with a customer inquiry about telephone service (or with a company solicitation), continues with the provision of basic wire service, and ends with a final bill or subsequent collection activity." For purposes of this process for examining NET's quality of service, we find the "product acquisition cycle" test instructive, but not controlling.

Re New England Telephone and Telegraph Company, Docket D.P.U. 92-100, 1992 WL 421265 (Mass.D.P.U.) (October 1992).

Illustration 2:

FLOW OF CUSTOMER THROUGH A UTILITY SYSTEM



SUMMARY OF RECOMMENDED RULES

In summary, from a low-income perspective, the following decision rules should be used in assessing proposed electric utility mergers by state regulators:

Proposed Rule 1: Electricity is an essential product which must be available to all customers. Any claim by applicants that a merger will produce probable efficiencies, including benefits and savings, shall be supported by an assurance that: (a) existing special rates, payment programs, and protections regarding customer service and shutoffs for customers will be maintained; and (b) further developments of such rates, programs, and protections to address the goals of universal service will continue.

Proposed Rule 2: No merger shall result in an adverse impact on attaining or maintaining universal service in the territory served by the applicant. Each application shall contain an explicit assurance that in the event an adverse impact on universal service occurs subsequent to a merger approval, the applicant will develop and implement an Action Plan reasonably directed toward reversing the adverse impact.

Proposed Rule 3: In determining whether workable competition exists in any product or geographic market in which electric energy or capacity is offered for sale to wholesale or retail customers, applicants shall provide documentation of such competition for each discrete customer class that is identifiable by characteristics of the customers in that class. This documentation shall identify the customer characteristics that might interfere with the operation of a competitive market and contain an evaluation of the impacts of those customer characteristics on competition.

Proposed Rule 4: A determination that a merger will not yield harmful impacts must be made for each discrete market served by the applicant(s).

Proposed Rule 5: Claimed cost savings resulting from a merger will not be considered if those savings are accompanied by reductions in service provided to customers or to any specifically identifiable group of customers. Claimed benefits accruing in the form of enhancements to service will not be considered if those claimed enhancements are accompanied by increased rates to customers or to any specifically identifiable group of customers.

APPENDIX A:

**DISPROPORTIONATE HARMS TO LOW-INCOME CONSUMERS
RESULTING FROM THE PROPOSED PRIMERGY MERGER**

**Found by the Energy Cents Coalition
(Minneapolis, Minnesota)
February 1997**

The proposed merger has the potential to impose significant harms on low-income consumers different from residential customers generally. The following merger-created, or merger-exacerbated, harms that differ for low-income customers from residential customers generally, have been established in the record:

- o As many as 300,000 low-income NSP residential ratepayers have difficulty in meeting their electric utility bills obligations.
- o The merger will position NSP to implement stricter policies regarding the disconnection of service.
- o The merger will result in personnel cuts that may result in less local access to customer service representatives
- o The merger will result in longer waits for customer complaint responses.
- o The merger will result in less ability on the part of the company to facilitate low-income customer enrollment in Cold Weather Rule protections.
- o The merger will result in reductions in other available low-income services and programs.
- o The merger will result in the offer of "degraded forms of electric service to customers with inability-to-pay," including service load limiters and prepayment cards."
- o The merger will result in a reduced ability of payment-troubled customers "to talk with company representatives in order to agree on payment plans and schedules," thereby increasing the number of service disconnections.
- o The merger will reduce the access of payment-troubled customers to company customer service representatives.
- o The merger will "diminish" the ability of payment-troubled customers to communicate with company representatives, with an increased number of service disconnections

resulting.

- o The merger will result in decreased spending on customer service personnel.
- o The merger will result in price discrimination against small user customers, such as low-income consumers. Indeed, in the long-term, the merger will allow "residential rates, particularly for low-income customers, to rise in order to offer lower prices to more profitable customers."
- o The merger will result in reduced or eliminated low-income energy efficiency spending.
- o The merger will result in reduced or eliminated low-income affordability program spending.
- o Increases in residential rates are the likely result of introducing greater market forces in electricity price-setting.
- o Captive residential and low-income customers will absorb cost-shifts in a restructured electric industry. Low-income ratepayers, however, cannot absorb any more utility bill burdens.

These harms particularly, specifically and disproportionately affect low-income customers since low-income customers are disproportionately burdened by utility costs. Low-income Minnesota customers spend five times the proportion of income for utilities as do non-low-income customers.

APPENDIX B:

DISPROPORTIONATE HARMS TO LOW-INCOME CONSUMERS RESULTING FROM THE PROPOSED IES INDUSTRIES MERGER

Found by Iowa Community Action Association (ICAA)
(Marshalltown, Iowa)
February 1997

The merger of IES Industries and Interstate Power Company will have the result of diluting the energy efficiency commitment made to low-income consumers, with an adverse impact on that group of customers now served by IES. The commitment to low-income energy efficiency made by Interstate Power is insignificant when compared to IES. When the two companies are merged, therefore, the energy efficiency commitment made to low-income IES customers will be significantly diluted as energy efficiency needs are met on a systemwide basis.

This is not a problem if low-income energy efficiency needs *in toto* are being sufficiently addressed through a combination of private and public investments. But they are not. A June, 1996 analysis of low-income energy efficiency needs in Iowa prepared for the Iowa Department of Human Resources, Bureau of Weatherization Services, found that roughly 190,000 low-income housing units remain to be weatherized in Iowa. In addition:

Assuming current production levels of 2,500 units per year, assuming further that no weatherized home will ever need to be re-weatherized, and assuming finally that no expansion in Iowa's low-income population will occur, these un-weatherized homes will all be treated with energy efficiency improvements by the year 2072, roughly 76 years.⁴⁷¹

While this data was on a statewide basis, there is not basis upon which to conclude that the service territories of IES and Interstate Power are in any better condition than the rest of the state.

A second adverse impact arising to low-income consumers as a result of the proposed IES merger is that the merger of IES Utilities and Interstate Power Company will result in the dilution of the private fuel fun commitments made to low-income consumers, with an adverse impact on that group of customers now served by IES. The commitment by IES to its low-income consumers is substantially greater than that of Interstate Power. When the two companies are merged, therefore, the fuel assistance commitment made to low-income IES customers will be significantly diluted as fuel assistance needs are met on a systemwide basis.

A third adverse impact arising to low-income consumers as a result of the proposed IES merger is that

⁴⁷¹ Roger Colton (1996). *Structuring a Low-Income "Wires Charge" for Iowa*, at 5, Fisher, Sheehan and Colton, Public Finance and General Economics: Belmont, MA.

Iowa administrative regulations governing utility collection activities impose specific requirements for personal contact to be initiated by the company and made in the event of nonpayment. In those situations where the non-paying customer is a low-income customer, the Iowa regulations specifically mandate that designated information be provided to those low-income customers during the collection process. In addition, previous research has shown that payment troubles give rise to the customer initiating contact with the utility, either to obtain information about public assistance or to work out payment arrangements.

The proposed merger will dilute the resources available to low-income payment-troubled customers of IES as the blending of low-income and customer service resources between IES and Interstate Power will likely divert resources from IES low-income customers who are marginally less well off than Interstate Power low-income customers. Consider, for example, that while IES LIHEAP recipients in Cedar Rapids pay roughly 14.4% of their incomes toward their summer cooling bills (500 kWh), Interstate Power LIHEAP recipients in Dubuque pay only 9.9% of their incomes. While IES public assistance recipients pay 17.7% of their income toward summer cooling bills (500 kWh), Interstate Power public assistance recipients in Dubuque pay only 11.2%.

One reason for this is that the low-income customers in IES communities such as Cedar Rapids live with lower incomes than the similarly situated customers in Interstate Power communities such as Dubuque. The average income of all households with incomes at or below \$15,000 a year in Cedar Rapids, for example, was \$8,288. The average income for all households with incomes of at or below \$15,000 in Dubuque was somewhat more, \$8,556. The IES service territory appears to have more low-income households than does the Interstate service territory. IES communities such as Cedar Rapids and Burlington, for example, have a higher proportion of low-income households than does the Interstate community of Dubuque.

In addition, there is a difference in payment-troubles between the two utilities. Information available through the National Association of Regulatory Utility Commissioners (NARUC) shows that more IES customers are in payment-trouble than Interstate Power customers. For example, while the former Iowa-Electric disconnected 1.75% of its residential customers for nonpayment each year, Interstate disconnected only 1.28% of its residential customers. While Iowa Electric had, on average, 0.33% of its residential billings 60-days or more in arrears each quarter, Interstate had only 0.19% of its residential billings 60 days or more in arrears.

Finally, in addition to the lower incomes and higher penetrations of poverty in the IES service territory, there is a considerable disparity in rates paid as well. Two of the three IES "regions," including the two regions with higher penetrations of low incomes, have substantially higher residential rates than does Interstate Power. The combination of low-incomes and high rates can be expected to create a higher incidence of payment-troubles in those areas. Through the merger, however, the companies are combining customer service operations, reducing customer service personnel, and diluting the resources to help address those payment problems.