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Please find enclosed
TURN's responses to your
Very provocative questions.
Thank you for this opportunity
to comment. Call if we can
do anything or answer any questions.
Sincerely

Nettie Hoge

TURN is a nonprofit
tax-exempt consumer
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1. How has the increased competition in wholesale electric markets affected consumers in your State to date?

The California Public Utilities Commission (CPUC) and the state Legislature have put California on the path to retail competition. It is difficult to sort out the impacts of the two kinds of competition as the various players -- utilities, independent power producers, brokers and marketers -- position themselves the start of retail competition

One impact from wholesale competition is worth describing -- the impact on system reliability. Increased wholesale competition played a major role in the two widespread and long-lasting blackouts that struck the Western states in the summer of 1996.

Driven by the vendors' goal of achieving large sales volumes, wholesale transactions taxed the capacity of the transmission system beyond what it could handle. The transmission grid was not designed to handle the huge shipments of energy newly triggered by wholesale price spreads. It appears, moreover, that the anticipation of retail competition led to cuts in utility budgets for routine expenditures for maintenance. Tree-trimming budgets, specifically, were reduced on more than one utility. Transmission lines, which sagged because of the large volume of energy flows for bulk power marketing at a time of high ambient temperatures, encountered the bushy trees. The combination of wholesale market opportunities and cost-cutting in anticipation of retail competition led to disruptions affecting over 4 million people in 9 states plus western Canada and northern Mexico.

The two blackouts highlighted the fact that the existing transmission grid was not designed for -- and cannot handle -- unrestrained open access and wholesale bulk power competition. Federal legislation appears to be needed to ensure the future reliability of the nation's transmission grid.

2. What role has your office played in any state proceedings on retail competition?

TURN has participated from the beginning in the California Public Utility Commission's (CPUC's) investigation of restructuring the electric power industry. The CPUC conducted many policy Hearings after the publication of the Blue Book in 1994 which initially laid out the course the Commission intended to follow. Unfortunately, none of the policy hearings included opportunities to conduct cross-examination to test assertions made by witnesses. As a result the CPUC Order to restructure the industry was adopted without rigorous testing of the ideas upon which it was based.

TURN also participated in the Legislative process in California, which culminated in AB 1890, a bill which modified the CPUC approach but did not adopt retail wheeling or "direct access" as it is called in California. TURN was the only active party that did not endorse AB 1890.

TURN staff participated in the various Workshops that the CPUC established to explore and flesh out the details of what the Commission had ordered. The Workshops were unbalanced in the sense that the utilities were able to fully staff each while TURN staff was spread thin in attempting to cover them. There is an important lesson here in that the utilities and advocates of retail wheeling were well funded in sad contrast to the limited resources public interest advocates were able to deploy.

TURN is continuing to participate in the multiple hearings the CPUC is holding in its efforts to implement restructuring, and continues to monitor the legislative clean-up of AB 1890.

What position has your office taken on the issue of whether or not retail competition would benefit consumers and on the issue of whether or not federal legislation mandating adoption of retail competition by a date certain, or any other type of federal legislation, is needed?

TURN had, and continues to have serious doubts that retail competition would benefit small consumers. Because of this TURN does not support federal legislation mandating adoption of retail competition by a date certain.

Do you believe there are substantial differences among the various states' consumer advocates, and why or why not?

TURN believes that there are substantial differences among the various states' consumer advocates. These arise because of different perceptions of the prospects for good regulation in the particular state. In addition, some advocates seem to believe that competition can do an effective job, or at least a better job, than their own ineffective Commission. Advocates in states with high cost electricity have different perceptions than those from states with low cost electricity. The former may see a benefit from retail competition, at least in the short run, while the latter fear losing their low-cost power to other states.

3. Some proponents of federal legislation mandating that states adopt retail competition by a date certain argue that substantial numbers of large industrial customers recently have negotiated favorable rates with their public utility commissions. Such proponents have further argued that residential and small commercial consumers lack bargaining power to achieve similar rate reductions. Finally, these proponents argue that federal legislation is essential to ensure that smaller consumers are not economically disadvantaged relative to large industrial customers.

a. Please indicate whether or not you agree with the three premises outlined above.

TURN agrees with the first premise: "substantial numbers of large industrial customers recently have negotiated favorable rates with their public utility commissions." Before the California PUC (CPUC) adopted its Order with respect to restructuring the electric power industry the Commission itself was clearly favoring the large industrial customers in its decisions.

As an example, in 1992 the CPUC, in the case of PG&E customers taking so-called interruptible power, provided discounts of around \$84/kW when the value of the interruption to the system, determined in the most generous way, was around \$55. In that proceeding the utility and representatives of smaller consumers, in a very unusual alliance, showed that the need for commitments for interruptible power were overstated and overvalued. The CPUC gave incredible -- using that word literally -- price discounts to the favored customers. The California legislature later blessed these inflated discounts and has extended them several times such that the discounts will now continue after restructuring. The above-cost portion of these discounts, however, will be born by other members of the industrial class rather than spread to all customers.

The CPUC has given generic approval to the major utilities to offer discounts to industrial customers provided that the new price covers so-called "marginal" costs plus 20%. The utilities now have the authority to proceed with offers. (In a later part of the answer to this question we will address the motivation for pricing sales below total cost.)

Finally, in California, as the restructuring proceedings advanced, industrial customers were favored by the utilities (as distinct from the CPUC) as the utilities attempted to do two things: first, to placate the forces behind the push for restructuring and, second, to lock the customers to the incumbent utility should restructuring occur. One manifestation of this is through utilities offering industrial and commercial customers a way to avoid paying the full Competitive Transition Charge (CTC) by switching to a Time-of-Use tariff.

TURN is also aware of developments nationally where industrial customers have been favored in a similar way in other states.

TURN agrees with the second premise -- but for reasons that argue against Federal legislation mandating retail wheeling: "Such proponents have further argued that residential and small commercial consumers lack bargaining power to achieve similar rate reductions. "

It is **because** small customers lack bargaining power that regulation of electric power must continue. Competition in an industry like electric power cannot provide for "Just, reasonable, and non-discriminatory rates."

Just, reasonable, and non-discriminatory rates are at the heart of the basic reason for regulating electric utility monopolies. And the phrase, "Just, reasonable, and non-discriminatory rates" is in the statutory or other direction given to Commissions in many states.

This is really the essence of the restructuring debate. Discrimination between customers in order to maximize profits is behind the drive to de-regulate and/or restructure now being funded in part by power marketers and other prospective vendors of electricity.

At the same time, the largest customers, the large industrial customers in particular, are pushing for retail wheeling because they correctly perceive that they will be the beneficiaries of the discrimination that gouges smaller customers.

In electric power, competition will not and can not deliver just, reasonable, and non-discriminatory rates. This is so because of the cost structure of the electric power industry. Electric power is an industry with overhead costs as a large portion of total costs. Large overhead costs require, for profitable operation, running at a high capacity factor, the higher the better. To achieve a high capacity factor requires, in turn, promotional pricing to induce sales that will employ the capacity. This requires discriminatory pricing. Some sales are made at a high price, more than covering fully-allocated costs, while additional sales are made at whatever concession is necessary to attract them. The principle is to extract from each customer the maximum revenue possible. To sell what is essentially the same product at different prices requires segmenting the customers to discriminate between them.

It is this cost structure of the industry that led, decades ago, to the recognition that this industry must be regulated. That recognition came from the power companies as well as the customers, with the former seeking protection from each other, lest ruinous price wars break out.

As the discussion of de-regulation or restructuring has evolved over the past few years, proponents, along with those fighting a rear-guard action against it, have offered a number of modifiers of the word competition. These modifiers have appeared because it is generally recognized that "competition" by itself offers no protection to the small consumer.

In a dim or confused grasping to express unease with de-regulation/restructuring, phrases like the following appear -- • real competition, • full and fair competition, • True Competition, • vigorous competition, • meaningful competition, • effective competition, • etc.

Inserting a modifier to the word competition points out that there is more going on here than the free market resulting in the lowest prices to each customer.

To repeat: in an industry with a cost structure like electric power, just, reasonable, and non-discriminatory rates cannot and will not occur absent regulation. Electric power is an industry with overhead costs forming a large proportion of total costs. Pricing behavior in such an industry must be extremely discriminatory between customers.

The behavior of companies which have overhead costs as a large share of total costs has been well understood for a long time, and has been clearly described and documented. In fact the behavioral implications led power companies to embrace regulation to protect themselves from each other.

Regulation also brought benefits, obviously, to the public. The general view is that the benefits are from limiting profits to a reasonable rate of return. The larger benefits, however, come from controlling price discrimination and by rationalizing total investment. Absent regulation, an industry with large overhead costs will swing between excess capacity and shortages and between price gouging and price wars. Price discrimination, in this industry, targets small consumers, in contrast with airlines, where price gouging is aimed at the business flyer.

Price discrimination is also a serious problem for the environment. Because price discrimination is aimed at increasing sales, even sales made at prices below total cost, a de-regulated electric power industry is likely to embark on heavy sales promotion. Given the concern with greenhouse gases, the environment is clearly at risk from unfettered marketing.

A book published in 1896 laid out the analysis:

Each producer can extend his output with a gain, rather than a loss in economy. If he can increase his sales, there will be only a slight increase -- perhaps none at all -- in the expense for wages and materials, and a decided decrease in the share of the charges on fixed capital which each unit of product must pay. There is no fixed standard of cost which we can treat as the normal price; for the cost per unit of product depends on the quantity sold, falling as sales increase.

The price which will induce new competitors to enter the field is also much higher than that which will lead old ones to withdraw. No concern will quit competition as long as it can pay an appreciable part of its interest charges. It is better to lose part of your interest on every piece of goods you sell than to lose the whole of it on every piece you do not sell.

This old text accurately describes the pricing behavior in today's airline industry. The airline industry, also one with relatively large overhead costs, sets prices to fill seats. From time to time that has led to fare wars and bankruptcies. The pricing behavior and the bankruptcies -- bankruptcies without capacity leaving the industry -- all of this airline behavior was predicted 100 years ago, in a book written before Orville and Wilbur Wright first flew.

In the airline industry the promotional prices flow to the little customer, with the business flyer being gouged. Airlines practice sophisticated pricing which they call "yield management." When an airplane leaves the gate with an empty seat, that seat produces no revenue. To avoid the zero revenue produced by empty seats, airlines run promotions to fill them. Airlines attempt, with the aid of powerful computer programs, to fill all seats, pricing each ticket to produce the maximum revenue. As a result, passengers sitting side by side frequently have paid significantly different fares.

The airlines have realized, and are acting on the realization, that it is better to lose part of their overhead costs by pricing some seats below total cost than to lose all of their overhead costs by not filling the seat at all. They fill the seats by selling some at a very low price, hoping to cover out-of-pocket costs at least.

Such pricing is actually quite common today in American industry. Such pricing is what drove the railroads and later the electric utility companies to seek regulation to protect themselves from each other. Railroad price wars were ruinous. They realized that by accepting regulation they could rationalize investment and find a level of capacity to serve the market and to make a reasonable profit.

In the airline industry business customers who must fly on short notice, and who are unwilling to accept discriminatory restrictions used to segment the market, are charged high prices. Requiring a Saturday night stay to qualify for a low-priced ticket, for example, is clearly a discriminatory provision, intended to exclude business flyers from low fares. Low priced tickets for senior citizens is another device to segment the market which has no rationale in costs but does fill what would otherwise be empty seats.

To put it plainly, prices are not based on cost but on what the market will bear. This last fact, that prices are not based on cost, gives the lie to the promise of the advocates of de-regulation that prices will be driven lower by competition. Even if costs were driven lower by competition, there is no reason to expect that prices will be, especially for small businesses and residential customers.

In segmenting the airline market the target for price gouging is the business customer. In electricity, the segmentation will harm the small customer. The larger customers, in particular the large industrial customers, will benefit

from the occasional price wars and from sweetheart deals to lock in sales. The power producers, having incurred large overhead costs, will want and need to run the plants at high capacity factors. The producers will want to sell all of their output at high prices of course. But from time to time, when there is excess capacity, they will offer price concessions to customers willing to commit to taking a block of power over a period of time. The customers targeted for these deals will be the industrial customers.

There is an obvious expository risk in quoting from a book which is 100 years old, even one which so appeals to common sense. So let us turn to some material from the cutting edge of Game Theory.

One objective of economists is economic efficiency. It appears to be the overriding objective of most economists, even if achieved at the expense of equity. Game theory, in exploring the conditions necessary for economic efficiency in an industry with large overhead costs, reaches the same conclusion as we find using common sense. Game theory finds, that is, that in an industry with large overhead costs, economic efficiency cannot occur in the absence of collusion among producers.

A leading theorist, Lester G. Telser from the University of Chicago, uses the word "cooperation" rather than collusion to describe the necessary condition.

As we shall see, competition may require some cooperation in order to obtain efficiency. Some of my analysis stems from theories of very distinguished economists, including Edgeworth, Bohm-Bawerk, Marshall, J. M. Clark and F. H. Knight. I take the argument further than they did, partly because since their time the economy has moved strongly in the directions that support the relevance of my theoretical analysis. These ideas are not fads or idiosyncrasies. They come from the mainstream of economic theory and help us understand the modern economy. (emphasis added. From Lester G. Telser, U. of Chicago, Journal of Law and Economics, 1985)

Telser is an economist leading a branch of game theorists. Some of them come from what is called Public Choice theory, almost libertarian in its policy proposals. What Telser is trying to do is reconcile the problem of the behavior of firms with large overhead costs with the absence of anti-trust laws and without regulation. Telser recognizes that with large overhead costs the capacity in place is going to fluctuate severely around the optimum. There will be either too much capacity, leading to price wars, or too little, leading to price spikes. That is not efficient. So Telser et. al. recommend that the competitors cooperate, that is collude, legally, so as to build the "correct" amount of capacity.

In an earlier book, Economic theory and the Core,¹ Telser put it this way:

The mathematical reason for an empty core is that the characteristic functions that represent the situation are unkind. ["unkind" here is a mathematical term describing a function.] In order to restore an equilibrium it is necessary to impose restrictions on which coalitions may form. If there are too many coalitions, then in the face of an unkind characteristic function an equilibrium cannot emerge. One may say that there is too much competition, which prevents having a stable outcome. This resembles the conclusions of J. M. Clark in his *Studies in the Economics of Overhead Costs* (1923). (emphasis added.)

"Too much competition" in Telser's search for economic efficiency used to be called cutthroat competition, and considered ungentlemanly and certainly unprofitable. Worse, for the public, cutthroat competition leads to severe swings in total capacity. Excess capacity does lead to low prices as a result of price wars, but it also drives down investment. That leads, in turn, to later capacity shortages, with accompanying price spikes. In the airline industry, the Wall Street Journal reports, business fares rose 9% in 1996 over 1995, and are up an additional 20% thus far in 1997 over a year ago. Accompanying this, and related to it, is a sharp increase in passenger bumping because of overbooking.

Although collusion (or "cooperation" in Telser's phrase) to avoid price wars is generally illegal, it is really not unusual in the US today and can be expected in a deregulated/restructured electric power industry. Recent convictions or settlements of price fixing cases range from a \$21 million settlement in the catfish industry to a \$400 million settlement in pharmaceuticals and fines ranging from \$1.55 million for price fixing in the residential door industry through a \$50 million fine against a unit of Bayer AG in a citric-acid case to the well-known \$100 million fine levied recently against Archer-Daniels-Midland Co. for price-fixing in the lysine industry.

The point of mentioning recent fines and settlements is to stress how powerful a force the cost structure of an industry can exercise on management. Although the laws controlling price-fixing are well understood, pressures on management have proved so powerful that criminal behavior has occasionally resulted. This is not to argue that criminal price-fixing will necessarily occur in a deregulated/restructured industry. Producers in many industries are able legally to signal prices to each other. Rather than illegal conduct, here we stress that price discrimination between customers is an extremely likely outcome. For

¹ University of Chicago Press, Chicago, 1978. Interestingly enough, in the 1923 JM Clark book cited by Telser is found the 1896 quote from A. T. Hadley, Economics, New York,: G. P. Putnam's Sons, 1896, pp 151-154.

it is through price discrimination that producers may be able to operate at capacity factors that will be profitable.

There is a disabling problem with the Game Theory analysis, beyond the tension with the American Way of competing rather than colluding. The thinking is in terms of a single product firm, so that discrimination between customers is not an issue. When there is discrimination between customers there is an equity issue, for to achieve the efficient output, given the size of the existing capacity, price discrimination is necessary. And the price discrimination is not based on differences in costs in serving the different customers but on charging what the traffic will bear. This means that small customers will be discriminated against in the absence of regulation.

There is, furthermore, an environmental issue, for price promotion is at the heart of the behavior of the producers. Promotional pricing is intended to achieve, and does achieve, increases in consumption, leading in turn to more output, more air pollution, more capacity, for ever and ever, amen. So-called "customer choice" will only be exercised within the promotional price framework established by the vendors, and is likely to lead to an adverse environmental impact.

The point in citing Telser here is to demonstrate that leading game theorists have taken up the issue of overhead costs in today's literature, and have reached the conclusion that economic efficiency cannot be achieved in an industry like the electric power industry absent collusion. Their recommendation appears to be to repeal anti-trust laws and to put an end to regulation, in order to get economic efficiency. But their goal not only omits considerations of equity, it also will lead to severe adverse environmental impacts and, finally, cannot be achieved by adopting their recommendations.

This is not about market power.

Market power is a separate issue, though a related one. The problem discussed here is about the cost structure of the industry, not about market power. Even with many active firms, in fact especially with many active firms in the industry, the pricing behavior described above must be expected. With only a few firms tacit or illegal cooperation can more easily occur and the total capacity to serve the load can be rationalized. Where one firm has significant market power, then the discipline of a dominant price leader can impose price stability. In this latter case the capacity rationalization may take longer to achieve, prices kept high, and customers might be forced to support excess capacity through their electric bills for years and years.

Harry Trebing predicts a tight oligopoly emerging as a result of the mergers taking place in the industry. In one sense customers will be better off with a tight oligopoly because capacity will be rationalized and customer abuses

curbed by the oligopoly to preclude the re-imposition of regulation. On the other hand, in the case of a dominant price leader and tight oligopoly, promotional pricing makes the capacity requirements dynamic, and the situation is unstable. An industry with this cost structure needs either regulation or fairly explicit "cooperation" or collusion.

One final but important -- very important -- thing to note. Divestiture, aimed at breaking up the vertically integrated utility, does not solve the cost structure problem. The Distribution utility is also going to be heavy with overhead costs. Distribution utilities, Discos, will vigorously promote energy use through price discrimination. There is no possibility of other behavior absent public control, either directly or through cost of service regulation.

b. In particular, please indicate whether you have reason to believe that large industrial customers are being favored in rate negotiations before public utility commissions relative to smaller commercial and residential customers. What type of state statutory direction generally governs such rate determinations? Historically, how have states balanced the interests of different customer classes? Is this changing?

Yes, TURN believes that large industrial customers are being favored in rate negotiations before public utility commissions. The level of favoritism varies from time to time and from State to State. This is not, we emphasize, a reason to deregulate or restructure the industry. As shown above, regulation is essential in order to moderate the favoritism that large industrial customers receive.

Historically, large customers have been favored by the utility companies. This is because growth in sales is desired in order to maximize the value of the price of the common shares on the stock market. To achieve growth in sales, markets which are expected to respond to price promotions have been given those price inducements. Those markets are, obviously, the industrial customers who have choices of technologies and choices of energy sources, plus the price sensitive segments of other markets. This last includes even large residential customers who might use more electricity if the price were right, choosing, for example, electric heat, rather than gas or oil.

As noted above, direction in most States, either through statute or Commission rules, aims at the result of "just, reasonable, and non-discriminatory rates." In practice, and in some statutes, the last term is interpreted to mean "not unduly discriminatory." The modifier "unduly" is used to reflect that there are cost differences in serving customers of different classes or even within a class of customers. States have historically balanced the interests of different customer classes (and customers within a class) in a phase of a general rate case known as "cost allocation and rate design."

In the cost allocation phase of a rate case, which for smaller and vulnerable customers is critically important, total costs are apportioned to the different classes of customers under a theory of "cost allocation." In a contested proceeding the different parties advance theories to persuade the Commission on how to spread the costs between classes. Prior to the energy crisis of the 1970s this process was more or less perfunctory, since prices had trended down for all classes during the entire history of the industry until that time.

After the energy crisis of the early 1970s consumer groups took great interest in how costs were allocated and achieved significant reforms in the process. As a result, for a time rates were more fairly apportioned, due to the light shed on the methods used for cost allocation. By the mid-1980s however, pressure from small consumers diminished as the utilities' demands for rate increases slowed, and Commissions felt free politically to reverse the equity achievements of the earlier period. Commissions returned to favoring the large industrial customers because of their political power and because it served the interest of the regulated utilities. This capture of the regulators by the regulated is not, it must be stressed, a reason to de-regulate or re-structure the industry. It is a reason, rather, for vigorous consumer and consumer advocate participation in cost allocation proceedings.

Balancing the interests of different customer classes is changing -- and has been changing for a few years -- for exactly the same reason that special interests are pushing for deregulation/restructuring. Some economists (distinct from the Game Theorists) have been arguing that conventional rate-of-return regulation does not give management incentive to be effective in keeping costs down. This is demonstrably false at the most rigorous theoretical level. But it is also clearly false when considered in the following way: Utility shareholders of today's high cost utilities would certainly be better off if they were not under the threat of deregulation/restructuring. Management's legal responsibility to the shareholders to maximize the value of the shares is/was incentive enough to keep costs down so as to preclude the issue of restructuring ever appearing on the national or state agenda. It is not a lack of management incentive to be effective that has resulted in the spate of legislation and regulatory review.

Some economists, nevertheless, have argued that Performance Based Ratemaking, or PBR, will give utility management greater incentive to perform effectively. Utility management has embraced this idea, notwithstanding that it is fatuous. The reason for the embrace is that PBR allows management freedom to discriminate between customers, so as to maximize sales growth. PBR eliminates the most important phase of traditional regulation, the protection of customer from unduly discriminatory rates. To the extent that PBR has been adopted it is an avenue to favor large industrial customers over smaller customers, and to shift costs onto those customers least able to protect themselves.

c. What position has your office taken in recent rate proceedings concerning large industrial customers' requests for rate reductions?

TURN has been active in the California investigation of restructuring, and in Legislative proceedings on the same issue. In the latter TURN tried to prevent cost shifting, in particular cost shifting to be accomplished through improper assignment of stranded costs. TURN participates actively in nearly all general rate proceedings.

d. In general, have consumer electricity prices in your State been rising, holding steady, or falling, and why?

In general, consumer electricity prices in California, in terms of system average rates, have been stable for about the last four or five years. That statement, however, conceals more than it reveals. Industrial rates have been stable to trending lower since 1985, while system average rates are up more than 30% over the same twelve year period. And since system average rates include the flat industrial rates, residential rates have gone up significantly faster than the system average in the past dozen years. Residential rates are up around 55% over the period, while industrial rates have shown no increase. The California Commission, in the period leading to its Decision to restructure the industry, severely distorted the sharing of costs between classes in favor of giving price breaks to the largest customers.

To address once again only the most recent few years, California has seen relatively stable system average rates. This stability is largely the result of natural gas prices falling until recently. Natural gas is both the dominant fuel used in fossil plants in the State and also provides the price basis for determining "avoided costs" used in calculating a portion of the compensation paid to Qualifying Facilities (QFs) under PURPA. Offsetting the natural gas price effect has been the contractual annual increase paid for the output of Diablo Canyon nuclear plant.

Had neither the CPUC nor the California legislature taken any action on restructuring the industry, almost all parties agree that California consumers would now be enjoying declining electricity prices, and sharply declining prices at that. California has a significant amount of QF capacity the output of which has been sold to the utilities at high prices. These contracts, however, have reached or are reaching the end of a ten year fixed-price period, after which the prices paid by the utilities drops sharply. It is generally agreed that California electric rates would have declined about 12% over the next few years from this effect alone.

Because the CPUC and the Legislature did act, however, consumers have been deprived of the anticipated rate reductions, have had rates frozen for a

period of years, and are self-financing a 10% rate reduction beginning in 1998 through the sale by the State of California of "Rate Reduction Bonds."

4. What are the most difficult issues to resolve in connection with utilities' stranded costs? To the extent your State has adopted, or is considering adopting, retail competition, has there been an attempt to distinguish between costs which were prudently incurred and those which were not? In Congress were to enact legislation mandating that states adopt retail competition by a date certain, what, if any, provisions relating to stranded costs should be included? Is securitization a useful tool, and how would it affect different interests?

It is important to start by noting that stranded costs don't occur unless wholesale or retail competition is adopted. I. e. there is no issue to resolve absent that step or steps. So the first difficult issue is whether or not to adopt wholesale or retail competition which would create the potential for stranded costs.

It is asserted that stranded costs can be created at the wholesale level if, for example, a municipal wholesale customer leaves a utility to take service from another provider. FERC, in Order 888, made a political decision in protecting investor-owned utilities versus municipal utilities by recognizing as a possibility the presumption that a wholesale purchaser intended to be an on-going customer even in the absence of an on-going contract. This decision seems to contradict FERC's drive toward open access transmission at the wholesale level. If Order 888 furthers open access transmission, but at the same time 888's presumption of a contract or implied contract prevents a wholesale customer from leaving a utility without paying stranded costs, a policy conflict within the same Order has been created. It seems appropriate for Congress to explore the FERC presumption on the wholesale stranded cost issue.

Once wholesale or retail competition has created the potential for stranded costs, another set of difficult issues come to the fore. The most contentious, obviously, is the question of who will bear or share the burden of paying the costs. Peter Bradford has written persuasively to dismiss the contention that a so-called "regulatory compact" creates a shareholder's right to escape sharing in the costs.² How to share stranded costs, if any, is in the end a political decision.

The next difficult issue is determining the dollar amount of stranded cost. The question of prudent investment should have been resolved earlier, i. e. before restructuring became an issue, at the state level. If a cost were imprudent it should not have been in a utility rate base at all and hence not have any

² See "Restructuring New Hampshire's Electric Utility Industry: Stranded Costs and Market Power" Synapse Energy Economics, Inc., Nov. 6, 1996.

recognition as a "stranded" cost.³ A more intriguing and contentious issue is whether or not utilities over the past years have been compensated, in the allowed rate of return, for the risk that some investments would later turn out to be not viable economically. In TURN's view a strong case can be made that such compensation has been paid in California. As a result, much of what the California utilities claim as stranded cost should not be paid for by ratepayers.

How to determine a dollar figure for stranded costs is also an important issue. A major problem here is that the amount depends on future events which cannot be confidently forecasted. An amount determined on today's set of beliefs about the future course of energy prices (assuming a set of beliefs could find a consensus) would be different from an amount determined tomorrow based on the then set of beliefs about the future. One part of this issue is whether a dollar figure should be established, once and for all, or in contrast should an on-going review be incorporated into the process? Part of this, aside from the perennial issue of fuel price forecasting, is the more basic question of whether or not the whole political drive for restructuring is to address a short-term problem. In other words, is restructuring being driven mainly by a condition of excess capacity in the industry, a condition that will correct itself absent restructuring, or is there a more fundamental justification for restructuring?

An important issue which has not gotten sufficient attention is the ownership of stranded assets if those assets are paid for as stranded costs. Stranded costs can be thought of in several ways. One is to think of the dollars as depreciation costs which ratepayers must pay on an accelerated basis. Under traditional regulation, a physically functional but fully depreciated power plant would serve customers but earn a zero return. Ratepayers, having paid for the plant through depreciation charges, would be entitled to the service from it.

If ratepayers paid, in its first five years, all depreciation on an asset with a thirty year life, under traditional regulation that asset would continue to serve the ratepayers for the next twenty-five years earning a zero return. But categorizing these as stranded costs has the ratepayers paying the depreciation in, say, the same five years but getting no service from the asset. Thus there clearly is a transfer from ratepayers to shareholders when stranded costs are recognized and paid for by ratepayers. Under California's "Competition Transition Charge (CTC) the ratepayers pay for the plants but title to them remains in the hands of the utilities. The utilities are then free to double-dip into the ratepayers' pockets by selling the power from them on the market. This clearly should not be permitted.

A second way to think of stranded costs is that they occur as the result of an unrecognized bankruptcy proceeding when retail competition is adopted. But

³ The California legislature, in AB 1890, more or less established stranded costs with a calculation on the back of an envelope. Prudent behavior was not explored.

it is a strange bankruptcy, where the proceeds go to the bankrupt and are paid by the customers rather than the creditors. And the bankrupt gets both the cash and the property.

Securitization, in California, is a device by which ratepayers finance their own rate reduction. More generally it is a device to spread the impact of stranded costs over a period of years. Securitization can hide the costs of restructuring from the losers in the process, for restructuring will not have only winners. Securitization can thus reduce the political backlash that might ensue if the general public were fully aware of restructuring costs and how those are being shared.

There are a number of problems with securitization, some severe, even if it did serve a good end. The bonds are to be paid off by assessing a charge on future sales of electricity. If those sales are less than initially forecasted, then the surcharge must either be raised or collected over a longer span of years. For a utility serving a declining or stagnant economy, say an older urban area like Detroit or Philadelphia, the customers remaining in the territory might face a continually increasing charge as other industry and residents desert the core city. This is one more burden to be faced by older population centers.

A corollary problem impacts the environment. This arises with the drive for conservation and energy efficiency. Each successful reduction in demand for electricity through Demand Side Management (DSM) programs (or simply more careful use of electricity) would mean that the unit surcharge on remaining sales to pay for the bonds would have to be raised. To avoid that price increase, and a downward spiral in sales that would then follow, utilities would minimize energy efficiency programs and encourage sales, with a resulting adverse impact on the environment.

The particulars of defects with the proposed California "rate reduction bonds" are addressed in a letter TURN sent to state legislators.⁴ The letter is attached at the end of the response to these questions.

5. Some proponents of retail competition hold the view that all electricity resources should be sold at market prices and that state authority to regulate retail rates should be eliminated. Could such a policy result in rate increases for customers that currently receive the benefit of such low-cost resources? In a restructured electric industry, who should receive the benefits of these low-cost resources – utility ratepayers, utility shareholders, or simply the highest bidder?

⁴ A copy of TURN's letter to state legislators about the bonds is available on the World Wide Web at ConsumerNet: <http://www.consumernet.org/turn/bonds>

Yes, such a policy will result in rate increases for customers that currently receive the benefit of such low-cost resources. If the utility owner of low-cost resources can redirect them from its previous retail market to more lucrative sales in another territory, rates will rise for the home territory. Wholesale sales from one utility to another have always taken place, under contractual prices or under split-savings arrangements for spot sales. Such sales have been beneficial to all by reducing the total capacity requirements of the utilities making the trades. But if a utility's total capacity (rather than capacity above its needs to serve its own load) can be diverted to the highest paying market, its own customers may be adversely impacted. Each state should retain the authority to control such sales.

6. Recently there has been increased discussion of the need for Congress to enact "reciprocity" requirements barring retail sales of power by parties located in states which have not adopted retail competition to parties in states which have adopted retail competition.

a. Do you have a position on this issue?

This is a critical issue which needs serious analysis. The serious analysis will be better accomplished after some time has passed during which experience is gained in how retail sales will actually play out. California has adopted, and is implementing at considerable expense, a Power Exchange, or PX. The PX was created in the belief that it would be a venue to ensure competitive and unfettered trading of electricity. Despite considerable debate and analysis extending over the past few years, problems have emerged which suggest that competition needs to be constrained with rules in order that the public interest be served.

We report here an example of an unforeseen problem with the PX. The PX was and is touted as a way to promote competition and free entry of new wholesale power producers. In a 31 page letter from the Trustee of the PX to the Secretary of the FERC, dated March 31, 1997, a problem is described showing how, if the PX were simply an open market, new wholesale power producers would be discouraged rather than encouraged.

Page 9 of the letter asserts

Perhaps this result [huge BPA sales into the PX at a small increase from previous BPA prices] could be justified if the higher price enjoyed by BPA fostered market entry by new lower cost, more efficient energy producers. ... For the supply in question, BPA's costs are so low that it can undercut virtually any new competitor. It is for these reasons that no new investment directed at BPA's market share will take place, and that a large wealth transfer from California electric customers will occur if the

standard rules are not modified as we suggest below. This financial windfall, which will produce no concomitant benefit to California electric consumers, cannot be tolerated.

In other words, the PX, set up to open markets, has found that it must adopt restrictive rules to keep power from flowing into the PX. For this reason TURN recommends a go-slow approach to a decision on a federal reciprocity requirement. The huge upheaval in how the electric power industry is run and regulated will have consequences now unforeseen. It is prudent to wait to learn of at least some of the consequences before adopting federal legislation.

b. Which interests would benefit from a federal reciprocity requirement, which would not, and why?

In the example just cited it is difficult to be sure which interests benefit and which would not. Couched in terms of protecting California consumers, it also seems clearly aimed at protecting owners of California power plants and power plants yet to be built. Whether the rules proposed by the Trustee of the PX in this letter are good for California in the short run, the long run, or both, and for California consumers or producers, or both, remains to unfold. The impact on consumers in the BPA service territory also needs analysis. In short, an answer to the question at this time is both premature and may require ad hoc analysis for different situations in different parts of the country.

7. Does your State currently have adequate tools to protect the interests of low-income electricity customers if Congress were to mandate retail competition by a date certain? If such legislation were enacted, do you have any recommendations as to how Congress should approach this important issue?

No, California does not have adequate tools to protect the interests of low-income electricity customers. First, red-lining of low-income customers by commodity vendors in a retail-competition-world is so likely as to subject them to almost certain discrimination. On the regulated Distribution system, the adoption of a PBR regime of regulation likewise will lead to almost certain discrimination by the wires utility, as price structures are changed to maximize profits and growth of sales. TURN anticipates an attempt by the wires utilities around the country to shift rate design to include a high monthly customer charge, effectively discriminating against small customers. Regulatory control over cost allocation and rate design is being effectively abandoned by the CPUC and the result will almost surely be lack of protection for low-income electricity customers.

Expecting the market through retail competition to protect low-income customers is so incredible that it is difficult to make a serious recommendation for a remedy. Congress created LIHEAP, which has been shrinking while needs

have been growing, and which in any event comes under attack annually. To set up a so-called free market under retail competition may lead to a transfer of tax money through LIHEAP not to the poor but to the vendors exploiting the market. A very aggressive and large budget weatherization and energy efficiency program, not under utility control, along with on-site power production on low-income housing through, for example, publicly owned PV and wind systems might be useful.

8. Do you have any concerns about reliability of service or the ability of the interstate transmission or local distribution systems to handle the transactions that would occur if retail competition became more prevalent?

Yes. Reliability has already suffered under the threat of restructuring/retail competition. In 1996 California and the west suffered two major blackouts that were directly related to cost cutting by utilities preparing for a restructured world. The sequence is this: First cost cutting, then corner cutting, followed by system failure.

In addition to the two multi-state blackouts already mentioned, northern California has had two blackouts extending over wide areas and extending over long time periods related to cutbacks in the utility's maintenance and labor force which were made in anticipation of restructuring.

With respect to the local distribution system it remains to be seen whether the transactions related under full retail competition can be handled effectively without the passage of several years. The CPUC Ordered, in May of 1997, full retail competition to begin for all customers on January 1, 1998. But it is clear that the metering and systems to permit small customers to participate are not in place and will not be for quite some time. The alternative proposed by the CPUC to avoid the need for meters and systems is "load profiling." Load profiling seems on its face to be unworkable. Because of a paucity of reliable data and a surfeit of litigation, load profiling looks more like a PR ploy than a policy with any prospect of overcoming hurdles for retail competition.

9. Are rural and urban consumers in different positions with respect to their relative ability to bargain for competitive electricity prices? Are all consumers similarly situated in terms of aggregation?

All consumers are not similarly situated in terms of aggregation. Electricity marketing is going to be highly selective in terms of which customers are approached by aggregators. Redlining and cherry picking will be the order of the day.

Redlining will take new shape in electricity. It will not necessarily be geographical, though there will be neighborhoods that will be avoided by

vendors. Rather individuals will be redlined. Customers will be solicited or avoided based on computer modeling of astonishing sophistication.

Electricity aggregators will have deep dossiers on each residential electricity consumer and use sophisticated computer programming to select among them as to who to approach. Consumer credit records -- including the type of purchases, travel, etc. -- will be combined with electricity and telephone billing records, Social Security numbers, driver's license information, magazine subscriptions and so on to sort through customer histories and to develop profiles of how profitable or risky a customer might be. Customers will be offered bundled products based on the sorting done by the powerful programs. Or a customer may be offered no product at all, and left to the default provider of the bare commodity.

Credit card companies already employ sophisticated discrimination to develop target markets and to offer different products different prices for credit cards. One customer might be offered a card with no annual fee, another low initial interest rates, etc. Based upon detailed knowledge and elaborate sorting models, card issuers are able to avoid or to charge higher prices to, for example, those customers who pay the balance in full monthly and are thus less profitable for the card company.

In a retail wheeling world, each residential customer may pay a different price for the electric commodity. This can occur through the vendors offering bundled packages of products -- energy efficiency, burglar alarm services at various levels of cost, cable TV, telephone, premiums like frequent-flyer miles and so on -- and various rate structures. A vendor will avoid small consumers, even those like senior citizens with impeccable credit records, if the customer isn't likely to take several products in addition to the electric commodity. And the likelihood of the customer taking a bundle of products will be known to the vendor through the powerful computer programs already being employed.

Added to the abuse of consumers that we can look forward to is the prospect of an identical product offered at different prices. This is a practice employed elsewhere. In 1996 Bausch and Lomb settled a class-action lawsuit that accused the company of cheating customers by selling the same product under four different brands at widely varying prices. (NY Times, 8/2/96). Vendors are already purveying "green electricity" at a premium price that is no greener than the same electrons the customer previously bought from the incumbent utility.

Beyond the issue of bundling will be the use of rate design to exclude or entice a particular customer. Small customers, who's monthly usage doesn't amount to enough for the vendor to be bothered with, even though the unit sales could be profitable, can be excluded through a rate design with a large monthly customer charge, regardless of the amount used. Small customers could be

avoided by offering a rate with a monthly customer charge of, say, \$25.00, regardless of the kilowatt hour usage, plus a charge for each kilowatt hour.

Even customers put together in affinity groups by vendors are at risk. Suppose, for example, that a large vendor approached an organization of senior citizens and offered an attractive price if the organization would help aggregate a block of customers by endorsing the vendor. This is a practice now used by insurance companies to sign up blocks of customers at a low marketing cost. Suppose further that the customers who signed up for the package turned out to be predominantly very frugal consumers of electricity. The affinity group will be dumped.

Affinity group dumping is already occurring in the credit card world. Banks and others offering a co-branded card, upon finding that the set of customers attracted are, as a group, unprofitable, are walking away from the deals, or forcing changes in them. The Washington Post reported that Giant Food Inc. is suing a bank to enforce an aggregation deal which had, from the bank's perspective, gone sour. (See the Washington Post, December 10, 1996, page 1 of the business section.) The story relates how the deal turned out to be unprofitable for the bank because more customers were paying their balances in full than had been predicted. The Post's story goes on to describe similar problems in other, unrelated deals.

The discussion thus far has focused on residential customers, but aggregators will also discriminate in putting together portfolios of commercial and other business customers. Credit reporting companies such as Dun and Bradstreet are offering products to assist aggregators in sorting through business customers. The goal is to put together a set of customers who not only will pay on time, of course, but also purchase a high volume of the product. Frugal users will be discriminated against as aggregators put together marketing plans and/or lists for sales calls. Once again each customer may pay a different price for an identical commodity.

The first part of this question asked

"Are rural and urban consumers in different positions with respect to their relative ability to bargain for competitive electricity prices?"

It is not clear that they will be, in terms of the commodity portion of electricity per se. But in terms of bundles of products, say cable TV and/or home security services plus kilowatt-hours of electricity, yes, they will be in a different position. Rural consumers may be relatively worse off.

Rural consumers may, furthermore, suffer in another important way. The company serving as the distributor of electricity over the wires, i. e. "the wires company," may see an advantage in claiming that it costs more to serve a rural

customer than an urban one because of customer density considerations. Only regulation can address such a claim, for there will be only one set of wires and no competition. Rural customers may be faced with higher transportation charges for electricity in a world where electric companies are vertically dismembered. In telecommunications the abuse of "rate de-averaging" is already being aggressively pursued to the detriment of rural customers.

10. Some proponents of retail competition have argued in favor of federal legislation requiring states to adopt retail competition regimes which include mandatory unbundling of those services currently provided by local distribution companies. What advantages and disadvantages might this pose for consumers? Do you have any recommendations?

The advantages for consumers seem minimal. Proponents seem more intent on getting control of the billing envelope as an entry to the consumer for the purpose of purveying bundled products and services.

The Wall Street Journal (12/31/96) reports on the "Race to 'Bundle'" rather than unbundle. Profits lie in the area of tied sales, so that the vendor, once having captured a customer, can sell a variety of products under one brand name. One electron is the same as another, but a brand name permits its sale at a higher price. If the commodity (electricity) can be sold in a package, that by itself permits a higher price for it than if sold alone.

Better still, if a package of bundled services can be sold the customer need not even be told the prices of the parts of the package. The Wall Street Journal's story, triggered by a takeover bid for a security system company, ADT, by an electric utility, Western Resources, says that "[A]ccording to the bundling theory, the more services -- like video on demand, Internet access and home security -- that one company can provide through a single bill, the less likely a customer will be to switch."

In addition to the billing envelope, some proponents want to provide a meter other than those commonly furnished by the utility distribution company. The technology of metering is advancing rapidly and there clearly can be advantages to consumers from the new devices. The (new) supplier of the meter is likely to have as strong a grip on the customer as the incumbent utility does now, but the consumer will be without the protection of a regulatory body. Utilities will assert that obsolete but functional meters should be added to stranded costs.

Unbundling appears to be technologically feasible, and the question may come down to which devil you want the customer to be exposed to, the devil you know or the devil you don't.

11. There is a wide divergence of opinion as to whether or not the Public Utility Holding Company Act of 1935 (PUHCA) should be modified or repealed. In view of the recent merger trend, PUHCA's protections have significance for all states, whether or not they traditionally have been served by a registered holding company.

- a. Do you believe PUHCA is a significant impediment to competition, at the wholesale or retail level, or can "effective competition" be achieved regardless of whether Congress enacts changes to PUHCA?**

PUCHA is not a significant impediment to competition but rather continues to be a critical element in promoting competition. PUCHA is about effective regulation of monopoly power. In all the discussion of de-regulation/restructuring, it is agreed that regulating Transmission and Distribution is critical for the consuming public. Those will continue to be regulated monopoly services. PUCHA regulates monopolies and will continue to be necessary in the future.

There are well known developments unfolding in the electric power industry that make PUCHA even more necessary now than in the past. We observe Enron pursuing the take-over of Portland General Electric, a vertically integrated electric utility. Enron, at the same time, owns companies that manufacture power plants to produce electricity powered by wind and by solar energy. The electric power industry is the arena for numerous mergers -- between electric utilities, between gas and electric utilities, and between gas transmission companies and electric utilities. PUCHA is a main bulwark for the public interest in reviewing mergers and in providing the possibility of effective regulation of monopoly power.

A change made in the Energy Policy Act (EPA) allows Exempt Wholesale Generators (EWGs) into generation at the wholesale level. That change weakens any argument that PUCHA impedes wholesale competition. In addition, PUCHA, through its limits on market power, promotes competition at the wholesale level, as well as at the retail level. Even in today's discussion of competition breaking out everywhere it must be recognized that generation is rapidly becoming concentrated, rather than fragmented into atomistic competition. PUCHA provides a public handle for dealing with monopoly situations.

Regardless of what States or Congress do to de-regulate/restructure the electric power industry there will be monopoly characteristics -- particularly in Transmission and Distribution, but even in generation -- that will require effective regulation. PUCHA is an important element in providing effective regulation for the public interest.

PUCHA promotes effective regulation at the State level by its limits on the interstate reach of monopoly utilities. It serves the public by limiting self-dealing by related subsidiaries owned by a holding company.

b. Do you believe Congress should modify or repeal PUHCA, why, and under what, if any, conditions?

PUCHA should not be repealed for reasons provided in answering the previous part of this question. Some modifications may be useful and should be considered. The Act takes as a given that electric utilities are vertically integrated entities. As the industry is changing in that regard the Act might be modified to reflect conditions in a disaggregated world.

As noted above, the EWG modification has already happened. Creation of EWGs, though, means that generation is less regulated than before. To the extent that an electric utility also owns an EWG, the barriers between the monopoly and competitive need to be strengthened. Some modification to prevent cross-dealing may be in order.

Finally, the rush to merge is partly driven by the desire to acquire customers, to lock in blocks of customers to the merged entity. As discussed in an earlier answer, undue discrimination between customers is going to be an abuse that smaller customers in particular now will face. To the extent that PUCHA provides some control over mergers, it may be an important tool for limiting or regulating control over the customers of the distribution utility, by promoting effective regulation at the State level.

c. Should Congress enact legislation to modify the holding in Ohio Power v. FERC, 954 F. 2d 779 (D. C. Cir. 1992)?

Yes. That decision took from FERC its authority to control an abuse resulting from self-dealing. That authority should be returned to FERC which has the staff expertise to protect the public from self-dealing abuses.

Although the holding in Ohio Power concerned a utility and a related coal company, it is not only in coal that the problems can occur. Holding companies forming nuclear service companies can have the service company charge unfair prices to related operating companies and, under the Ohio Power decision FERC can be excluded from jurisdiction if the SEC approves the contractual relationship, which it did in the Ohio case. The Telecommunications Act modified PUHCA to permit a service company to provide telecommunications service to a related operating company. In this area, as well, some oversight by an agency with staff expertise will afford the consuming public more protection than it now has under the Ohio holding.

It should be emphasized that PUHCA protects consumers as well as investors, and that protection will continue to be needed in the future electric power industry, regardless of whether a registered holding company serves the customers of a State or not.