PART III

RECOMMENDATIONS TO FACILITATE

EFFECTIVE COMPETITION

IN THE COMMONWEALTH

INTRODUCTION

This final section of the Commission's 2002 report on competition provides a list of proposals that may be considered as a means of stimulating effective competitive activity within the Commonwealth's electricity market. To assist the Commission in developing a comprehensive list of proposals, our Staff sent a letter on April 24, 2002, to approximately 60 interested stakeholders. In that letter the Staff asked for any thoughts and recommendations related to the specific topics listed in § 56-596 B of the Act. These topics include the supply and demand balance for generation services, new and existing generation capacity, transmission constraints and market power. In addition, Staff posed sixteen questions in the letter designed to elicit respondents' thoughts on specific restructuring related issues.

Staff received comments from sixteen parties. It then held a meeting on June 4, 2002, to discuss the development of an effective competitive market. Not counting Staff, 29 people attended the meeting representing 14 different organizations.

All stakeholders were given the opportunity to provide supplemental comments by July 1, 2002. In the supplemental comments, stakeholders could respond to written comments of others, respond to statements made in the June 4th meeting, elaborate on their original comments, or present new material. Four parties provided additional comments and three parties that did not submit comments originally provided a response in the second round of comments.

Provided in Appendix III-A, which is a separate volume of this report, are the Staff's letter, a list of stakeholders the letter was sent to, and all of the comments that were received.

The following parties provided comments and recommendations to the Staff:

Utilities:
- Allegheny Power ("AP")
- American Electric Power ("AEP-VA")
- Conectiv/Delmarva
- Dominion Virginia Power ("DVP")
- LG&E Energy/Kentucky Utilities ("KU")
- Virginia, Maryland & Delaware Association of Electric Cooperatives ("Cooperatives")

Competitive Service Providers/Aggregators:
- AES NewEnergy
- Energy Consultants
- EnergyWindow
- Pepco Energy Services ("PES")
- Washington Gas Energy Services ("WGES")

Consumer Representatives:
- Urchie B. Ellis, Esquire
- Virginia Citizens Consumer Council ("VCCC")
- Virginia Committee for Fair Utility Rates ("VCFUR")

Others:
- American Energy Institute ("AEI")
- National Energy Marketers Association ("NEM")
- UHR Technologies ("UHR")
- Virginia Energy Providers Association ("VEPA")
- Virginia Independent Power Producers ("VIPP")

In the remainder of this section of the report, proposals for facilitating competition will be presented. A discussion will follow each proposal identifying the party or parties that made the proposal and a review of the arguments that have been raised for and against the proposal. Following each proposal's discussion, the Commission will provide comments regarding the proposal.

The proposals are not ranked in any order of preference or importance. The first several proposals are grouped together because they all deal with some type of modification of the rate cap or wires charge. These types of recommendations were the

most common. The next group of proposals deals with sending real-time price signals to customers to assist in making informed purchasing decisions, which were the second most common types of recommendations. The section will conclude with miscellaneous proposals received.

Proposal 1: The Restructuring Act should be amended to remove the cap on rates and allow rates to fluctuate with the market.

Perhaps the most vigorously argued premise advanced by several parties is that competition cannot develop until customers are subjected to market-based prices for competitive energy supply. Delmarva states, *"The most significant obstacle to the development of robust competition is the setting of regulated supply prices that are not market based. Whenever the market prices faced by competitive suppliers to obtain their wholesale supplies to resell to customers moves above the default service rate, competition will start to grind to a halt irrespective of the aggressiveness of the marketing campaigns, the amount of customer outreach and education, the mechanisms established with respect to information flow between the utility and marketers, or any other factor."* (Conectiv letter dated May 24, 2002, response to question #1).

AES NewEnergy states that the Restructuring Act provides for no adjustment to capped rates *"to reflect increases in inflation, pollution or other environmental costs, and price increases required to stimulate new generation in the event of increases in demand. In effect, there is no transition at all to a competitive market."* (AES NewEnergy letter dated May 17, 2002, pp. 1-2).

According to LG&E Energy, the parent of Kentucky Utilities, *"the most significant obstacles to the development of competition in the residential or any other market sector is the reluctance of jurisdictions to release generation to the market. With the view that generation should be retained for the incumbent's customers, jurisdictions limit the development of the robust market."* (LG&E Energy letter dated May 20, 2002, response to question #1).

LG&E goes on to state, *"Price caps have no place in an open market. In order to have an active market the competitors must be able to respond to variable conditions…The premise behind deregulation is that with an open market, the market will provide its own cap with the competitors driving prices down."* (LG&E Energy letter dated May 20, 2002, response to question #11).

Several parties, including Delmarva, Energy Consultants and UHR Technologies, lament that price caps prevent appropriate price signals from reaching customers. National Energy Marketers Association states, *"Price caps do not facilitate energy competition and do not permit consumers to modify their consumption levels in response to price. Utility pricing mechanisms must be flexible enough to accommodate and reflect changes in price in the wholesale market. NEM is cognizant of the concern that consumers should be protected from erratic price swings. However, if consumers were permitted to see and respond to real-time pricing signals they could adjust their consumption thereby lessening the impact of price spikes."* (NEM letter dated May 17, 2002, response to question #11).

Not all parties agree that the rate caps should be removed. AEP-VA, DVP and the Cooperatives state that the rate caps and wires charges are included in the Restructuring Act as a result of compromises and negotiations intended to provide a proper balance between developing competition and a smooth transition process.

Dominion Virginia Power further states, *"The caps on base rates, for example, furnish a 'safe harbor' for consumers from the price volatility that may mark the development of a competitive retail market during the transition period."* (DVP letter dated May 20, 2002, p. 2).

AEP-VA does not think it is appropriate to make major changes to the Act at this point. The Company states, *"The Commonwealth began its transition period only a few months ago on January 1, 2002, and retail choice has been intentionally deferred for a substantial number of Virginia's electric customers until as late as 2004. Given the evolutionary concept of market development embodied in the Restructuring Act, it is too early to recommend fundamental changes in the Virginia restructuring process, particularly because some customers do not yet have a right to choose and the Commission has barely started its customer education process."* (AEP-VA letter dated May 20, 2002, p. 4).

The Cooperatives state that, *"Even minor attempts to modify the current scheme, when conducted in a piecemeal fashion, will disrupt the intent of other seemingly unrelated statutes and regulation."* (Cooperatives letter dated May 21, 2002, p. 2).

The Cooperatives further argue that *"the only goal of retail competition is to provide economic savings to consumers… Implementing changes to the framework that effectively raise the price of electricity to Virginia consumers is <u>not</u> an acceptable means to promote competition."* (Cooperatives letter dated May 21, 2002, p. 2). (Emphasis in original).

Consumer groups also argue against the removal of price caps. The Virginia Citizens Consumer Council states, *"the fact that energy prices in Virginia have long been below the national average and below those in neighboring states, cannot be ignored. Markets tend to move to an average and since Virginia is below it and since no state that has implemented choice has seen consumer prices decline, care must be taken to not prematurely force Virginia consumers to give up the advantage of the regulated market.*

Virginia consumers are not willing to pay higher prices for energy for only the opportunity to be part of a competitive market." (VCCC letter dated July 1, 2002, response to question #1).

The VCCC further states, *"to remove the price caps would be a tremendous mistake, especially given the high level of consumer concern about the fact that in no state that has moved to choice have consumers seen lower retail prices and distrust raised by Enron and other corporate debacles."* (VCCC letter dated July 1, 2002, response to question #11).

The VCFUR strongly objects to the removal of capped rates. It says such a proposal is *"an unfair and artificial means of 'encouraging' competition. Few strategies are more likely to harm customers and, at the same time, discourage the development of competition through a restructured electric industry than unjustified increases in capped rates for bundled service."* (VCFUR letter dated May 28, 2002, response to question #11).

Commission comments: The proposal of removing price caps so that the price for competitive energy supply is market-based has generated more debate than any other issue.

One side believes that price caps are a fundamental flaw of the Restructuring Act and competition will not develop until they are removed. Once removed, it is argued that the market will develop quickly and serve to regulate prices and protect consumers.

The other side of the argument is that the paramount concern during the transition to a competitive market is the protection of the consumer. That protection demands that consumers not be exposed to market-based prices until effective competition has

developed and can be depended upon to regulate prices. Consequently, there is predictable tension between letting the market set price levels where it will, and ensuring an *effectively* competitive market (a touchstone of the Restructuring Act) where *competition* sets market prices.

As evident from comments on this issue, rate caps are believed by many to be an essential consumer protection built into the Act. A concern expressed by several parties going into restructuring was that Virginia had relatively low-cost energy and that there would be upward pressure on prices in a competitive market. Virginia's electric utilities agreed to cap their rates through mid-2007 with the expectation that they could continue to earn an adequate return plus recoup any stranded investment during that time frame, thus the rate caps provide a protection for utilities as well as consumers.

If an underlying premise of the Restructuring Act is that a competitive market will result in lower retail electricity prices for Virginia consumers, an argument that these prices must rise so as to induce competition rings hollow. If Virginia was surrounded by effectively operating competitive electric markets, a stronger case could be made for market-based pricing during this transition period. As it is, retail competitive activity is developing slowly in all areas of the country—not just in Virginia or in the Mid-Atlantic region. Consequently, a market has not yet developed that can be depended upon to regulate prices.

Proposal 2: The Restructuring Act should be amended to allow the cap on rates to gradually increase.

The main advocate of this recommendation is Allegheny Power. The Company proposed a concept it calls "The Fund" in its response to last year's solicitation of ideas for facilitating competition. AP continues support of The Fund because it claims the existence of price caps has prevented market development.

As described by AP, The Fund *"involves a surcharge mechanism whereby rate caps are incrementally increased to facilitate market development, thus creating 'head room' for competitive offers… The mechanism permits increases to rate caps to facilitate market development, but not to benefit the distribution company. To the extent that higher rates are paid to the distribution company, the distribution company would not retain revenues in excess of its capped rates but would instead accrue these revenues in a 'Fund'. Monies collected in The Fund would be accumulated and used to offset the costs associated with establishing demand response programs. In latter years this money will help to buffer any 'rate shock' which may exist when caps are removed from the prices that regulated distribution companies charge for energy that they procure to meet the requirements for customers who choose not to shop."* (AP letter dated May 17, 2002, p. 6).

AP cautions that The Fund is only a transitional tool, not a substitute for an efficient market. It will allow some consumer protection while the competitive market develops.

Energy Consultants agrees with AP that an approach such as The Fund is needed. The Company states, *"Until there is a substantial competitive market in operation, some*

artificiality in retail pricing needs to allow a reasonable basis for profitability at modest customer volume. As multiple companies gain traction in the market and economies of scale allow competitive forces to do their work, this artificiality can be phased out." (Energy Consultants letter dated May 20, 2002, response to question #10).

Energy Consultants further states, *"The cumulative impact of even modest inflation may build a significant bow wave effect that could cause a major rate shock in 2007, whether competition exists or not… If competition does not develop to restrain prices, we believe it could be appropriate to relax rate caps for the specific purpose of avoiding an artificial bow wave of unrecovered cost and a large price spike."* (Energy Consultants letter dated June 28, 2002, p. 1).

AES NewEnergy prefers a market-based approach, but sees as reasonable an alternative approach of escalation of the price cap to avoid rate shock. Where AES NewEnergy disagrees with the concept of The Fund is how the excess revenues are to be distributed. AES NewEnergy states, *"If such a pricing structure were to be adopted in Virginia, NewEnergy stresses that any such excess collection should be provided in such a manner as to not disadvantage competitive markets. For example, the subsidization of demand response programs* ***of a utility*** *would create a long term advantage for utility supply customers if competitive suppliers were unable to administer these programs for their own customers. Demand side management programs should be a competitive, unregulated service. A better proposal would be simply to provide* ***all customers*** *a refund applied towards their distribution costs, allocated based on energy consumption. NewEnergy avers that customers know best how to allocate their own funds."* (AES NewEnergy letter dated May 17, 2002, response to question #10). (Bold in original).

LG&E Energy sees periodic increases of a rate cap as a distortion of market conditions and believes there should be no rate cap at all. WGES also believes that non-market-based prices set by regulators do not improve the development of competitive markets. The Virginia Energy Providers Association claims The Fund would be a *"contrived, artificial subsidy that would distort true price signals."* (VEPA letter dated May 20, 2002, response to question #10).

The VCFUR suggests that The Fund should be rejected. It states, *"If the General Assembly amends the provisions in the Restructuring Act pertaining to capped rates, it should permit changes to capped rates based on the incumbent electric utility's cost of service, following a rate investigation by the Commission. Otherwise, customers will pay unnecessarily high prices for electricity."* (VCFUR letter dated May 28, 2002, response to question #10).

The VCFUR further states that The Fund simply assumes that "rate shock" will occur in 2007. The VCFUR claims that provisions in § 56-585 of the Act should prevent such rate shock by directing rates to be established based on prices in competitive regional electricity markets.

Commission comments: As noted earlier, Virginia is in the beginning stages of a transition period that concludes in 2007. Many customers do not presently have the right to choose—some may not be able to do so until January 1, 2004, in keeping with the Commission's order establishing the phase-in of retail choice within the incumbent utilities' service territories. Moreover, at this time there are virtually no retail competitors making competitive offers in those service territories that are open to choice. Of course, the advocates of this proposal, and the proposal to eliminate capped rates,

contend that competitive entry is unlikely to occur unless and until changes such as these are made in Virginia's restructuring paradigm. However, it seems to this Commission that while increasing rates paid by Virginia's electric consumers may potentially create the "head room" that competitive suppliers such as AES NewEnergy view as essential, such increases are not consistent with consumer protections in the Act or the expectations of Virginia's electric customers that retail choice would lower—and not raise—their electricity costs. Also, a premise behind this proposal is that "rate shock" is inevitable even though we are only nine months into the transition to competition.

Proposal 3: The Restructuring Act should be amended to eliminate the wires charge.

Several parties aver that the wires charge mechanism may be as strong a detriment to the development of competition as rate caps. For instance, AES NewEnergy states, *"The existing wires charge methodology currently used to establish competitive transition charges is not viable. It dictates that if market prices are below SOS* [standard offer service or capped rate service] *prices, the shopping credits will be reduced to eliminate any retail market incentive for competitive suppliers. In practice, the calculation of a wires charge is even more punitive to suppliers, since reserve margins, option premiums, retail costs, and off-system transmission and ancillary costs and charges incurred by a supplier are excluded from the determination of the market price."* (AES NewEnergy letter dated May 17, 2002, p. 3).

Similarly, WGES claims, *"The setting of the wires charge is a key issue that is preventing the progress of retail competition in the Commonwealth at this time. The legislature should revise the entire mechanism for setting the wires charge to be consistent with models developed in other States in the Mid-Atlantic region. Wires charge should be driven by retail distribution costs and market forces should determine the retail prices."* (WGES letter dated May 20, 2002, response to question #8).

Pepco Energy Services asserts, *"the wires charge and the price to compare are in the nature of a zero sum game because any increase above zero of the wires charges must be accompanied by an equal decrease in the generation price to compare so that the sum of the two continues to equal the unbundled generation rate. Consequently, any non-zero wires charge will reduce the incentive for Virginia consumers to shop for a competitive*

supplier through a reduction in the price to compare." (PES letter dated May 22, 2002, response to question #9).

AEP-VA, DVP and the Cooperatives share a common view that the relationship between the wires charge and capped rates is a cornerstone of the Restructuring Act that was developed through intense negotiations. The wires charge, they say, is designed to assure utilities of revenue neutrality during the transition period.

AEP-VA states, *"the economic impact of wires charges on an individual customer's choice of generation supplier has been accepted from the initial adoption of the Act. The General Assembly originally concluded that those transitional effects did not justify excluding wires charges from the balanced provisions in the Act. Although retail generation suppliers have not yet begun to enter the market in Virginia, the construction of generation facilities suggests that the generation supply that would accommodate a competitive retail market is growing. It is premature to consider wires charges an impediment to competition that need to be removed from the Act immediately."* (AEP-VA letter dated May 20, 2002, p. 3).

Commission comments: It is hard to refute either side of the argument related to this proposal. The wires charge will cause it to be more difficult for competitive suppliers to offer savings to customers. On the other hand, the wires charge is a central component of the Restructuring Act.

The elimination of the wires charge may help, but will not guarantee, competition. In 2002, three utilities that transitioned to full retail access (Delmarva, Allegheny Power and AEP-VA) did not have wires charges and no CSP offers were made in their service territories.

Proposal 4: There should be a staged transition to the competitive markets by rate class.

AES NewEnergy claims that an effective method for moving to full retail competition *"is through a staged transition to competitive markets by rate class, with the large customers leading the way. For example, in the Baltimore Gas and Electric service territory in Maryland, the largest customers (greater than 1.5 MW) transitioned to full competition in the first 1 to 2 years of retail choice, while smaller industrial and commercial customers will transition to full competition within 4 years. Utility default service for these large customers after the transition period was equal to the spot market price plus a retail cost adder of 7 mills. Thus, the utility will not incur any further cost exposure for its retail supply obligation, and customers were encouraged to enter the competitive market for their electricity supply requirements. To date, the transition to a competitive market is moving smoothly for these large customers."* (AES NewEnergy letter dated May 17, 2002, pp. 2-3).

Delmarva advocates *"establishing mechanisms to permit the long-run growth of a competitive market for commercial and industrial customers through the use of a default service rate that is a market-based rate. This offering will have to be evaluated to determine whether it should apply to default service for all C&I customers or just returning C&I customers. Additionally, evaluation will be necessary to determine if this should be offered in the near term, or after the expiration of the rate caps."* (Conectiv letter dated May 24, 2002, response to question #1).

Commission comments: The Commission believes that it may be worthwhile for the LTTF to consider amending the Restructuring Act to provide more incentives and

opportunities for large customers to switch suppliers. When the Act was written some advocated that it would be unfair for large customers to be allowed access to the competitive markets before residential customers because all of the good deals would be taken by the large customers.

The objective of this proposal is to stimulate competitive activity in a fair and orderly manner. An approach such as Maryland's should be considered. Large customers are the most attractive market for CSPs. If the large customers are moved to a market-based default service there may be a jump-start of competitive activity that may eventually allow similar treatment for residential customers without subjecting them to undue rate shock.

A proposal the LTTF could consider is as follows: **If a large commercial or industrial customer is willing to commit to market-based pricing should it ever return to its LDC, that customer should be allowed to switch to a CSP without paying a wires charge.**

This proposal would enhance the ability of large energy users to shop because without a wires charge the potential savings are escalated. The benefit to the incumbent utility is that the customer could not return to capped rate service. The impact on the utility's ability to recover fully its stranded costs, however, may need to be evaluated.

It would appear that the Restructuring Act would need to be amended to allow this proposal because large commercial and industrial customers would be able to avoid wires charges before residential and small commercial customers had a similar opportunity. Section 56-577 2 b provides for similar treatment for all classes of customers.

Proposal 5: The SCC or General Assembly should calculate recoverable stranded costs for each utility and the pricing of standard offer service should reflect an amortization of those costs over a fixed period of time.

WGES, Energy Consultants and the VCFUR make this recommendation. WGES defines its recommended process thusly, *"The wires charge and standard offer mechanism should be built on the following three steps, as previously stated: (i) determine the needed level of stranded cost recovery for each utility, if any; (ii) select a transition period and an amortization schedule over which each utility will collect stranded costs, if any, through a "wires charge"; and (iii) at the end of the transition period, all electric supply to retail customers should reflect market pricing and be provided by competitively chosen suppliers. This model would present complete clarity to the market in terms of the costs and duration of utility standard offer service. It therefore would promote the development of the competitive market. It also would avoid the requirement of projecting market prices of any type, and allow customers to compare true market prices to the standard offer service benchmark."* (WGES letter dated May 20, 2002, response to question #8).

The VCCC appears to concur with this recommendation in its statement, *"Since stranded costs were never quantified, it is possible that the wires charges are contributing to long term market power of the companies currently serving Virginia and this could harm potential competitors."* (VCCC letter dated July 1, 2002, response to question #9).

The utilities did not respond to this recommendation although given the opportunity to provide supplemental comments.

Commission comments: The Restructuring Act provides in § 56-584 that rate caps and wires charges through mid-2007 would reimburse incumbent utilities for their "net just and reasonable stranded costs". Neither this statute nor any other in the Restructuring Act, however, defines stranded costs nor provides any formula or statutory framework for their calculation.

Nevertheless, § 56-595 C of the Restructuring Act provides that the Legislative Transition Task Force ("LTTF") should:

> after the commencement of customer choice, monitor, with the assistance of the Commission, the Office of the Attorney General, incumbent electric utilities, suppliers, and retail customers, whether the recovery of stranded costs, as provided in § 56-584, has resulted or is likely to result in the overrecovery or underrecovery of just and reasonable net stranded costs.

Since there was no determination of reasonable net stranded costs going into the transition (nor any statutory structure for their calculation, thereafter), this may be a challenging task for the LTTF. However, the Commission, the Office of the Attorney General, incumbent electric utilities, suppliers, and retail customers are all required by this statute to assist the LTTF in this endeavor. Consequently, if and when the LTTF moves forward under this statute, all concerned will have an opportunity to offer guidance to the LTTF in making these important determinations.

The Commission would note, however, that since measuring the "underrecovery" or "overrecovery" of stranded costs under § 56-595 C requires their quantification, it will be necessary to adopt a formula or method for their calculation.[1] Moreover, and with respect to monitoring the levels of their recovery, it will also be necessary to determine

[1] The adoption of a formula would provide an effective, operational definition of stranded costs.

what part of the utilities' capped rates (together with wires charges) should be allocated to stranded cost recovery. Simply put, two things must be done in order to monitor the progress Virginia's utilities are making toward recovery of their stranded costs. First, determine the amount of stranded costs; second, allocate wires charges and some part of capped rates to their recovery. Undertaking any of the foregoing presupposes, however, that authority exists within the Restructuring Act's current statutory framework for doing so.

Proposal 6: The SCC's determination of market prices for generation should reflect a retail market price rather than a wholesale market price.

Section 56-583 A of the Restructuring Act directs that wires charges shall be the excess, if any, of the incumbent electric utility's capped unbundled rates for generation over the projected market prices for generation. The determination of the market price is, therefore, a critical component in the setting of both the wires charge and the price-to-compare.

Last year the Commission held a proceeding (Case No. PUE-2001-00306) to determine the projected market price to be used in calculating the 2002 wires charge for DVP and AEP-VA. In the November 19, 2001, order in that case the Commission's interpretation of the Restructuring Act was that the wires charge/market price determination should be designed to be revenue neutral to the incumbent utility. The market price was therefore calculated to be the price the utility would receive if it sold in the wholesale market the energy displaced by a switching customer.

In that proceeding, AES NewEnergy argued that market prices for generation should include costs such as retail administrative costs and transmission costs that a CSP would incur in supplying electricity to retail customers. This argument was rejected.

In comments received in the solicitation of recommendations for this report, several parties revisited the AES NewEnergy proposal that it is appropriate to consider retail costs in the market price calculation. Pepco Energy Services makes the following argument, *"While the cost of electricity is by far the largest cost for a competitive supplier to serve retail customers, suppliers must also incur additional costs such as the cost to acquire customers, billing, customer service, general and administrative costs,*

costs associated with credit worthiness including bonding requirements established by both the Commission and the distribution companies, and other miscellaneous costs. A retail market price concept includes not only the cost of electricity, but also all these other costs that a supplier must incur to serve customers.

Pepco Energy Services submits that if the legislature had intended for the price to compare values to be based on wholesale market prices, which is a price level that will bar competitive retail suppliers from operating in Virginia, it would be illogical for the legislature to simultaneously include language encouraging the Commission to implement rules and regulations that will advance competition in Virginia. Consequently, the only reasonable and logical interpretation of the phrase "projected market prices" in § 56-583 (A) is a retail market price concept." (PES letter dated May 22, 2002, response to question #8).

The National Energy Marketers Association claims that default service must be priced at retail rates for each customer class. If a subsidized or artificially low rate is set true competition will not develop. NEM states, *"Default pricing for electricity should include transmission charges, scheduling and control area services, and distribution system line losses, a share of pool operating expenses, risk management premiums, load shape costs, commodity acquisition and portfolio management, working capital, taxes, administrative and general expenses, the costs of metering, billing, collections, bad debt, information exchange, compliance with consumer protection regulations, and customer care."* (NEM letter dated May 17, 2002, response to question #8).

In particular, the VCFUR states that *"Section 56-583 of the Restructuring Act…makes no reference to 'revenue neutrality' as a goal, implicit or explicit, in the*

calculation of wires charges for incumbent utilities." The VCFUR goes on to say that *"In an overwhelmingly 'retail' pricing context, it seems anomalous to suggest that Section 56-583 A requires wires charges nonetheless to be based on 'wholesale' prices. The word 'wholesale,' of course, is not found."* The VCFUR further states *"Obviously, CSPs that would sell at retail in Virginia – and that must, therefore, incur substantial costs for electricity, marketing, etc. in order to enter that retail market and who must, in addition, recover some margin above such costs – cannot be expected to sell electricity at prices that are below wholesale prices. If retail sellers must sell at below-wholesale prices, few, if any, sellers would even consider entering the market."* Thus, the VCFUR concludes, the Commission should *"reconsider the legal conclusion that it reached in PUE010306 and revise its methodology for the projection of market prices in order to avoid frustrating the development of competition in Virginia. In particular, the Commission should modify the current methodology to permit the establishment of wires charges that reflect retail market prices, rather than wholesale market prices."* (VCFUR letter dated May 28, 2002, pp. 4-5).

AP and AEP-VA, however, argue that the current methodology used to set market prices on a wholesale level is appropriate. AEP-VA also states, *"AEP's load shaping methodology already adjusts wholesale generation prices for class-specific losses, load factors and peak and off-peak usage. These adjustments result in generation market prices that are on a comparable basis to the incumbent's generation rate paid by each retail customer class. Any further adjustment would be speculative and inconsistent with a comparison to AEP's generation costs. While such a rule might appear to create a margin between projected market price and an incumbent utility's costs, that margin*

would not likely result in appropriate choices by customers or encourage competitive entry." (AEP letter dated May 20, 2002, p. 10).

Commission comments: The Commission has already made its interpretation of the Act and how it relates to this proposal. It did so in its order in Case No. PUE-2001-00306, where the Commission concluded as follows:

> We do not disagree that allowing for "headroom" by incorporating retail costs in market prices would fairly recognize the costs CSPs will incur to serve customers, and would likely promote competition. However, it would not be revenue neutral to the incumbent utility.
>
> The Act, in our view, is designed to make the incumbent utility whole, with the wires charge priced to make the utility indifferent as to whether it recovers stranded costs through capped rates or wires charges. Including retail costs in the calculation of market prices would not likely leave the utility in a revenue neutral position as the Act is designed to do. We cannot, therefore, find that the Act authorizes such action. If the General Assembly determines that this measure is appropriate to advance competition it, of course, may amend the Act to allow it.

Proposal 7: The SCC should consider setting the fuel factor and wires charge for AEP-VA and DVP for longer than one year.

The Virginia Committee for Fair Utility Rates is the main proponent of this proposal. Specifically, the VCFUR states, *"The Commission should not, however, retain an annual re-calculation of fuel factors and wires charges. The Commission should consider fixing the fuel factor for both APCo and Virginia Power for a longer period, perhaps two or three years. Fixing the fuel factor for a longer period would provide the benefits of greater cost certainty for electricity purchased from both companies because, for bundled service, both base and fuel rates then would be fixed for a longer period. For unbundled service, there would be greater certainty regarding shopping credits. This greater certainty would allow CSPs and their potential customers to enter into longer term agreements and to make decisions in a more predictable and, therefore, favorable environment and thereby assist in the development of competition."* (VCFUR letter dated May 28, 2002, p. 7).

Pepco Energy Services agrees with the VCFUR proposal. PES states that fixing the fuel factor for a longer term *"would provide competitive suppliers with more time to develop and implement marketing campaigns to acquire customers."* (PES letter dated July 8, 2002, p. 10).

Commission comments: If the goal of this proposal is to accommodate long term stability in the wires charge and the shopping credit (price-to-compare) both the fuel factor and the market price must be established for periods in excess of one year. It is challenging to project market prices for a period of one year in today's often volatile energy market. Extending that period would stabilize the "price-to-compare" (for utilities

with a wires charge) but would increase the probability that the market price established by the Commission would not reflect actual market conditions. While such stability may be valuable in terms of negotiating longer term contracts with CSPs, it may also prevent customers from shopping for a sustained period of time if the market price established does not reflect (i.e., is lower than) actual market conditions. Likewise, it may thwart a utility's recovery of stranded costs if a market price that is set for a multi-year period is higher than actual market conditions.

For utilities that do not have a wires charge, if the goal is to stabilize the "price-to-compare," establishing the fuel factor for an extended period would accomplish this objective. Again, this requires longer term projections and enhances the probability that fuel factor adjustments, when they are made, would be larger.

While this concept may have merit, it is unclear that it would accomplish the goal of advancing competition. In addition, it appears that a legislative amendment would be needed to allow a fuel factor to be set for more than one year. Section 56-249.6 states:

> Each electric utility which purchases fuel for the generation of electricity shall submit to the Commission its estimate of fuel costs, including the cost of purchased power, for the twelve-month period beginning on the date prescribed by the Commission. Upon investigation…the Commission shall direct each company to put in place tariff provisions designed to recover the fuel costs determined by the Commission to be reasonable for that period…

Proposal 8: Shopping customers who return to the incumbent utility should have a market-based price as an option of avoiding minimum stay requirements.

The existence of capped rates provides an opportunity for a knowledgeable customer to "game" the system by contracting with a CSP for electricity supply during low demand periods when wholesale prices are low and returning to capped rate service during high demand periods. A minimum stay period is designed to thwart such actions by forcing a returning customer to stay with the LDC for 12 months or some other defined period of time.

The Commission decided in Case No. PUE-2002-00296 that a 12-month minimum stay period should apply only to customers with a demand of 500 kw or above that return to the LDC. Therefore, this proposal would currently only apply to large commercial and industrial customers.

Delmarva related its experience in another jurisdiction with a similar concept. It states, *"The Maryland Commission, in at least two instances (BGE and Pepco), have approved market-based rates for returning larger customers based on PJM hourly prices for energy and PJM's short-term capacity markets or deficiency penalties for capacity that also include a kwh 'adder.' An explicit 'adder' may not be necessary if the wholesale prices include the risk assumed by the default service provider for the potentially fluctuating default service load. The reason for limiting this approach to larger customers is more practical than theoretical. The benefits described below would apply to all customers, but, the larger customers typically have hourly demand and energy meters and the greatly reduced number of customers involved greatly reduces the work*

necessary to implement market-based rates." (Conectiv letter dated May 24, 2002, response to question #7).

Allegheny Power agrees that having a market-based price as an option will protect the distribution company from short-term supply obligations while encouraging customers to re-enter the competitive market.

Pepco Energy Services also agrees with the proposal with the caveat that the market-based pricing should *"fully reflect all costs associated with providing that service and should be based on hourly spot market costs, if existing metering permits, or on rates that reflect costs as much as practicable given the existing metering equipment."* (PES letter dated May 22, 2002, response to question #7).

Both WGES and the VCFUR support the proposal. WGES further states that residential customers should not be subject to minimum stay restrictions at all.

About the only party that objected to this proposal was the Virginia Independent Power Producers. It stated that capped rates through mid-2007 is a fundamental consumer option that should not be tampered with.

The Virginia Citizens Consumer Council warned that subjecting customers to market-based prices may deter involvement in the competitive market.

Commission comments: The Commission believes that this proposal has merit. As previously mentioned, it would currently only apply to large commercial and industrial customers who should be more sophisticated energy purchasers. The proposal as defined would offer a choice to accept market-based pricing as a means of avoiding a minimum stay. This would enable large customers that volunteer for such an option to shop again immediately rather than wait for 12 months. However, in the Commission's

view, the authority it has under § 56-577 E to establish minimum stay periods may not be sufficiently broad to enable the Commission's implementation of this proposal, absent additional legislative authority to do so. Currently, the capped rate statute (§ 56-582) provides that shopping customers who return to their incumbent utility enjoy the benefit of returning to capped rate service (§ 56-582 D). In the Commission's view, an amendment to this statute may be a prerequisite to this proposal's implementation by this Commission, i.e., authorizing incumbents to impose market-based pricing on customers (at present, those with a demand of 500 kw or greater) desiring to avoid the minimum stay periods authorized by § 56-577 E, and implemented in the Commission's regulations. Thus, the LTTF may wish to consider, in particular, the impact of such a proposal on the "right of return" to capped rates currently afforded shopping customers under § 56-582 D of the Restructuring Act.

Proposal 9: There should be a five-year moratorium on restructuring to monitor the market development elsewhere.

This proposal was offered by Mr. Urchie B. Ellis. He states, *"In the light of the many complications that have arisen around the U.S. and with several of the power trading companies, it is clear that Virginia 'public interest' requires a 5 year moratorium."* (Urchie B. Ellis letter dated June 15, 2002, response to question #5).

Although not calling for a moratorium, the VCCC states, *"The facts that today there is not a 1) dependable, transparent, effective wholesale market, 2) a connected, independent Regional Transmission Organization, 3) transmission designed to move energy not only across Virginia but to and from other states as well, and 4) sufficient generation to sustain a dependable market mean that substantial obstacles exist for a robust competitive retail energy market, especially for residential customers. These issues must be adequately addressed and resolved before residential consumers are forced into the 'competitive' market. The worst that could happen would be to force a competitive retail market when the infrastructure is not in place and functioning effectively."* (VCCC letter dated July 1, 2002, response to question #1).

Commission comments: By January 1, 2004, all consumers in Virginia will have the right to choose. By that time all of Virginia's utilities should be members of operating RTOs. We believe that the preparatory work we have completed and are working on (including computer systems, rules and regulations) will be conducive to competitive markets.

Of course, the existence of a market structure conducive to competition does not ensure that there will be actual competitors vying for customers' business. The presence

of competitors depends upon economic factors beyond the ability of the General Assembly or the Commission to assure. If the General Assembly decides at some point in the future that effective competition has not developed as desired and that a proposal such as a moratorium is necessary, implementation would require an amendment to the Restructuring Act.

Proposal 10: An auction should be conducted to determine default rates for 2004 and after.

Several states, including Maine and New Jersey, have recently conducted auctions to determine a standard offer rate or default rate for service that is available for customers that do not or cannot shop. In its letter to stakeholders soliciting comments for this section of the report, Staff asked for thoughts on the possibility of using an auction process for default service beginning in 2004. While the concept did not earn a ringing endorsement, several parties believe it merits consideration.

AES NewEnergy believes *"a market bid for default service is preferable to a long-term, non-market based fixed price for SOS. NewEnergy concurs with the Maine Public Utility Commission that this structure is much more appropriate for the development of competitive markets. With that said, it is also important to note that the Maine utilities also divested their generation assets and created a supply market with many sellers, thus effectively dealing with market power issues. Massachusetts also conducts default service auctions that also provide a successful example of such auction processes. The success of any program is driven not by one factor, but many factors that contribute to a viable competitive market. Among these are many generation suppliers, an effective and independent transmission system operator, and retail supply rates that are established in the competitive market. True competition is achieved only when retail and wholesale prices are market based. The pace by which this takes place is driven by how quickly and effectively legislative and regulatory action is taken to create this environment."* (AES NewEnergy letter dated May 17, 2002, response to question #14b).

The National Energy Marketers Association claims that if a bid process is properly structured it could encourage a competitive market. It believes that the bids should be based not only on the wholesale price of the energy commodity, but also retail costs. NEM urges that *"the bid process be designed for selection of suppliers to directly serve retail customers as opposed to the competitive selection for wholesale contracts to meet the needs of retail customers. Implementation of a bid system for wholesale contracts will not contribute to the ultimate development of a competitive retail market because customers will be unaware of the competitive suppliers serving their supply needs."* (NEM letter dated May 17, 2002, response to question #14b).

EnergyWindow states that *"competitive marketing processes, including, possibly, competitive bidding, should be used to set default supply service cost, during and following any transition period."* (EnergyWindow, letter dated July 7, 2002, p. 1).

The Virginia Energy Providers Association *"supports the concept of a wholesale solicitation that would result in a competitive price, as opposed to an administratively set price, for retail customers."* (VEPA letter dated May 20, 2002, response to question #14b).

LG&E Energy believes a bidding program *"distorts the market by purchasing power on behalf of ratepayers; if the customers believed a competitive market existed they would take advantage of the opportunity to reduce their energy cost."* (LG&E Energy letter dated May 20, 2002, response to question #14b).

Energy Consultants argues that *"An initiative that is artificial and having very short-term duration…would attract only those companies where the marginal cost of participation is low. Such programs could potentially extend the horizon for more*

meaningful competition." (Energy Consultants letter dated May 20, 2002, response to question #14b).

Allegheny Power states that, *"there is no place for anyone not involved in free markets to become involved in 'nurturing' competition. Intervention into the functioning of any market will only function to further distort the market. The market should be permitted to function freely and efficiently, with any intervention applied externally to its operation."* (AP letter dated, May 17, 2002, response to question #14b).

Commission comments: Section 56-585 of the Restructuring Act addresses the provision of "default service" to those customers who do not or cannot obtain service from an alternative supplier. Such service is also available to customers whose alternative supplier fails to perform. Under the current language of the Restructuring Act, and consistent with the Commission-established phase-in schedule, default service will be provided to all retail customers of Virginia's incumbent electric utilities effective January 1, 2004.

The Commission is charged with determining the components of default service and with establishing one or more programs making such services available to retail customers requiring them. The Commission may conduct a competitive bidding process under procedures established by the Commission. Upon a finding that the public interest will be served, the Commission may designate one or more default service providers to provide specific components of service, in one or more geographic areas within the Commonwealth, to one or more classes of customers. In accordance with the Restructuring Act, the Commission may also require the incumbent utilities to provide one or more components of service or to form an affiliate to do so.

In an effort to determine the interest in and feasibility of having default service provided by entities other than, or in combination with, the incumbent utilities, our Staff sent a letter to interested parties soliciting input on this topic. Parties were asked to address a list of specific issues relating to their interest in the provision of default service and the desirability and feasibility of the Commission conducting competitive bidding processes to solicit the provision of default service. Parties were asked to respond by mid-August and were encouraged to raise other issues they were interested in discussing. A meeting to further discuss competitive default service is scheduled for October 4, 2002.

In addition to soliciting input from interested parties, Staff is gathering information and monitoring the activities of states where the competitive default service provider selection process has taken place or is currently under way.

In New England, most states' utility commissions either required or encouraged divestiture, and initially set discounted provider of last resort rates, with utilities required to purchase the power. Most New England states have since transitioned to a competitive bidding process for some portion of default service.

In Connecticut, "sealed bids" were solicited with the requirement that bids be at or below the regulated rate, effectively negating any competition. In Maine, each utility undertook a separate bidding process to select service providers to allow for several providers for each customer class. The Maine Public Utilities Commission has frequently found the bid prices too high and unacceptable, leaving the utilities to fill the supply gap with little notice.

In Massachusetts, utilities were not required to divest but were provided strong incentives to do so in terms of the recovery of stranded costs. Rates for default (returning

load) service were set higher than the standard offer service of customers who never switched. All new customers were extended the default service rate.

In Texas, the utilities were not required to divest all of their generation assets but they have been separated from the wires business typically through affiliates. Utilities were required to sell off a large portion of their rights to power from their generation portfolios and have been conducting a series of entitlement auctions to do so. In Texas, a utility retail affiliate can become the provider of last resort within the utility service territory, compete to serve retail customers in other service territories and participate in the utility's entitlement auction.

The competitive bidding process receiving the most attention to date is the simultaneous descending clock auction conducted by the New Jersey Board of Public Utilities in February 2002, to meet their default service ("Basic Generation Service" or "BGS") obligations. The Internet BGS auction used in New Jersey is the first of its kind in the nation. A participant may bid to supply a portion of the BGS load of one or more of the electric utilities. When a participant bids in this auction, that participant is stating the amount of power that it is willing to serve for each utility at the prices in force at that point in the auction. If the bids offered are for more power than is needed, the prices are reduced and another round of bidding is held. This process continues until the amount of supply bid matches the load requirements of the utilities. The bidders that hold the final bids when the auction closes are the winning bidders. Applicants must meet certain requirements to participate in the auction. Auction offers are binding and no post-auction negotiations are allowed.

On February 15, 2002, the New Jersey Board of Public Utilities approved the results of the BGS auction. The board was initially concerned about a lack of participation in the auction but their concerns proved to be unwarranted as over twenty qualified bidders participated.

An auction for the right to provide default service may be a useful tool in stimulating the interest of alternative suppliers of energy. Through an auction, a competitive provider would have the potential opportunity to gain a large number of customers without having to spend significant funds on marketing. However, there are a number of possible challenges associated with an auction for default service during the capped rate period. Certain factors might limit the effectiveness of default service bidding in Virginia, at least in the near term. Competitive power markets have not developed to any significant extent in Virginia.[2] Our largest utilities have not yet transferred control of their transmission assets to an RTE. Also, our capped rates are very competitive and it may be difficult for prospective bidders to make attractive offers until those rate caps expire.

If prices offered through an auction exceed the unbundled capped generation rates, designation of a default service provider other than the incumbent utility would be tantamount to a lifting of the price caps. Otherwise, incumbent utilities would have to absorb higher costs paid through the auction in order to maintain capped rates. In the event that an auction produces a lower price than the capped generation rates, incumbent utilities would presumably be entitled to wires charges and customers may not receive

[2] For example, three of New Jersey's incumbent utilities are participants in PJM. PJM has established markets for both energy and capacity. Additionally, PJM imposes credit worthiness and capacity reserve requirements on load serving entities. In the absence of such requirements, an auction for default services would have to include standards to qualify alternative providers of default services.

any direct benefit from the auction. The Staff will continue to review what is being done in other states with respect to competitive default service and will encourage interested parties to participate in future work group efforts.

Proposal 11: Customers should be provided with the tools necessary to monitor electricity prices and make informed buying decisions.

According to the American Energy Institute, one of the most important ways in which the Commonwealth can address the issues of supply and demand balance, transmission constraints and market power is *"through linking electricity supply and demand via price signals to ultimate energy consumers. This requires the implementation of advanced metering that collects usage information at least hourly and retrieves it for consumers, utility, and energy supplier use at least daily."* (AEI letter dated May 20, 2002, p. 1).

In its comments the American Energy Institute cites a study by McKinsey & Company that estimates the benefits in the U.S. from price-based demand response at $10-15 billion per year. McKinsey & Company argues that regulators need to take a large and active role. Their study states, *"Since so much of the value comes from collective actions, there is a risk that consumers or their utilities, especially in the mass-market residential or commercial sectors, will not invest in real-time metering of their own accord. However, unless significant customers are offered this opportunity, the economics will not be positive. By our estimates, at least half of mass market customers would need dynamic pricing capabilities in order to justify the infrastructure expense. Such a wide-scale deployment will require an institutional solution."* (AEI letter dated May 20, 2002, citing a McKinsey & Company study, pp. 6-7).

The American Energy Institute describes a proceeding that is being considered in California that would consider the development of an advanced metering infrastructure to facilitate demand-responsiveness and investigate dynamic pricing rate design options to

encourage consumer use of demand response. A draft of the California Public Utilities Commission agenda, dated May 16, 2002, is attached to AEI's comments. Apparently the California proceeding is still under consideration.

AEI also suggests that advanced metering should become a part of basic distribution service so that all customers are provided this new technology. AEI states, *"The specific problem with advanced metering is that it exhibits significant scale economies and requires a single, common-carrier provider to be cost-effective and to enable all competitors to have equal access."* (AEI letter dated May 20, 2002, response to question #1).

WGES states, *"competitive suppliers and buyers should have complete knowledge of market prices at the same time."* (WGES letter dated May 20, 2002, p. 2).

Allegheny Power claims that *"a demand response to price is one of the missing fundamentals in the retail electricity markets. The introduction of demand elasticity based on price, such as real-time pricing, will result in lower market clearing prices as load will diminish as prices rise. AP supports any initiatives that promote peak load management through market price mechanisms."* (AP letter dated May 17, 2002, p. 8).

The VCFUR says the Commission may want to investigate the use of a fuel factor that varies by season as wholesale energy prices vary. This would cause retail customers to pay for electricity at prices that more closely reflect wholesale market prices and thus customers would receive more accurate price signals. (VFUR letter dated May 28, 2002, p. 8).

Commission comments: The Commission agrees that one of the key objectives of a competitive retail electricity market should be to obtain generation cost efficiencies

from retail customer response to improved price signals. Additionally, improved pricing structures increase the responsibility of individual customers for the cost they impose upon the system, thereby reducing traditional regulated average-rate subsidies. The competitive supplier provision of improved price signals to retail customers, however, requires hourly (or sub-hourly) interval metering at the retail customer level. Interval metering equipment, and the collection and processing of data from such a meter, is significantly more expensive than the typical metering provided residential and all but the largest non-residential customers at the current time. Most meters perform a simple measuring of non-time differentiated cumulative usage.

There are two approaches for advancing the implementation of interval metering for smaller customers. Currently, the Act directs a competitive metering approach for large customers and authorizes the Commission to require the same approach for smaller retail customers. The competitive metering approach leaves the decisions whether to install interval metering and who should pay for it to individual customers and their competitive suppliers. A regulatory approach, as suggested by AEI, would require or encourage incumbent utilities, in their role as the provider of distribution service, to install interval metering.

Due to metering economies of scope and scale, a planned mass deployment of interval metering capability for smaller customers by the incumbent utility would be significantly more cost effective on a per customer basis than the customer-by-customer deployment that would characterize a competitive metering approach. The regulatory approach also would provide for a much more rapid and comprehensive deployment of interval metering for smaller customers by overcoming market barriers associated with

the competitive approach. Such barriers include customer and supplier reluctance to make a relatively significant and somewhat risky up-front investment in metering equipment, which is further compounded by a general lack of customer understanding of interval metering and time-of-use pricing implications. It is also quite possible that a system-wide deployment of interval metering could increase the interest of competitive suppliers relative to the provision of default electricity service. If this were the case it would be a significant advancement in retail competition.

On the other hand, a system-wide deployment of interval metering would entail a significant up-front investment by incumbent utilities, which are currently operating under capped rates. Of course, such a deployment of advanced metering technology may also result in improved meter reading and other operational efficiencies that generate cost savings which would off-set at least a portion of such investment. Consequently, if the regulatory approach were to be implemented, either the utilities' shareholders would have to absorb the up-front investment net of any operational savings until distribution rates can be changed in 2004 or 2007, or legislative modifications would be required to allow an earlier recovery of the cost from retail customers. Importantly, there is considerable controversy as to whether, and to what degree, residential and small commercial customers would respond to time-of-use price signals. Such response would require these customers to better manage their electricity usage either directly or through energy management systems and devices that would require additional customer investment. The regulatory approach would also limit customers' ability to choose among differing metering configuration technologies.

In any event, given the capped rate and competitive metering provisions, the Restructuring Act does not appear to contemplate the option of the AEI suggested regulatory approach, requiring or encouraging system-wide deployment of interval metering for smaller customers by incumbent utilities. Accordingly, the Commission is continuing its evaluation of market readiness and whether the implementation of competitive metering for residential and small commercial customers is in the public interest. As a first step while this evaluation proceeds, the Commission has adopted rules that provide each retail customer with the opportunity to obtain interval metering service from the incumbent utility at the incremental cost above basic metering service.

With respect to the VCFUR's suggestion to investigate the use of a seasonal fuel factor, the Commission stands ready to consider reasonable proposals that may provide improved regulated price signals. In fact, in the recent order adopting the rules referred to above, the Commission encouraged the work group assisting Staff to study the possibility of the utilities establishing (and/or expanding) voluntary time-of-use rate programs. The Commission, however, would be hesitant to adopt a seasonal fuel factor that would essentially reallocate fuel cost responsibility from one rate-class of non-shopping customers to another rate-class in light of the Act's capped rate provisions. Of course, a seasonal fuel factor proposal could be developed in such a way as to avoid such cost reallocations among the rate classes.

Proposal 12: Regulation should be used to stimulate demand side management measures.

Some parties advocate that demand response programs, such as the real-time pricing discussed in the previous proposal, should be mandated by regulation. They argue that such markets will not develop on their own and the benefits to be derived from effectively pricing and efficiently using energy are too valuable to ignore.

Energy Consultants believes there are two important roles for regulation in the promotion of demand side management. The first is to educate customers about the value of demand control and the options available. The second role is to lead the establishment of a signaling infrastructure that would make a pricing signal available based on the wholesale price in a region. (Energy Consultants letter dated May 20, 2002, response to question #12).

The Virginia Citizens Consumer Council states, *"Given that the high cost of equipment required for* [demand side management] *and the fact that in a competitive market energy providers do not have the incentive to support this that they had in the regulated market, it may be necessary to find ways to provide incentives or require ways for consumers to participate in demand side management."* (VCCC letter dated July 1, 2002, response to question #12).

The utilities prefer that demand side measures be left to the competitive market. AEP-VA states, *"Demand side management measures pursued under regulation, in the Company's experience, have not proved to be cost-effective and have been largely phased out. There is no reason to believe that demand side management will occur in a*

competitive environment unless it is cost-effective." (AEP-VA letter dated May 20, 2002, pp. 10-11).

Delmarva believes *"it is important for future demand-side programs to be funded directly by participating customers paying for measures installed at their premises, rather than subsidization from other ratepayers."* (Conectiv letter dated May 24, 2002, response to question #12).

Allegheny Power also believes that the market, not regulation, should drive the implementation of demand-side technologies. AP states, *"Energy efficiency programs should be market-driven. Electric competition causes customers to be more aware of their energy expense, more so than in the past. Thus, customers are more likely to identify and analyze new technologies available to reduce energy costs. Where cost savings can be achieved economically with investment in demand side measures, energy efficiency programs will grow."* (AP letter dated May 17, 2002, p. 8).

Interestingly, AP also states, *"Utilities should be permitted to offer DSM programs to its customers, and recover the associated costs above any existing rate caps. Utilities provide a cost-effective channel to market and will benefit, not inhibit, the market as a competitor."* (AP letter dated May 17, 2002, p. 8).

LG&E Energy believes there is a role for regulation in demand response programs, but that mandatory programs will distort the market and lead to inefficiencies. *"The key elements for state-approved demand response programs are (1) voluntary participation, (2) the timely, uninterrupted reception of price signals to the customer and (3) the ability of the customer to actively and rapidly respond to the price signal."* (LG&E Energy letter dated May 20, 2002, response to question #12).

Pepco Energy Services and the Virginia Independent Power Producers believe that the best way to promote demand side management is through the competitive marketplace.

WGES states, '*To the extent that demand side management can reduce the cost of distribution, there is a role for regulation in providing incentives to customers. To the extent that demand side management affects the cost of generation supply, it should be left to the competitive market as regulated generation is phased out."* (WGES letter dated May 20, 2002, response to question #12).

Commission comments: This Commission has historically been cautious in its promotion of demand side management programs. In an effort to prevent the subsidization of such programs by non-participants, the Commission insisted that a cost benefit analysis be performed on all DSM programs. Each utility's package of programs had to withstand such an analysis. Historically, demand side programs have been pursued with the goal of avoiding generation plant additions and/or reducing fuel expenses.

To the extent the utility has the continuing responsibility of providing default service in its territory in an environment where incremental load is being served by purchases from the competitive market, certain DSM programs may be economically justified if the savings in energy supply costs exceeds the costs of the program. Until the expiration of capped rates, however, the recovery of the costs of such programs by the utility may present a problem. Additionally, to the extent such programs lower the utility's capped rates through a lower fuel factor, it may become more difficult for CSPs

to successfully compete to provide default service or competitive electricity supply service.

Proposal 13: There should be legislation that requires regulated distribution utilities to make available to their customers, at a reasonable monthly cost, time-based energy commodity and distribution prices using interval metering and communications technology.

This proposal was advanced by UHR Technologies. Its justification is detailed by UHR as follows: *"Since it is widely recognized that a key ingredient to successful competitive markets is the availability of pricing options for consumers, this recommended legislation represents a mechanism to educate the consumers on how they can benefit from pricing options that carry very high prices during a limited number of peak hours. The peak hours are determined and communicated to the customer on a near real-time basis. Such pricing options would be limited to 2% of all customer classes and the target date for the initiation of the program would be June 1, 2003.*

The first objective of the pilot program would be to stimulate the technology companies to begin marketing load management products that can be packaged with time-based pricing options. This would give them an opportunity to demonstrate the viability of their products. It is important that the technology companies view the pilot a serious project of sufficient scale to warrant their attention.

The second objective would be to give the Commission time to develop the regulatory mechanism that would minimize any short-term impact on the utility earnings resulting from short-term revenue losses that are not recovered through reduced commodity costs. There is a fundamental timing issue relative to the short-term costs to the utility vs. the long-term asset utilization and energy purchase contract benefits.

The quid pro quo aspect of this program would be that the customers would pay for the load management equipment and for the metering and communications requirements while the utilities would absorb any short-term revenue loss from the pilot program. As stated above, the long-term objective would be to work out a regulatory mechanism that allows the utility to recover any short-term costs that are justified relative to long-term energy and capacity cost reductions." (UHR letter dated June 17, 2002, p. 2).

In its supplemental comments, Energy Consultants cite UHR's proposal and expresses agreement with it. Energy Consultants states *"many of the customers participating in this study might be willing to serve as a test platform for further investigations, such as actual tests of real-time signaling and new design advanced meters."* (Energy Consultants' letter dated June 28, 2002, p. 5).

Commission comments: The Commission recognizes both the potential value of improved price signals to the development of an effective market and the frustration of many real-time pricing advocates that new metering technologies have not been broadly introduced at a faster pace. As the Commission noted in its comments to Proposals 11 and 12, the rate cap and competitive metering provisions of the Restructuring Act do not appear to envision regulatory mandates in this regard. However, the Commission has recently directed the work group investigating competitive metering to study the possibility of establishing (and/or) expanding voluntary time-of-use rate programs.

Proposal 14: A pilot program should be undertaken to quantify the effectiveness of demand controller on reducing system level demand.

This is a proposal by Energy Consultants. In particular, it advocates that the effectiveness of demand controllers, such as the kind it distributes, should be studied. Energy Consultants states *"There have been approximately 40,000 installations nationally of the Energy Sentry demand controller distributed in this state by our company. There are a large number of similar units from other manufacturers marketed by other companies. Virginia Power has informed us that a study has never been conducted to develop quantitative data on the demonstrated effectiveness of these devices to lower system demand. The lack of quantitative data on the results of on-premises demand control, as it impacts on CSP ultimate true-up cost, creates a high risk for a CSP. The cost of advanced metering and on-premises energy management equipment will be borne by the customer or the CSP, depending on how the CSP elects to share the benefits of demand reduction (based primarily upon rate design). The quantification of actual demand reduction is essential for the CSP to be able to design profitable rate incentives.*

One approach to help facilitate the development of competition would be to provide quantification of the performance of the equipment currently in use in Virginia homes. We understand that Hampton Roads has the largest concentration of these devices in residential use of any location east of Arizona. A pilot program (effectively a study) could be undertaken there to quantify the effectiveness of this equipment on reducing system level demand, hour by hour. The goal of the study would be to:

a. *provide quantitative data to ISOs and CSPs for their use in designing demand response programs for this class of customer,*

b. *provide quantitative data to the SCC and LDCs for their use in coordinating LDC rates with CSP demand response programs,*

c. *evaluate alternative approaches to metering and reporting demand response,*

d. *provide feedback to manufacturers that could enhance the effectiveness of this technology through design changes and*

e. *evaluate the cost effectiveness of real-time signaling compared to alternative approaches to demand response (e.g. established times).* (Energy Consultants letter dated June 28, 2002, pp. 4-5).

Commission comments: The study recommended may be beneficial to Energy Consultants and other market participants in the demand controller industry. However, an industry-sponsored study conducted by an independent research laboratory would likely provide the best means of quantifying the effectiveness of demand controller systems. The results of such an industry-sponsored study could be furnished to this Commission and the LTTF.

Proposal 15: The scope of the Commission's Consumer Education Program should be expanded to educate consumers about the benefit of energy management and the potential of innovative technologies.

This is a proposal by Energy Consultants. The Company states that it believes *"that one of the most important benefits of industry restructuring will be the potential for more innovation in rate design, energy management technology and real-time two-way communication between customers and providers. For this technology to emerge, it is vital that customers become better educated on energy. There are overall environmental, system reliability and energy efficiency benefits to Virginia if cost effective energy management programs develop. Individual companies that might try to bring these technologies to the market are dealing with small business and residential customers that have no basic understanding of why and how these are beneficial. We believe the Consumer Education Program should go well beyond the simple notification that choice in providers will be coming. The scope should be expanded to include education for these customer classes so that they become fertile fields for both large and small companies to introduce new ideas and products. Customers are already skeptical about the deregulation process. Inertia against changing suppliers will be strong. If individual companies have to attempt to educate small business owner and homeowners about the benefits of energy management in addition to overcoming their reluctance to change, it is very unlikely that these technologies will bear fruit except for the largest of customers (industrial and large commercial). That would be unfortunate because the residential and small business customers are the major contributor to the short-term demand*

peaking problem." (Energy Consultants letter dated May 20, 2002, response to question #5).

Energy Consultants further explains the reasoning behind its proposal in its supplemental comments. *"Even after explaining the concept of the LDC's role in service reliability, there remains a basic distrust of risking their essential electrical service by shifting to another supplier. When offers are available in the market, it will not be enough for the SCC's education program to simply say that electric service is not at risk. It will need to be repeated and repeated. It will have to be said in multiple ways. It is very difficult to deliver an advertising message though the clutter of what people see everyday when the target customer of the ad has no preconceived opinion. When that person already believes that there could be risk to their electrical service, the message has to be emphatic and often.*

Our experience in deploying energy management technology has constantly had to deal with the lack of customer understanding of their electrical service. Except for large commercial and industrial customers with facility Managers, most customers do not understand the basic concepts of kW and kWh. As was discussed relative to reliability of service, the existing perception of customers sets the stage for their potential readiness to accept a new idea. If CSPs are to be successful to promoting load response rates, the customer base must have some independent basis to evaluate the credibility of the offer. We believe that the Customer Education Program should provide materials and sources that CSPs can refer people to or distribute themselves as part of their marketing effort. This should not be an expensive requirement. The objective is simply to give the CSP a way to point the prospective customer to a source that the customer

would be likely to trust. We commend the SCC website include links to education pages on various subjects, such as:

a. *the status of competition*
b. *kW and kWh and why load management benefits the system,*
c. *availability of types of energy efficiency and demand control products and how they save money (not specific brands or suppliers) and*
d. *how to evaluate a rate offer, including a demand reduction or TOU rate offer."* (Energy Consultants letter dated June 28, 2002, pp. 7-8).

UHR technologies appears to support this proposal in its statement that *"Without an understanding of how technology can automatically reduce peak loads and improve the efficiency of the electric grid, the competitive marketplace will never develop its full potential."* (UHR technologies letter dated June 17, 2002, p. 1).

Commission comments: Section 56-592.1 B of the Act defines the scope of the consumer education program. It states that the program will be designed to help consumers make informed choices about energy providers, help consumers reduce their transaction costs in selecting a CSP, and foster compliance with the consumer protection provisions of the Act. Education about electricity usage and the potential opportunities of conservation and load management appear beyond the scope of the consumer education program envisioned by statute. In addition, if the Virginia Energy Choice ("VEC") education program were to undertake the task of energy management education, it may duplicate the work already done by federal and state agencies charged with such a responsibility, particularly the U.S. Department of Energy.

However, recognizing the importance of these topics for consumers, the VEC has initiated an effort to provide links from the VEC website to other established sites and education efforts on these topics. For example, a recently added section of the VEC website was created specifically for small businesses at the request of the Consumer Advisory Board.[3]

The Department of Mines, Minerals and Energy ("DMME") has researched the availability of energy management educational efforts and conducted a survey of where consumers currently get energy conservation information. DMME has provided one report to the Consumer Advisory Board and has done additional work over the summer. DMME has shared with the VEC work group a list of sources that may be added to the VEC website.

Providing links to existing sources of information is a low cost method for the VEC to distribute education material. If the LTTF decides to make energy management and conservation a specific component of the consumer education campaign, it will likely require a significant portion of the VEC budget.

[3] This can be found at: http://www/yesvachoice.com/biztoolbox/bizlinks.asp.

Proposal 16: The Commission should expeditiously approve and implement competitive metering and consolidated billing rules.

This is a proposal of the National Energy Marketers Association. As justification for its proposal, NEM states, *"Competitive advanced metering enables suppliers to offer multiple pricing options, such as time of use rates, which increases the number of choices for customers and enables customers to save money by shifting usage to off-peak periods. If customers have hourly meters, they have the opportunity to see and respond to price spikes, which could enable price to bring supply and demand into balance. Advanced meters will also allow for increased accuracy and fairness of settlements in comparison with statistical load profiles.*

Encouraging the development of a competitive market for billing services will allow competitive marketers to provide consumers with enhanced, value-added services. Suppliers should be able to present bills in order for consumers to have better access to innovative product offerings. It normally is not possible for Suppliers to provide many of these choices to consumers when the LDC presents the bill. Without the option for suppliers to present bills to consumers, consumers are prevented from enjoying these innovative possibilities in product choice. Retail electricity customers overwhelmingly prefer single consolidated bills. Allowing only the utility to provide what customers want puts suppliers at an unfair competitive disadvantage. Billing is also an important point of contact for the supplier. It enables the supplier to promote and market its energy services. Inasmuch as consumers cannot choose their distribution company, billing simply does not serve the same function for the regulated utilities." (NEM letter dated May 17, 2002, response to question #4).

Delmarva, on the other hand, states that, *"The Code of Virginia § 56-581.1 B requires having a provision in the state to allow a supplier to render a consolidated bill, which would include both the local distribution company charges and the supplier charges. Although a work group was convened to develop these rules, there was very limited participation from suppliers, and Delmarva is concerned with implementing this costly process without having developed it in a truly collaborative environment. Delmarva believes supplier consolidated billing should be delayed until there is a more robust market. Furthermore, the location distribution company supplier consolidated billing implementation costs are allowed to be recovered under Code of Virginia § 56-581.1 H, and this may further reduce the ability of a supplier to make competitive offers to customers."* (Conectiv letter dated May 24, 2002, response to question #4).

Commission comments: The Commission is proceeding with its implementation responsibilities for both competitive metering and consolidated billing. Such efforts, however, have been impacted by the lack of competitive activity relative to these services nationally and by the limited participation of CSPs invited to participate in Staff-sponsored work groups to assist in the development of governing regulations and standardized business practices. The development costs for utilities to fully implement competitive metering and consolidated billing consistent with standardized business practices and electronic data interchange protocols will be substantial. Proceeding with system development prior to indications of competitive activity or interest, and without significant input from CSPs, would result in the risk of substantial rework and additional costs when interest in the competitive provision of these services increase. Accordingly, the Commission is proceeding with the development and adoption of regulations as

required by the Act and, where feasible, allowing interim implementation approaches that minimize costs for system modifications.

In the Commission's competitive metering proceeding, an order was issued August 19, 2002, adopting rules to ensure that all retail customers can obtain interval metering service from the incumbent utility at the incremental cost and requiring that both CSPs and retail customers have reasonable options for securing timely access to metering data. The Act envisions an evolutionary approach to the implementation of competitive metering services and the Commission is continuing its evaluation of market readiness for additional components of metering service to be offered competitively. In this regard, a Staff report on other aspects of competitive metering is due the day this report will be issued.

As for CSP consolidated billing, which is scheduled by the Act to become effective January 1, 2003, an order was released August 21, 2002, adopting final rules to govern the implementation and provision of CSP consolidated billing. With respect to implementation, the Commission has accepted an interim system workaround approach, proposed by the incumbent utilities and recommended by our Staff, until competitive interest develops to avoid the potential for significant system rework and additional investment in the future.

Proposal 17: The Commission should encourage distributed generation technology.

Distributed generation involves moving the generation of electricity away from large central units to smaller units located closer to the point of consumption. Section 56-578 of the Restructuring Act provides for nondiscriminatory access to the transmission and distribution system. The Commission is specifically directed to establish interconnection standards to ensure transmission and distribution safety and reliability.

The National Energy Marketers Association recommends the encouragement of distributed generation technology. It states, *"Distributed generation can provide real value as a demand-side management resource as it reduces customer impacts on the distribution system and enhances system reliability. NEM urges the Commission to unbundle and redesign distribution rates, eliminate penalties, redundant charges, and barriers to entry for distributed generation and implement tariffs that encourage investments in this technology. The Commission should also adopt a uniform interconnection standard in order to reduce the cost to install distributed generation."* (NEM letter dated May 17, 2002, response to question #12).

Commission comments: The Commission agrees that distributed generation has a great deal of potential value. Our Staff has already developed a draft of proposed interconnection standards. We are monitoring similar efforts by the Institute for Electrical and Electronic Engineers, ("IEEE") the National Association of Regulatory Utility Commissioners and FERC. In comments Staff received regarding its draft of proposed standards, several parties recommended that the Commission wait until these other entities, particularly FERC, have finalized their rules. The Commission does not intend to delay the implementation of distributed generation interconnection standards,

but we do hope to coordinate our efforts with FERC and the IEEE so that we do not have to revisit our standards to put them in compliance with national standards.

Proposal 18: Senate Bill 554 should be interpreted and implemented so as to reduce barriers to the expansion of generating capacity.

Senate Bill 554, which was passed in this year's session of the General Assembly, specifies the responsibilities of the SCC and other governmental entities in the review of environmental aspects of applications for certificates to construct power plants. Some commentors expressed the urgency for the Commission to avoid duplication in environmental reviews to provide for, as the VCFUR stated *"expeditious and favorable treatment of applications for the construction of new generation that will assist the development of competition."* (VCFUR letter dated May 28, 2002, response to question #1).

Dominion Virginia Power claims, *"Virginia is fortunate in that is has attracted considerable interest from potential developers of many thousands of megawatts of electric generating facilities. However, investors need certainty regarding market structure."* (DVP letter dated May 20, 2002, pp. 4-5).

The Virginia Energy Providers Association states, *"The Commission should recognize the very clear determination by the General Assembly and Governor embodied in SB 554 and act accordingly."* (VEPA letter dated May 20, 2002, response to question #1).

Commission comments: SB 554 became effective on July 1, 2002. The Commission and DEQ were charged in SB 554 to develop a memorandum of agreement regarding the coordination of reviews of the environmental impact of electric generating plants and associated facilities. After receiving public comment on a draft agreement, the final memorandum of agreement was signed on August 14, 2002.

Proposal 19: Incumbent utilities should be allowed to legally separate their generation business from their transmission and distribution business.

Dominion Virginia Power advocates that legal separation is necessary for the development of an effective competitive market. The Company states, *"The legal separation method is…the best way to carry out the Act's clear intent to promote development of a market in which all participants compete on a level playing field…only legal separation will provide the environment in which the Company's generation business (Dominion Generation) can realize its potential, for both customers and shareholders, in the competitive market."* (DVP letter dated May 20, 2002, p. 4).

This proposal is also supported by EnergyWindow. In its comments it states, *"The SCC should reconsider allowing state utilities to separate legally their generation assets into separate subsidiaries in order to support competitive processes for determining default service providers and rates and to allow those subsidiaries to participate fairly in those competitive processes."* (EnergyWindow letter dated July 8, 2002, p. 1).

Commission comments: The issue of legal separation is one arising out of § 56-590 of the Restructuring Act. Pursuant to that statute, Virginia's incumbent electric utilities were required to be functionally separated into generation, transmission and distribution components by January 1, 2002. Plans for that purpose were to be submitted to the Commission on or before January 1, 2001. Separation through the "creation of affiliates" was recognized as one means of achieving functional separation, but no express provision in this statute requires the Commission's approval of any application for separation through that means. Commission orders addressing the utilities' plans were

issued prior to January 1, 2002. Although two utilities (Dominion Virginia Power and AEP-VA) sought legal or corporate separation via transfer of their generation assets to unregulated affiliates, the Commission directed functional separation by division in both cases. In the case of Dominion Virginia Power, this issue was addressed on the merits; AEP-VA, however, withdrew its request for consideration of that issue prior to January 1, 2002, and has, thereafter, requested that the Commission defer action on that issue for the present.

Proposal 20: An independent consultant chosen by the Commission should analyze wholesale market power in each control area.

This is a proposal by AES NewEnergy. The Company states, *"The issue of potential market power in the various service areas is very complex, and should be better studied so that a competitive market is assured for Commonwealth consumers… In the event such study does determine that undue influence could be exerted by DVP or others, the Commission should require the utility to sell power to competitive service providers at a rate that provides a reasonable retail margin, and allows CSP's to compete against the utility's SOS rate until this market power is fully mitigated."* (AES NewEnergy letter dated May 17, 2002, response to question #1).

The Virginia Committee for Fair Utility Rates expresses similar concerns. It states *"Transmission constraints and insufficient, reasonably priced generation within the transmission-constrained area, i.e., a load pocket, can seriously impede the development of retail competition.*

Last year, in assisting the Commission in fulfilling its responsibilities under Section 56-596.B, the Committees provided data on transmission import capability into Virginia Power's service territory. The data raised substantial market power concerns. The Commission should obtain similar, updated data for all of Virginia's utilities – including, of course, Virginia Power and APCo. In addition, the Commission should obtain data on constraints and load pockets within their service territories." (VCFUR letter dated May 28, 2002, p. 8).

Commission comments: In accordance with § 56-578 G of the Restructuring Act, the Commission will be responsible for monitoring market power over the sale of

electric generating capacity or energy to retail customers. It should be noted, however, that to the extent that market power is exercised by a generating facility dispatching into a wholesale market, the mitigation of that market power will likely be the responsibility of the Federal Energy Regulatory Commission, consistent with its authority under the Federal Power Act. The Commission will perform its statutory obligations under § 56-578 G with respect to market power exercised in Virginia's retail markets. In doing so, it may retain the use of a consultant.

SUMMARY

The Commission appreciates the input it received from those parties that responded by letter and/or participated in the discussion group hosted by our Staff. Although we would have preferred a larger number of participants, at least we did receive the thoughts of a reasonable cross-section of stakeholders: utilities, competitive service providers, aggregators, consumer representatives, and business associations.

There seems to be universal agreement that before a viable competitive retail market develops in the Commonwealth there must be a robust wholesale market and an operational and independent regional transmission organization. While progress has been made, it will take more time before that foundation becomes a reality. The Commission's recommendations in this report reflect the evolutionary nature of the transition to competition.

As detailed in the section of the report, the Commission recommends that the General Assembly consider the following:

- Amending the Act to allow a large commercial or industrial customer who is willing to commit to market-based pricing should it ever return to its incumbent utility, the ability to switch to a CSP without paying a wires charge.
- Whether the Act needs amending to allow shopping customers who return to their incumbent utility to select a market-based price in order to avoid a minimum stay requirement. [Minimum stay requirements only apply to large customers with a demand of 500 kw or above].

The Commission will take the following actions during the next year in an attempt to facilitate competition:

- Continue to explore the potential for designating alternative default service providers.
- Analyze the technical and operational implications of the RTO filings expected from AEP-VA and DVP.
- Re-evaluate the method for determination of the market price and resulting wires charge for DVP and AEP-VA, and then re-set those numbers.
- Continue to solicit ideas from stakeholders about methods to attract CSPs to the Commonwealth.
- Continue to monitor approaches being used in other states to attempt to stimulate competitive activity.
- Continue the transition of customers to retail access. By January 1, 2003, about three million customers in the Commonwealth will have the ability to choose. By January 1, 2004, all customers will have the ability to choose.
- Continue the education of consumers about choice, although at a pace that conserves resources.
- Continue the development of a proper foundation for competition including the on-going work involving competitive metering, consolidated billing, development of business practices, distributed generation interconnection standards, and aggregation.
- Continue the study related to SB 684 regarding the reliability of our energy infrastructure.

- Evaluate alternatives to minimum stay requirements.