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ENERGY REGULATORY LAW

March 1, 2002

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Ms. Blanca S. Bayó, Director
Commission Clerk & Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Florida Public Service Commission Docket No. 001574-EQ
Proposed Amendments To Rule 25-17.0832, FAC,
Firm Capacity And Energy Contracts

Dear Ms. Bayó,

Enclosed for filing and distribution, on behalf of the City of Tampa, Florida and the Solid Waste Authority of Palm Beach County, Florida, please find 10 copies of the Direct Testimony and Exhibit of Frank Seidman.

If you have any questions or require anything further, please contact this office immediately.

Sincerely,

Richard A. Zambo
Florida Bar No. 312525

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enclosure

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Proposed Amendments to Rule 25-07.0832, F.A.C., Firm Capacity and Energy Contracts	)))	Docket No. 001574-EQ Filed: March 1, 2002

TESTIMONY

AND EXHIBITS

OF

FRANK SEIDMAN

ON BEHALF OF

THE CITY OF TAMPA

AND

THE SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

TESTIMONY OF FRANK SEIDMAN

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN DOCKET NO. 001574-EQ

REGARDING PROPOSED AMENDMENTS

TO RULE 25-17.0832, F.A.C.,

FIRM CAPACITY AND ENERGY CONTRACTS

ON BEHALF OF

THE CITY OF TAMPA and

THE SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

Q. Please state your name, profession and address.

A. My name is Frank Seidman. I am President of Management and Regulatory Consultants, Inc., consultants in the utility regulatory field. My mailing address is P.O. Box 13427, Tallahassee, FL 32317-3427.

Q. State briefly your educational background and experience.

A. I hold the degree of Bachelor of Science in Electrical Engineering from the University of Miami. I have also completed several graduate level courses in economics at Florida State University, including public utility economics. I am a Professional Engineer, registered to practice in

the state of Florida. I have over 30 years experience in utility regulation, management and consulting. This experience includes nine years as a staff member of the Florida Public Service Commission, two years as a planning engineer for a Florida telephone company, four years as Manager of Rates and Research for a water and sewer holding company with operations in six states, and three years as Director of Technical Affairs for a national association of industrial users of electricity. I have been providing rate and regulatory consulting services in Florida for over 20 years. Specifically, with regard to Commission rules affecting cogenerators and small power producers, I have participated in the development of those rules on behalf of cogenerators and small power producers, and presented testimony or comments before this Commission on their behalf, in nearly every rulemaking proceeding since 1982.

Q. On whose behalf are you presenting this testimony ?

A. I am presenting this testimony and appearing on behalf of the City of Tampa, Florida ("Tampa") and the Solid Waste Authority of Palm Beach County, Florida ("the Authority").

Q. What is the interest of Tampa and the Authority in proceeding?

A. The Authority and Tampa each currently own municipal solid waste facilities which are defined as a solid waste facility or Small Qualifying Facility ("SQF") by Commission Rule and as such are eligible for Standard Offer Contracts pursuant to Commission Rule 25-17.0832, F.A.C., the subject of this proceeding. Accordingly, both the Authority and Tampa have a direct interest in the rule amendments proposed in this proceeding.

Q. What is the position of Tampa and the Authority with regard to the proposed rule amendments?

A. It is the position of Tampa and the Authority that the proposed amendments to the rule will result in payments to QF's that are less than the purchasing utility's avoided costs, will increase transaction costs for QF's, and will otherwise negatively impact upon QF's and consumers of electricity in Florida. One detrimental effect of the proposed amendments is that they would act as a disincentive to the development of QF's and thereby indirectly contribute to an increase in the consumption of scarce resources, contrary to the letter and very

clear intent of existing federal and state laws. In addition, Tampa and the Authority are very concerned that the proposed rule amendments as well as interpretations of the existing rules, as expressed in recent Commission orders regarding standard offer rule waivers, no longer reflect the conservation benefits and economic principles upon which the laws and regulations encouraging the development of QF's were founded.

Q. What are the conservation benefits and economic principles to which you refer?

A. The conservation benefits and economic principles to which I refer are that (1) qualifying cogeneration facilities, as defined in federal laws and regulations, provide substantial savings in the consumption of energy relative to conventional separate production of electric energy and thermal technologies; (2) qualifying small power producers conserve scarce resources producing energy through the use of renewable resources; and (3) payments to QF's equal to full avoided cost, as defined in federal and state laws and regulations, are just and reasonable to consumers, because they reflect costs to the utility that are neither higher nor

lower than the utility would have incurred, had it generated the electricity itself, or purchased it from another source.

HISTORY OF LAWS AND RULES ENCOURAGING QF'S

Q. Would you briefly summarize the development of the law and rules encouraging QF's?

A. Yes. In 1978, in response to a world oil shortage resulting from an embargo, and other concerns regarding the availability of finite fuel resources and the efficient use of those resources in producing electric energy, Congress passed the Public Utility Regulatory Policies Act (PURPA). A significant part of that act was devoted to encouraging the development of cogeneration and small power production facilities that produce electricity by the use of highly efficient systems, or renewable fuel resources, or both. PURPA's primary means of encouraging the development of cogeneration and small power production was to remove the then existing institutional barriers that had grown out of the traditionally monopolistic electric utility industry. PURPA did this by requiring utilities to offer to purchase electricity from qualifying cogenerators and small

power producers ("Qualifying Facilities" or "QF's") at rates that were just and reasonable to consumers, non-discriminatory to QF's and not in excess of the cost the utility would have incurred to generate such electricity or purchase it from another source. To be a qualifying cogenerator or small power producer, the facility had to meet certain energy efficiency or fuel use standards to be established by the Federal Energy Regulatory Commission (FERC) The FERC, which was also responsible for developing regulatory guidelines for the states to implement PURPA, concluded that if rates for the purchase of electricity from QF's were set at the purchasing utility's full avoided cost for energy and capacity, the rates would meet the criteria set forth in PURPA.

Beginning in 1981, and during most of the 1980's, this Commission developed and refined rules, the purpose of which, was to implement the intent of PURPA and the FERC regulations. The Commission's understanding and endorsement of the principles set out in PURPA and FERC regulations was clearly evident from its statement in Order No. 12443,

issued September 2, 1983 adopting rules in relation to cogeneration:

> " The encouragement of cogeneration through the establishment of electric utility markets for electricity produced by qualifying facilities (cogenerators and small power producers) will result in economic savings to consumers of electricity and the citizenry of Florida at large. These economic savings stem from the lessened dependency on the use of foreign oil as a boiler fuel and the deferral or cancellation of the construction of additional generating capacity by electric utilities in Florida which result from cogeneration."

The rules developed by the Commission included four important features. (1) The first feature was a requirement that utility's must make available to QF's, a standard offer contract for the purchase of firm capacity and energy as an alternative to negotiation of a contract with a utility. This

feature protected the QF from unreasonable and extended negotiations. (2) The second feature was a requirement that the capacity payments under a standard offer contract be based on the year-by-year value of deferral methodology. This feature was included as a means of protecting the consumer from a QF defaulting on a contract because payments would only have been made for the actual value of deferred capacity. It is important to note that at that point in time, the QF industry was in its infancy and the Commission and utilities were exercising caution, with a view toward erring (if at all) in favor of the consumer. (3) The third feature was the inclusion of a "risk factor" in the capacity payment as a result of which a QF would be paid only 80% of a utility's avoided capacity cost. The purpose of this feature was to further protect the customer; this time from various "unknown factors" such as the possibility that there might be an insufficient amount of capacity when needed or that a QF commitment of less than the useful life of the avoided unit would leave the utility with insufficient capacity in later years. (4) The fourth feature was a requirement that the standard offer contract period be a minimum of ten years and

a maximum of the useful life of the avoided unit. This feature protected the customer and the QF. It protected the customer because, in the words of the Commission: "while a ten-year contract will not offset the expected thirty year life of a base load generating unit, we believe it is of sufficient length to confer substantial capacity related benefits on the ratepayers." (Order No. 12634 at p. 9.) It protected the QF by allowing the opportunity to contract for a period longer than ten years and to receive payments equal to full avoided cost if it was willing to contract for the life of the avoided unit. As the Commission pointed out in Order No. 12634, the value-of-deferral methodology pays low payments in the early years and high payments in the later years, while the revenue requirements for a generating unit are higher in the early years and lower in the later years (see Exhibit (FS-1)_____, Graph 1). But over the life of the avoided unit the value-of-deferral method will pay the QF the same amount it would have received if capacity payments had been made based on deferred revenue requirements. This is an extremely important fact in the context of this rulemaking proceeding. To repeat, a QF can only

receive full avoided cost (to which it is lawfully entitled) if it contracts for a period of time equal to the entire useful life of the avoided unit.

Both the ten year minimum contract period and the other provisions, such as the inability of a QF to unilaterally modify its capacity commitment, were designed to protect the utility and the customer. As the Commission stated, "The rules pertaining to standard offer contracts have been carefully designed to provide the planning certainty required to allow a utility to depend on the QF capacity and defer additional power plant construction." (Order No. 13247 at p. 11).

These features fairly well defined the Commission's implementation of PURPA and FERC regulations, through most of the 1980's.

Q **Were there changes in the Florida statutes near the end of the 1980's that had an affect on Commission cogeneration rules?**

A. Yes. Among other things, in 1988, the Florida legislature passed the 1988 Solid Waste Management

Act. This act specifically encouraged the development of local government solid waste facilities that use waste as the primary energy source for electrical generation. As regards the Commission's cogeneration rules, it required the elimination of the 20% risk factor when establishing capacity payments in a standard offer contract.

Then, in 1989, the Florida legislature conducted a sunset review of Chapter 366, Florida Statutes. Until this review, all of the Commission's actions to encourage cogeneration were in response to the mandate of PURPA and the implementing FERC regulations. To that point, the Florida statutes had not addressed the issue, other than to give the Commission jurisdiction in matters pertaining to QF's. During the sunset review the legislature added language to the statute specifically addressing QF's. A new section, 366.051, was added to Chapter 366, Florida Statutes providing that electricity produced by cogeneration and small power production is a benefit to the public. In addition, this new section mandated the Commission to authorize a rate equal to the purchasing

utility's full avoided costs. Thus, cogeneration and small power production were now encouraged, at both the federal and state level, through payments for purchases at full avoided costs. Several changes were made to the existing rules. But a major change, with regard to standard offer contracts, was to limit their availability to solid waste facilities and other QF's of 75 MW or less. Until that change, the standard offer contract was available to any QF, regardless of size.

Q. After reviewing the history of the development of the Commission's rules through 1990, are there any conclusions that can be drawn?

A. Yes. The rules regarding standard offer contracts, as they evolved through 1990 fairly implemented the intent and purpose of federal and state laws as they apply to QF's. They fully recognize the conservation benefits and economic principles I described earlier in my testimony. As a result, they encourage the development of qualifying facilities.

Q. Did the Commission make any changes in the 1990's that affected the standard offer rule?

A. Yes. In 1993, the Commission adopted a "bidding rule" that required all regulated electric utilities to issue Requests for Proposals for any capacity addition with a steam-electric generating capability of 75 MW or more. In the same year, assuming its bidding rules would provide ample opportunity for QF's to sell electricity, the Commission amended its rules to significantly limit the applicability of the standard offer contract. In Order No. PSC-96-1548-FOF-EQ, issued December 19, 1996, the Commission limited the standard offer to "small qualifying facilities" which includes municipal solid waste facilities, small power producers or other QF's with a primary energy source of at least 75% renewable resources, and QF's no greater in size than 100 KW.

Q. With that rule change did the rules continue to fully recognize the conservation benefits and economic principles you described earlier and continue to encourage the development of qualifying facilities?

No. Absolutely not. That change severely limited the encouragement of QF's because it forced many otherwise qualified QF's into the negotiation

process with no reasonable expectation of success. However, for those that could still pass the Commission's litmus test for "small" QF's, it did offer a fair opportunity to contract at full avoided cost payments. As an aside, the Commission's bidding rules were and are defective in the sense that a utility can circumvent the intent of the rule by, for example, building combined cycle plants in piecemeal fashion. First, the utility can build the combustion turbine components of a plant as a peaking facility. Because there is no steam generation the bidding rule does not apply. Later, when the utility seeks to add the steam portion, no bidder is able to compete with the utility because the utility only needs to build half of a plant to complete the combined cycle, while the bidder would have to build the entire plant.

PRIMARY FEATURES OF THE EXISTING RULES

Q. For those that still qualify for the standard offer contract, what are the primary features of the existing rules that result in a fair implementation of the requirements of federal and state laws and the encouragement the development of QF's?

A. The primary features of the existing rules that encourage the development of QF's in the fair manner required by federal and state laws, are as follows:

1. They protect the customer by ensuring that capacity delivered is paid for only at its deferred value;

2. They protect the planning process of the utility and the QF's by requiring a minimum ten year standard offer contract. This provides planning certainty and allows a utility to depend on QF capacity and deferral of additional construction.

3. They protect the QF from monopsonistic behavior in negotiations by setting as a default alternative, a standard offer contract that pays full avoided cost for a contract period up to the life of the avoided unit;

4. They provide QF's with a basis for the long term financing of qualified facilities by providing a QF with the opportunity to contract, within the standard offer, for the life of a unit. Since a QF's generating facility will have a life equal or very similar to that of an avoided unit, it can be assured of a revenue stream to finance construction

by opting for a contract equal to the life of the unit.

PROBLEMS WITH THE PROPOSED AMENDMENTS

Q. Will the proposed rule amendments continue to fairly implement the requirements of federal and state laws and encourage the development of QF's?

A. Unfortunately, no. The combined proposed amendments to the rules - lowering the minimum contract period from ten years to five years and requiring the utility to set a specific contract period in the standard offer contract - will negate at least two of the four means of fair implementation and encouragement that I just summarized, and quite probably three. First, the protection from monopsonistic behavior is removed. Second, the basis for long term financing by the QF is seriously impaired. And to some degree the protection of the planning process is weakened. More importantly, however, the proposed amendments will result in capacity payments to QF's which are less than full avoided cost, thereby falling short of the requirement of Florida and Federal law.

Q. How does the proposed rule change remove the protection from monopsonistic behavior?

A. As previously discussed, the existing rules require that a utility must enter into a standard offer contract as an alternative to negotiation. This is protection against monopsonistic behavior only if the standard offer is set high enough to encourage the utility to negotiate. Under current rules, the standard offer indicates only the minimum length of the contract period, and allows the QF to choose a contract period up to the anticipated useful life of the avoided unit. Only a contract for a period of time equal to the life of the avoided unit will pay the QF full avoided cost for the capacity deferred. This was part of the leverage provided to QF's to insure that utility's had a motive to negotiate. If a utility would not negotiate in good faith, the QF could fall back on the standard offer.

Under the proposed rule amendments, the utility would be permitted to establish the contract period so long as the minimum contract period is no less than five years. A number of Standard Offer rule waivers allowed by the Commission over the past

several years have already allowed some utilities to specify the standard offer contract at five years, so the minimum contract period has already become the maximum contract period - unless the QF negotiates. But where is the leverage under the proposed rule with which the QF can negotiate? What is the incentive for the utility to negotiate? Is the QF to negotiate for less than five years and then fall back to five years if negotiations are unsuccessful? That is not a realistic expectation if the Commission truly seeks to continue to encourage QF's and comply with the mandate of law. Nor is it realistic to expect a utility to negotiate for more than five years, when the only fall back for the QF for an unsuccessful negotiation is five years. The end result is that there is no longer protection from the utility's monopsonistic behavior. In short, the QF either accepts the bone thrown to it, or incurs substantial transaction costs to challenge the utility and the Commission, or - in cases where the QF is a new proposed facility - the capacity is simply not built.

Q. How does the proposed rule language impair the basis for long term financing by the QF?

A. QF's in general, and solid waste facilities in particular, are designed, constructed, operated and maintained to reliably produce electricity over a useful life of 20 to 40 years - similar to that of a utility generating plant. If such a facility is to be financed at a reasonable cost - or at all - there must be some assurance that revenues from electricity sales will be available during the financing period, which again, similar to a utility facility, can be for a long period of time and often through the useful life of the facility. That cannot be done when the QF does not have the option to contract for longer than five years. The proposed rule amendments effectively eliminate the QF's ability to enter into a contract of any meaningful length.

Q. How does the proposed rule language weaken the planning process?

Utilities need to plan for both the long and short term. When units are designated as an avoided unit, the implication is that without an alternative, the unit will need to be built. That is a long term

commitment on the part of the utilities, the risk for which is borne by the customers. A utility may be able to defer construction for short periods, but eventually capacity must be built by someone. The alternative to purchase from another source is only possible if there is another source. All sources are the result of a long term commitment by some entity - either the utility requiring the energy, another utility, or a non-utility supplier. By limiting standard offer contracts for QF's to a term too short to allow financing, the availability of QF's, as a resource will be, for all intents and purposes, eliminated. It also removes the "planning certainty" which the Commission identified in Order No. 13247 as being required to allow a utility to depend on QF capacity to defer additional construction. This weakens the planning process by essentially discarding a reliable, efficient and cost-effective long-term generating alternative.

RECENT COMMISSION INTERPRETATIONS

Q. Earlier in your testimony, you indicated that Tampa and the Authority were concerned that interpretations of the existing rules, as expressed in recent Commission orders regarding standard

offer contract rule waivers, no longer reflect the conservation benefits and economic principles upon which the laws and regulations encouraging the development of QF's were founded. What do you mean by that?

A. The rules developed and implemented throughout the '80's and most of the '90's supported the federal and state premises that payments set at full avoided costs best met the criteria of just and reasonable to consumers and non-discriminatory to QF's. In addition, the rules protected the QF and the utility by making the standard offer contract an alternative to negotiations and by requiring contracts to be at least ten years in length, but up to the life of an avoided unit, so that a QF had the opportunity to earn the full avoided cost as it is legally entitled.

Then, beginning in 1999, in response to petitions by each of the investor owned utilities (some more than once) for approval of "sub-standard" standard offer contracts through, among other things, waivers of the ten year minimum contract requirement, the Commission began including statements in its orders that lead me to believe

that the Commission no longer considers QF's an economic alternative resource nor a more efficient electricity producer (i.e., more energy efficient) than utility generation. The comments lead me to believe that the Commission considers QF's to be nuisances rather than viable generating alternatives. The orders are replete with statements and innuendo that QF's provide no benefit and therefore any payment to them - above energy payments - is a subsidy. This is simply not true. It is disconcerting how far afield the Commission has come from the its original concepts of QF's.

Q. Could you be more specific with regard to the statements made by the Commission?

A. Yes. In Order No. PSC-99-0748-FOF-EQ, the Commission approved a new standard offer contract for Tampa Electric Company (TECO), designating a 2001 CT as the avoided unit. The Commission then goes on to say that it is unlikely that the unit can be avoided, that payments made to QF's amount to a subsidy, and that this subsidy is mandated by federal and state regulations.

In Order No. PSC-99-1091-PAA-EI, the Commission approved a new standard offer contract for Gulf Power Company (GFC), designating a 2002 CC as the avoided unit. But, the Commission stated that most likely, the offering of said contract will not result in benefits to Gulf's ratepayers.

In Order No. PSC-00-0505-TRF-EG, the Commission approved a new standard offer contract for Florida Power and Light Company (FPL), designating a 2001 CT as the avoided unit. The Commission then went on to state that the contract offer may result in a potential subsidy to QF's, that QF's should compete on an equal footing with all other producers of electricity, and that unless the federal and state laws are changed, QF's are being given preferential treatment.

In Order No. PSC-00-0265-PAA-EG, the Commission approved a new standard offer contract for Florida Power Corporation (FPC), designating 2001 CT as the avoided unit and approving a waiver to the 10 year minimum period and authorizing a 5 year limit to the contract period. The Commission stated that the waiver is warranted because a longer contract

period will result in an economic hardship to ratepayers who bear the risk of generation that is not avoided or deferred. The Commission then restated the same arguments it made in the FPL order.

Then, in Order Nos. PSC-00-0504-PAA-EQ, PSC-00-1748-PAA-EI, PSC-00-1773-PAA-EQ, PSC-01-1418-TRF-EQ, all dealing with petitions by FPC, FPL or TECO for new standard offer contacts and/or waivers of the minimum contract period, the Commission's approval was supported by the same rationale used in the cases previously discussed.

Q. What do you infer from the Commission statements in these recent orders?

A. The only logical inference is that: (1) the Commission has decided to no longer base its decisions on sound economic principles and to no longer recognize the conservation benefits of QF's; or, (2) the Commission has erroneously been led to believe that the economic and conservation benefits of QF's no longer exist. Nothing could be further from the truth, and for that reason, I sincerely

hope it is the latter reason, because those erroneous beliefs can be pointed out and corrected.

Q. How do the proposed rule amendments fit in with all of this?

A. The proposed rule amendments merely codify the Commission's actions and stated intent in approving the recent standard offer contract rule waivers of the minimum contract period. The proposed rule amendments assume that the Commission's reasoning in those orders is correct and therefore are the basis for the proposed rule change.

Q. Would you please address the Commission's statement that QF's are being given preferential treatment and should be on an equal footing with all other producers?

A. If the rules actually were implementing the intent of the federal and state laws, I would agree that QF's were being given preferential treatment - a treatment to which they are legally entitled. After all, that is the intent of the Florida and Federal laws previously referred to with respect to QF's. There is nothing wrong with encouraging or preferring facilities that conserve scarce

resources by making more efficient use of those resources than conventional fossil fuel burning facilities. That is the basis of all utility conservation programs approved by the Commission and paid for by the customers. But the Commission's statements imply that such preference is not deserved. There is simply no basis for that conclusion.

The sad fact is that with the restrictions to entry placed upon QF's in the 1996 rule change and the proposed amendments now before the Commission, the rules could be better characterized as unduly discriminatory against QF's. The 1996 rule changes severely limited and constricted the QF market. The proposed rule amendments will more severely restrict that market and undermine the economic incentive for a QF contracting to sell firm capacity and energy.

THE CONSERVATION AND ECONOMIC BENEFITS OF QF'S

Q. Do the conservation and economic benefits of QF's continue to exist?

A. Absolutely. Nothing has happened that has changed those characteristics. By definition, QF's always

conserve energy and/or scarce resources. By definition, avoided cost payments are always fair and reasonable to the utility and to the customer.

Q. How do QF's always conserve energy and/or scarce resources?

A. The facilities that "qualify" as QF's are either cogenerators, facilities that produce electricity by use of renewable resources, or in some cases both.

A cogenerator is a system that produces <u>both</u> electrical or mechanical energy <u>and</u> thermal energy sequentially from the same primary source. By definition, a cogenerator gets two products out of the same source. When one of those products is electrical energy, producing any thermal output from the same primary source makes it more energy efficient than a system that produces only electrical energy. Moreover, the minimum thermal output requirements of the federal regulations and Commission rules insure this outcome.

QF's that are small power producers, according to federal regulations must produce energy using a

renewable resource for at least 50% of its primary fuel input. To qualify for a standard offer contract under PSC rules, it must use a renewable resource for at least 75% of its primary fuel input. When renewable resources are used, nonrenewable fossil fuels are not. By definition, using renewable resources conserves scarce resources. In addition, though beyond the scope of this proceeding, resource recovery facilities minimize the amount of solid waste going to landfill thereby reducing a potential threat to Florida's scarce ground water supplies.

Compared to conventional electric generation, QF's always conserve scarce resources.

Q. Why are avoided cost payments fair and reasonable?

A. One only has to look at the definition in Section 366.051, Florida Statutes. " A utility's "full avoided costs" are the incremental costs to the utility of the electric energy or capacity, or both, which, but for the purchase from cogenerators or small power producers, such utility would generate itself or purchase from another source." Obviously, if the costs the utility would have

incurred in generating or purchasing are fair and reasonable, paying those same costs to an alternative source to provide the same product is fair and reasonable. In the case of QF's, the utility would be paying those avoided costs for a product that is superior in that the same product will be provided with the use of less fossil fuel input.

RESPONSE TO COMMISSION STATEMENTS

Q. The Commission has stated, in the Rulemaking Notice, that keeping the ten year minimum would "continue" the possibility that IOU's and their ratepayers would be faced with "higher" costs. Would you please respond to those statements?

A. Yes. First, in what context are the terms "continue" and "higher" used? "Continue" implies that payments made to QF's in the past are higher. Higher than what? Payments to QF's are equal to or lower than the cost the utility would have incurred had it provided its own generation. The Commission sets those payments based on information provided by the utilities. The payments made to QF's cannot be higher than the costs avoided, and any capacity provided by QF's is avoided by the utility. So, is

the Commission saying those numbers were in error? If so, that is not something for which QF's should be penalized. Or is the Commission saying they chose the wrong avoided units, and therefore they are not really avoided? Again, that is not something for which QF's should be penalized.

Q. The Commission, in the recent orders discussed above has made statements to the effect that standard offer contracts will not likely result in a unit being avoided or result in benefits to ratepayers. Would you please address those statements?

A. Yes. I believe those statement are simply incorrect. When capacity requirements are provided by other than the serving utility, the need for that utility to construct that capacity is avoided. The utilities have identified their own avoided units. The selection is their choice; the timing for the selection is their choice. Capacity provided by others avoids the need for that unit's capacity in part or in total. For each year that any amount of alternative capacity is provided, the need for utility capacity is deferred or avoided or reduced. If alternative capacity is provided for

five years, the need is deferred for five years. If capacity is deferred for twenty years, and the utility would have been required to build a unit with a twenty year life, the need is avoided entirely. It is as simple as that and that is the basis for the payment scheme devised by the Commission with the assistance of the utilities.

Q. Well what if the cost of capacity goes down in the short term - say five years? Wouldn't, it be a detriment to ratepayers, as the Commission infers, if QF's with a long term contract are continued to be paid at the higher cost of their contract?

A. No. The ratepayers would be unaffected. Remember, if the utility unit had not been deferred or avoided, it would have been built by the utility. Then, the cost of that investment would be recovered through rates for the life of the unit, regardless of what happens to the cost of future units. That's what payments based on avoided costs are all about. If a utility builds a unit with a twenty year life, its liability for paying the associated capital costs does not go away if by chance, in five years, the cost of future construction goes down. But that is exactly what

is being asked of QF's if a five year contract term is mandated. The Commission would be saying to the QF - "you commit to building a unit to defer a utility's need to construct capacity. We'll pay you the equivalent cost for five years and then we'll take another look to see if construction costs have changed. If they have gone down, that's too bad. I guess you will just have to make up the difference somewhere else. Of course, if costs go up, we'll pay you more, but that doesn't seem very probable, or we would not be proposing this rule change."

Q. Is that a viable choice for QF's?

A. Not any more so than for utilities.

THE ECONOMIC OF PAYMENTS - PROPOSED VS. EXISTING RULES

Q. In stating your position you said that the proposed rules will result in payments to QF's that are less than the purchasing utility's avoided costs. Would explain how that happens?

A. **As previously discussed,** the annual payments to QF's for capacity are determined by calculating the year-by-year value of deferral of investment in the avoided unit. Value of deferral payments begin low and increase with time (see Exhibit (FS-1)_____,

Graph 1); the later payments being higher to reflect the time value of money and the value of deferring for longer periods of time. If the unit can be deferred entirely; i.e. for the length of its useful life, then the amount deferred is the total cost that the utility would have incurred to construct the unit and pay all the associated carrying costs. If a QF enters into a contract equal to the life of the avoided unit, it will be paid all of those avoided costs over the life of the plant, even though, as a practical matter, it will receive capacity payments in the early years that may be drastically less than its own actual carrying costs to build a facility to defer or avoid the utility's unit. In the later years, capacity payments are likely to be higher than its actual carrying costs to have built the facility to defer or avoid the utility's unit. On a net present value basis, however, the results are the same, over the life of the unit. In other words, on a net present value basis that accounts for the time value of money, the total value of deferral payments to the QF would be equal to the "revenue requirements" the utility would have collected from its ratepayers for the same capacity. If a QF

contracts for, or is forced to contract for, anything less than the life of the avoided unit, it will not receive payments equal to the full avoided cost of the unit. Under existing Commission rules, the QF has the opportunity to decide how long a contract it can enter into, as long as it is at least ten years. If the QF determines that a contract term shorter than the life of the avoided unit is workable, it can make that decision. It has a viable choice.

Under the proposed rule amendments the QF will not have that choice. The minimum contract period will be five years and the choice of making it longer belongs solely to the utility. With the contract period limited to a minimum of five years or to a maximum at the utility's discretion, there can be no other conclusion than that QF's will receive payments that are less than the purchasing utility's avoided cost.

Q. The proposed rule amendment allows the QF to renew its contract every five years. Assuming avoided costs don't change, if a QF proceeds with that option for four five-year periods, won't it receive

the same payments it would have received with a twenty year contract?

A. No. Each time it enters into a new contract, the payments to the QF start over at the low end of the value-of-deferral payment stream. So the QF never receives the higher payments that make the present value of deferred payments and revenue requirements equal over the life of the unit. It just gets twenty years of low payments. This is illustrated in Exhibit (FS-1)_____, Graph 2.

Q. Can you provide a numerical example to the Commissioners to illustrate this point?

A. Yes. Exhibit (FS-2)_____ is just such an illustration, based on TECO's COG-2 Standard Offer tariff, effective July 24, 2001. The exhibit compares the payments a QF would receive if it entered into repeating 5 year contracts versus a single 20 year or 30 year contract. As the exhibit illustrates, the present value of the payments a QF would receive from four repeating contracts with 5 year terms would be 12% less than if it had entered into a single 20 year contract. And the present value of the payments a QF would receive from six repeating contracts with 5 year terms

would be 17% less than if it had entered into a single 30 year contract. Of course, this illustration assumes that a standard offer contract will be available to the QF at then end of each successive five year period.

CONCLUSION

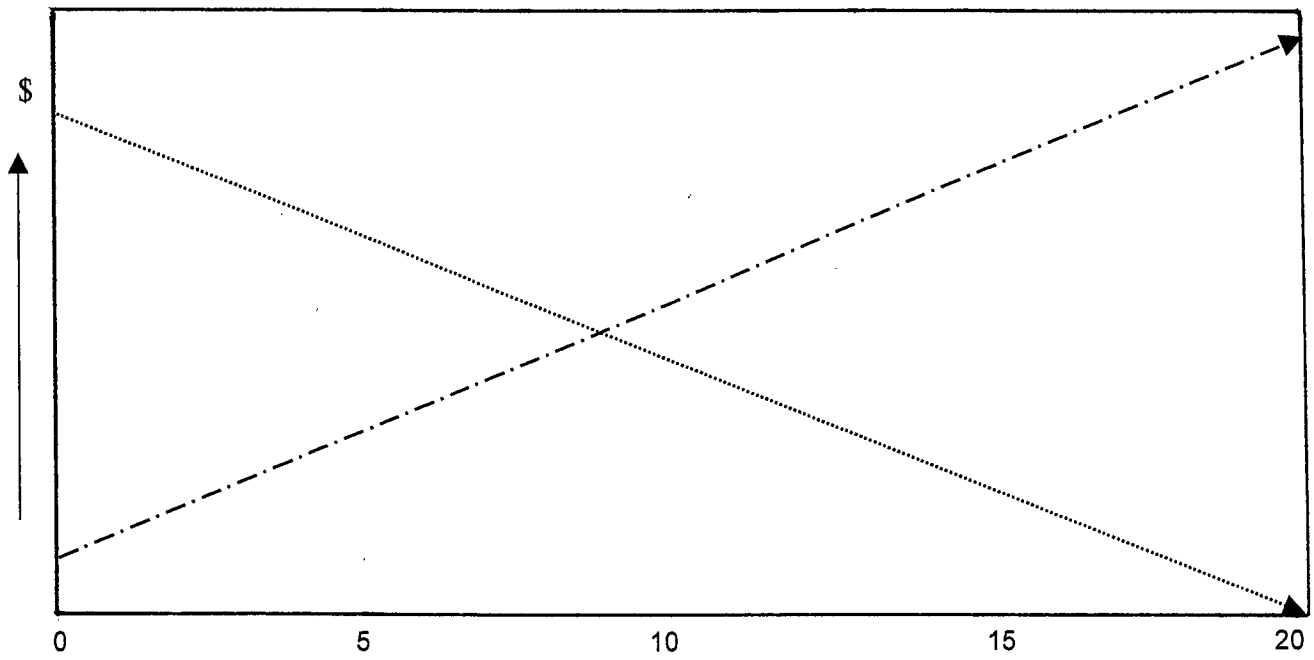
Q. If the proposed rule amendments are approved will the development of QF's continue to be a viable choice?

A. Not in my opinion. I cannot see how anyone can afford to construct a unit with a twenty year life based on the assurance that it can cover its cost for only five years. If you don't believe me, ask the utility's if they would be willing to make a commitment to construct their avoided (or unavoided) unit with a twenty year life based on the assurance that they will receive value-of-deferral receipts for only five years, but will have another shot at another unknown payment stream every five years.

Q. Does that conclude your direct testimony?

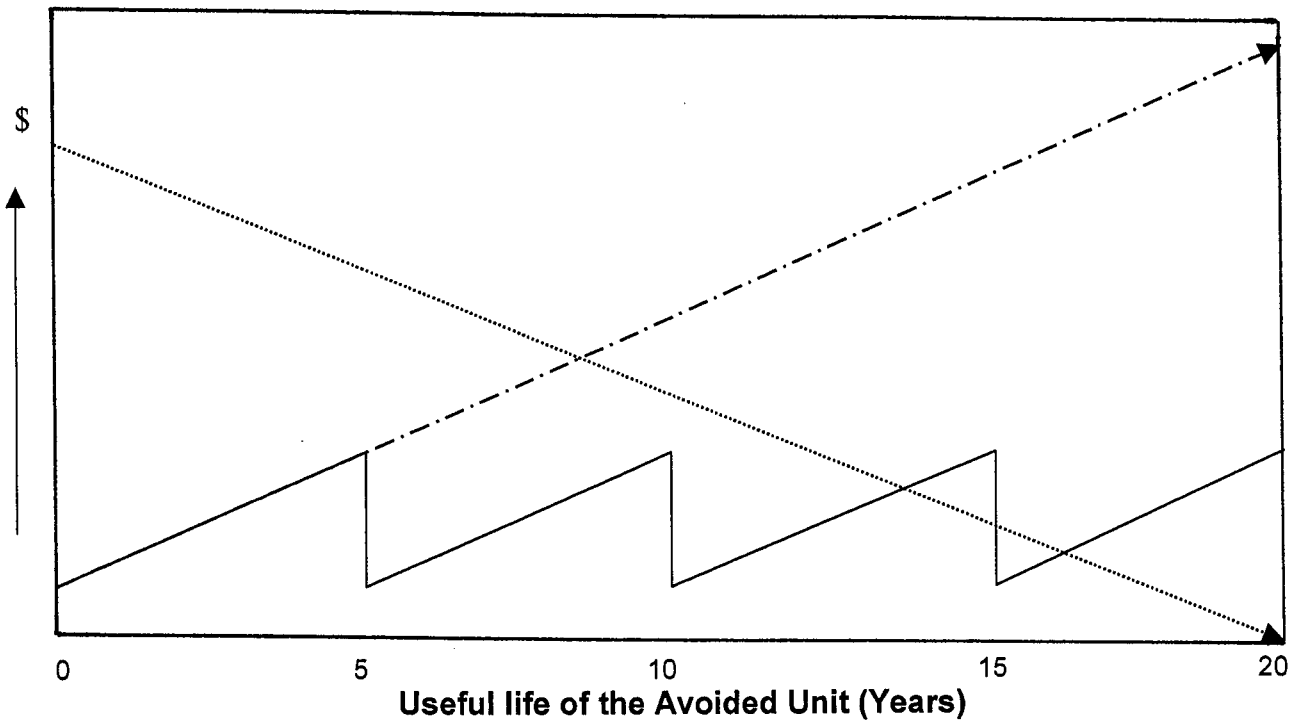
A. Yes it does.

GRAPH 1



Note: Present Value of "Value of Deferral" Payment stream = Present Value of "Revenue Requirement" Payment Stream = the full avoided cost of the capacity deferred.

GRAPH 2



Note: Present Value of "Value of Deferral" Payment stream = Present Value of "Revenue Requirement" Payment Stream, **but** Present Value of Staff Proposed " Value of Deferral" Payment streams **is less than** Present Value of "Revenue Requirement" Payment Stream and **less than the full avoided cost of the capacity deferred.**

Docket No. 001574-EQ
Seidman Exhibit (FS-2)_____

COMPARISON OF PAYMENTS
REPEATING 5 YEAR NORMAL PAY CONTRACTS, INCLUDING O&M
VERSUS 20 AND 30 YEAR NORMAL PAY CONTRACTS INCLUDING O&M

Year	4 5 Year Contracts	20 Year Contract		6 5 Year Contracts	30 Year Contract
1	$3.56	$3.56		$3.56	$3.56
2	$3.65	$3.65		$3.65	$3.65
3	$3.75	$3.75		$3.75	$3.75
4	$3.85	$3.85		$3.85	$3.85
5	$3.95	$3.95		$3.95	$3.95
6	$3.56	$4.05		$3.56	$4.05
7	$3.65	$4.15		$3.65	$4.15
8	$3.75	$4.26		$3.75	$4.26
9	$3.85	$4.37		$3.85	$4.37
10	$3.95	$4.48		$3.95	$4.48
11	$3.56	$4.60		$3.56	$4.60
12	$3.65	$4.72		$3.65	$4.72
13	$3.75	$4.84		$3.75	$4.84
14	$3.85	$4.97		$3.85	$4.97
15	$3.95	$5.10		$3.95	$5.10
16	$3.56	$5.23		$3.56	$5.23
17	$3.65	$5.37		$3.65	$5.37
18	$3.75	$5.50		$3.75	$5.50
19	$3.85	$5.65		$3.85	$5.65
20	$3.95	$5.79		$3.95	$5.79
21				$3.56	$5.94
22				$3.65	$6.10
23				$3.75	$6.26
24				$3.85	$6.42
25				$3.95	$6.59
26				$3.56	$6.76
27				$3.65	$6.93
28				$3.75	$7.11
29				$3.85	$7.30
30				$3.95	$7.49
NPV	$394.55	$450.34	NPV	$440.25	$530.67
Diff fr 20 Yrs	-12.39%		Diff fr 30 Yrs	-17.04%	

Note: Based on TECO COG-2 Tariff, effective Juy 24, 2001