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COGENERATION & RENEWABLE ENERGY ENERGY REGULATORY LAW

November 3, 2006

Ms. Blanca S. Bayó, Director Division of Commission Clerk and Administrative Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850 Via Hand Delivery

Re:

FPSC Docket No. 060555-EI

Proposed Amendments To Rule 25-17.0832, F.A.C. Firm Capacity and Energy Contracts

Dear Ms. Bayó:

Enclosed for filing in the referenced proceedings find the original and 15 copies of the following:

CMP		•	Direct Testimony and Exhibits of Frank Seidman on behalf of the City of Tamp	Tompo the Solid
COM_5	2	•	Waste Authority of Palm Beach County, the Florida Industrial Cogeneration Asso	•
CTR DY	3		the Covanta Energy Corporation;	
ECR _		•	Direct Testimony of Michael D. Bedley on behalf of the City of Tampa, the S	
GCL 1			Authority of Palm Beach County, the Florida Industrial Cogeneration Associat	ssociation and the
OPC _			Covanta Energy Corporation; 10191-06	
RCA		•	Direct Testimony of Marc C. Bruner on behalf of the Solid Waste Authority of	Palm Beach
SCR			County; and, 10102-06	
SGA _	······································	•	Direct Testimony of David W. McCary on behalf of the City of Tampa. 1010	13-06
SEC _		We ha	have also enclosed a CD containing the above testimony in MS Word format. If yo	ou have anv
отн			tions or require anything further, please contact this office.	

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FPSC-BUREAU OF RECORDS

RAZ/nb

Sincerely,

Richard A. Zambo Florida Bar No. 312525

xc: Parties of record via hand delivery or FedEx w/enclosure

DOCUMENT NUMBER-CATE

10190 NOV-38

TESTIMONY AND EXHIBITS OF FRANK SEIDMAN

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
IN DOCKET NO. 060555-EI
REGARDING PROPOSED AMENDMENTS
TO RULE 25-17.0832, F.A.C.,
FIRM CAPACITY AND ENERGY CONTRACTS

ON BEHALF OF

THE CITY OF TAMPA

THE SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

THE FLORIDA INDUSTRIAL COGENERATION ASSOCIATION

And

COVANTA ENERGY CORPORATION

NOVEMBER, 2006

10190 NOV-38

FPSC-COMMISSION CLERK

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2		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
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5		TO RULE 25-17.0832, F.A.C.,
6		FIRM CAPACITY AND ENERGY CONTRACTS
7		ON BEHALF OF
8		THE CITY OF TAMPA
9		THE SOLID WASTE AUTHORITY OF PALM BEACH COUNTY
10		THE FLORIDA INDUSTRIAL COGENERATION ASSOCIATION
11		And
12		COVANTA ENERGY CORPORATION
13	Q.	Please state your name, profession and address.
14	A .	My name is Frank Seidman. I am President of Management and
15		Regulatory Consultants, Inc., consultants in the utility regulatory
16		field. My mailing address is P.O. Box 13427, Tallahassee, FL
17		32317-3427.
18		
19	Q.	State briefly your educational background and experience.
20	A.	I hold the degree of Bachelor of Science in Electrical Engineering
21		from the University of Miami. I have also completed several
22		graduate level courses in economics at Florida State University,
23		including public utility economics. I am a Professional Engineer,
24		registered to practice in the state of Florida. I have over 40 years
25		experience in utility regulation, management and consulting. This
26		experience includes nine years as a staff member of the Florida
27		Public Service Commission, two years as a planning engineer for a
28		Florida telephone company, four years as Manager of Rates and

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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 25 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"), the Solid Waste Authority of Palm Beach County, Florida ("the Authority") the Florida Industrial Cogeneration Association (FICA) and Covanta Energy Corporation ("Covanta") who may be collectively referred to herein as the "Renewables Group".

Q. What is the interest of Tampa, the Authority, FICA and Covanta in this proceeding?

A. The presumed basis for this rulemaking is compliance with Section Section 366.91, Florida Statutes, the purpose of which is to promote the development of renewable energy resources in Florida. Tampa, the Authority, FICA and Covanta currently operate facilities that meet the definition of renewable energy resources and may expand such facilities in the future if there is sufficient

1		incentive. Accordingly, they have a direct interest in the rule
2		amendments proposed in this proceeding.
3		
4	Q.	What is the position of Tampa, the Authority FICA and Covanta
5		with regard to the proposed rule amendments?
6	A.	It is the position of Tampa, the Authority FICA and Covanta 1) that
7		the proposed amendments do not comply with the intent of Section
8		Section 366.91, Florida Statutes and that compliance requires a
9		separate and distinct rule applicable to renewable energy
10		resources, 2) that they are simply a slight modification of an
11		existing rule that applies to qualifying facilities, in general, and 3)
12		that such modifications will be ineffective in promoting the
13		development of renewable energy resources.
14		
15	Q.	You state that the proposed amendments do not comply with
16		the intent of Section Section 366.91, Florida Statutes and that
17		compliance requires a separate and distinct rule applicable to
18		renewable energy resources. What is the basis for your
19		position?
20	A.	To understand our position, you must have an understanding of the
21		history of the existing rule as it compares to the mandate of the
22	,	Florida legislature regarding renewable energy resources.
23		
24		The basis for the existing rules pertaining to cogeneration and small
25		power production is in federal law, the Public Utility Regulatory
26		Policies Act (PURPA) of 1978. That legislation - passed nearly 30
27		years ago - was in response to a different set of circumstances and
28		concerns. Namely, a world oil shortage resulting from an embargo

and our nation's growing dependency on foreign fuel supplies, as well as other concerns. PURPA was designed to, among other things reduce our dependency on foreign oil, increase the efficiency of use of conventional fuel and encourage the use of alternative energy resources. The encouragement of cogeneration and small power production was a part of that design – cogeneration by virtue of its greatly enhanced efficiency and small power production by virtue of its use of non-traditional fuel/energy sources.

Q. Does the intent of Section 366.91, Florida Statutes, differ from that of PURPA?

A. Yes. It differs substantially. The primary goals of the Florida Legislation are to diversify fuel mix and decrease Florida's dependence on natural gas for the production of electricity. In addition, the Legislation seeks to minimize the volatility of fuel costs, encourage investment within the state and make Florida a leader in new and innovative technologies.

Clearly, the main focus of Florida law is fuel diversity and fuel price stability by promoting the development of renewable energy resources.

Q. Are the differences sufficient reason to require a separate rule or rules to implement Section 366.91 Florida Statutes?

A. Yes they are. The Florida legislature is not unaware of the existing Commission rules implementing PURPA. They are not unaware that these rules depend on PURPA for their enablement. And they are not unaware that recent modifications have been made to

PURPA through the Energy Policy Act of 2005 that weakens it substantially. If they thought the existing rules only needed tweaking, they would not have bothered with enacting specific legislation. Whereas the modifications to PURPA weaken the obligations of a utility to purchase and sell energy to a qualifying facility (or "QF"), and identify circumstances under which a utility's PURPA obligations may be suspended or waived, the provisions of Section 366.91, Florida Statutes strengthen the obligations with regard to renewable energy resources.

The existing rules are based on a waning federal mandate. The development of rules applicable to renewable energy facilities ("REFs") is based on a fresh mandate of State energy policy with distinctly different purposes that is building momentum. The two situations need and deserve separate rules.

Q. Has the Renewables Group prepared a proposal for rules specifically applicable to renewable energy facilities?

Yes. The Renewables Group has prepared what we have designated PART IV PUBLIC UTILITIES' OBLIGATIONS WITH REGARD TO RENEWABLE ENERGY PRODUCERS of Section 25-17 of the Commission rules. It parallels PART III UTILITIES' OBLIGATIONS WITH REGARD TO COGENERATORS AND SMALL POWER PRODUCERS. This keeps Part III, which implements PURPA separate from PART IV which implements Section 366.91, Florida Statutes. PART IV is attached to my testimony as Exhibits (FS-1) and (FS-2). Exhibit (FS-1) shows additions and deletions from the rule proposed by the Commission.

Exhibit (FS-2) is a clean, unmarked version. Although Part IV incorporates the format of Part III, and even includes some of the general language, there are distinct differences meant to encourage the development of renewable energy resources as intended by Section 366.91, Florida Statutes.

Q. What are the major differences that distinguish Part IV from Part III?

There are five major differences: the designation of the avoided unit, the available contract term, the handling of subscription limits, the application of the avoided cost standard, and terms and conditions of the standard offer contract.

Q. Please explain the designation of the avoided unit and the basis for that designation.

A. The avoided unit is designated as a statewide avoided unit and specifically a generic, state-of-the-art 600 MW pulverized coal-fired generating unit with a useful life of 25 years that is designed and equipped to comply with all applicable environmental requirements.

This unit was chosen because it best fulfills the intent of Section 366.91, Florida Statutes to displace electric generation by natural gas. In addition, such a unit exhibits the high capacity factor, base load operating characteristics that are similar to those of many of the renewable energy facilities currently operated by or under consideration by the sponsors of this testimony. Using such a high capacity factor unit as a proxy for developing payments for electricity generated by renewable energy facilities allows the best

opportunity to diversify the fuel mix by displacing larger kWh blocks of electric energy. Moreover, designating it as a "statewide" unit provides a uniform and equal opportunity for all renewable energy producers on a statewide basis regardless of their location within the state.

Importantly, the designation of a statewide, rather than a utility unit is not without precedent. In implementing its initial cogeneration rules, this Commission stated that designating a statewide unit "reflects the Commission's long standing policy that the need for additional capacity by Florida utilities should be determined from a statewide perspective rather than simply focusing on the isolated needs of the individual Florida utility systems." (Order No. 13247, 5/1/84, page 1). In this case, it is not the need for capacity but the need for diversification of fuel mix and reduction of the dependency on natural gas for electricity production on a statewide basis that Section 366.91, Florida Statutes has pre-determined and directs the Commission to address. Generation by renewable energy facilities anywhere in the state will thus benefit consumers everywhere in the state.

Q. What is being proposed by the Renewables Group for the contract length/term?

A. It is proposed that the contract length/term be for a minimum of ten years and a maximum of 25 years, the useful life of the designated statewide avoided unit. The selection of the length of the contract is at the sole discretion of the renewable energy facility in order to allow the renewable energy producer to choose a contract term

compatible with its financial needs. The minimum term is long enough to assure a fuel diversity benefit from the renewable energy facility. The maximum term provides the security of a long term revenue stream to attract investors and lenders in order to encourage growth in the renewable energy industry.

Α.

Q. Is there a proposal for subscription limits?

Yes, in a sense. But, unlike the limits of the existing rule which are tied to the construction or capacity of the avoided unit, the Renewables Group's proposed subscription limit is tied to a requirement that 25% of capacity and energy be provided by renewable energy facilities on a statewide basis. After all, the intent of Section 366.91, Florida Statutes is not the avoidance of capacity, but the diversification of the fuel mix and minimization of fuel cost volatility. The Legislature's commitment to this policy of fuel mix diversification was reinforced by Section 366.92, Florida Statutes, enacted in 2006, which authorizes the commission to adopt goals for increasing the use of existing, expanded, and new Florida renewable energy resources.

Q. What is being proposed by the Renewables Group with regard to the application of the avoided cost standard?

A. The proposed rules provide that payments for energy and capacity be "based upon" full avoided costs, as is required by Section 366.91, Florida Statutes. (This differs substantially from the provisions of Section 366.051, Florida Statutes applicable to QFs which state that the payments shall be "equal to" full avoided cost). Essentially the Legislature has given the Commission significant

discretion and flexibility in determining the payments to renewable energy facility. Whereas PURPA would continue to prohibit payments of less than avoided cost, the Commission may authorize higher payments that are "based on" avoided costs. differentiates the application of this principle in our proposed rule from the existing rule is the elimination of the use of the value-ofdeferral method for calculating payments to renewable energy facilities. Payments based on value-of-deferral never did result in the payment of full avoided cost. Rather than paying the cost of avoiding a unit, they pay the cost of "deferring" construction of a unit that may eventually be built. It is an inexpensive way for a utility to buy time before committing to major construction expenditures at the expense of the alternative producer which must commit those funds in lieu of the utility, but without receiving the recovery of those funds commensurate with how the utility would have received them. Quite frankly, I doubt any utility would ever commit to constructing a plant if it had to look forward to the revenue recovery stream determined by the value-of-deferral methodology. Legislative mandate, rather than being interested in deferring construction, we are now interested in promoting construction of renewable energy facilities. The value-of-deferral methodology does not provide the appropriate analytic means.

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Q. What were the Commission's reasons for instituting the valueof-deferral methodology?

A. The Commission's reasons were due to uncertainty and a desire for security. When the Commission first adopted the value-of-deferral methodology in 1983, qualifying facilities were an unknown

quantity and considered to be risky. The Commission was concerned that insufficient QF capacity would be available to avoid a unit and that the QF might not be around to perform or deliver over the long term. The value-of-deferral methodology, which provides payments that start low but escalate over time was for protection of the ratepayers from unknown risks. The concern for risk was apparently so great that in addition to the low front end payments, a Commission Staff witness also recommended discounting these payments by 40% and if early payments were to be received, discounted those payments by another 20%. I guess QFs were lucky that in the end, they didn't end up having to pay the utilities for the privilege of providing capacity. In the end, the Commission approved payments based on the value-of-deferral methodology with a 20% discount along with provisions for performance guarantees and overpayment refunds.

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- Q. Since the value-of-deferral methodology was adopted what has been the risk experience with regard to QFs, especially those that would qualify today as renewable energy resources?
- A. To my knowledge, only a few that would qualify as renewable energy facilitieshave failed to deliver as contracted in Florida. Most have been operating reliably and providing capacity for approximately ten to twenty years. It is time for the Commission to acknowledge that the risks presented by renewable energy facilities are no greater than, and in fact appear to less than, those presented by utilities and that renewable energy facilities and are entitled to the same revenue requirement payment stream enjoyed

1		by utilities. What more appropriate opportunity to recognize the
2		reality of the situation than in a rulemaking whose specific purpose
3		is to promote the development of renewable energy resource in
4		accordance with Section 366.91, Florida Statutes.
5		
6	Q.	What is the Renewables Group's proposal for payments to
7		REFs?
8	A.	The Renewables Group's (or "RG") proposal is to develop
9		payments based on the same revenue recovery stream permitted
10		for a utility. As an alternative, the proposal retains the levelized
11		payment stream as an option. Payments received in excess of the
12		revenue requirements for an annual period would be subject to of
13		repayment.
14		
15	Q.	Are there provisions in the Renewables Group proposed rules
16		vs. the Commission's proposed rules to develop the cost of
17		the avoided unit and the associated payment streams?
18	A.	Yes. The Renewables Group's rules set out the procedure for
19		developing costs and payment streams. They require annual unit
20		specifications, cost estimates, payment stream calculations and
21		supporting data, all coincident with the filing of the annual Ten Year
22		Site Plan.
23		
24	Q.	Are there provisions in the RG's proposed rules to keep track
25		of the progress in developing renewable energy development?
26	A.	Yes. There is a provision for an annual report to be filed with
27		sufficient information to determine the progress of renewable
28		energy development and the progress in meeting the requirement

1		that 25% of capacity and energy be provided by renewable energy
2		resources.
3		
4	Q.	Are there provisions in the RGs proposed rules for the
5		development of a standard offer contract?
6	A.	Yes. There are provisions for a uniform statewide standard offer
7		contract form to be developed in an evidentiary proceeding before
8		this Commission within 60 days of the effective date of Part IV.
9		
10		DETAILED EXPLANATION AND COMPARISON OF THE
11		RENEWABLES GROUP PROPOSED PART IV RULE TO THE
12		COMMISSION PROPOSED MODIFICATION OF RULE 25-
13		<u>17.0832</u>
14		
15	Q.	In the Notice of Rulemaking, the Commission proposed to
16		amend Rule 25-17.0832. Would you please explain how the
17		rule modifications proposed by the Renewables Group differ
18		from the Commission's proposal to amend Rule 25-17.0832?
19	Α.	Yes. Rule 25-17.0832 is but one of several rules, numbered 25-
20		17.08 xx, that fall under PART III UTILITIES' OBLIGATIONS WITH
21		REGARD TO COGENERATORS AND SMALL POWER
22		PRODUCERS of Chapter 25-17, F.A.C. For reasons discussed
23		earlier in my testimony, the Renewables Group believes that Part III
24		should remain unchanged and still remain applicable to
25		cogenerators and small power producers as defined in 25-17.080,
26		F.A.C. A completely new section – as proposed by the
27		Renewables Group - should be added to 25-17, F.A.C. identified
20		OD DART IN LITHITIES! ORLIGATIONS WITH REGARD TO

RENEWABLE ENERGY PRODUCERS that will be applicable to renewable energy facilities in compliance with 366.91. The rules in Part IV would be numbered 25-17.09xx. In general, Part IV parallels Part III, but not entirely. Therefore, the Renewables Group proposal is to (1) leave 25-17.0832 as it now exists intact, (2) reject the modifications to 25-17.0832 proposed by the Commission in this docket, and (3) adopt a new Part IV to Chapter 25-17, F.A.C. applicable only to REFs, as proposed in Renewables Group Exhibits (FS-1) and (FS-2).

- Q. In the Order Establishing Procedures, the Commission asked for explanations of changes or additions to the Commission proposed rule text with cross referencing to the testimony or comments. Since you are recommending that the entire Commission proposal be rejected and replaced with an entirely new Part IV to Chapter 25-17, F.A.C., how will you arrange your explanations and cross referencing?
- A. The proposed Part IV fairly well parallels Part III in rule titles and substance. I will, therefore explain differences between similar rules in Part IV and Part III to which the Commission is not proposing any changes. When I get to the Renewable Group's proposal for Firm Capacity and Energy Contracts, in rule numbered 25-17.0932, I will compare it to 25-17.0832 as proposed by the Commission in this docket.

Q. Would you now please compare, rule by rule, each of the Part IV rules to the Part III rules and provide an explanation, as necessary?

Yes. I will make my references to Exhibit (FS-1). The first new rule proposed for REFs is 25-17.092 Definitions (Exhibit (FS-1) at p. 1). It is somewhat comparable to existing Rule 25-17-080. Existing Rule 25-17.080 provides the definitions and criteria for cogenerators and small power producers adopted from the Federal Energy Regulatory Commission (FERC). However, because those definitions are not applicable to REFs under Section 366.91, Florida Statutes they are not used in the Renewables Group proposed Rule 25-17.092. Instead proposed Rule 25-17.092 includes definitions applicable to REFs. The proposed rule defines Renewable Energy, Biomass, Renewable Energy Facility and Statewide Avoided Unit.

A.

Q. Why did you include a definition of a Statewide Avoided Unit?

A. As previously explained in my testimony, the intent of Section 366.91, Florida Statutes is to carry out its objectives for Florida as a whole and not on a utility by utility basis. Therefore, it is important to define a generic statewide unit up front as the basis for pricing, so that all utilities and REFs are on notice of the basis for pricing decisions.

Q. What is the second new rule proposed for REFs?

A. The second new rule proposed for REFs is 25-17.093 The Utility's Obligation to Purchase; Customer's Selection of Billing Method (Exhibit (FS-1)at pages 2 through 5). It is comparable to existing Rule 25-17-082. It is nearly the same in all respects except for additional conditions under which the billing methodology may be changed. For example, those additional conditions, 25-

17.093(3)(a)3 and 6 are when a utility declares a renewable energy facility to be in default pursuant to a contract for firm energy and capacity or when the utility defaults on a contract with a renewable energy facility.

Α.

Q. What is the reason for adding these conditions?

Because the basic purpose of Section 366.91, Florida Statutes is to promote renewable energy, it is important that the rules not impose unnecessary restrictions on economic decisions of the REF. If changing from one billing methodology to the other will provide additional incentive to produce renewable energy, the Commission should assure that a change can be made easily, timely and expeditiously.

In addition, based on the experience of some QFs, sometimes a problem occurs wherein they cannot meet the sales obligation under a simultaneous buy/sell arrangement but could continue to serve their own load at a low cost if released from that arrangement. This would allow them to continue to operate, strengthen their financial position and once again meet its contractual obligations. In the past without this provision, QFs have resorted to the courts to arrange such a change. It is not something that happened frequently, and is not anticipated to be a problem, but this provision is precautionary. But again, it provides an opportunity for the REF to continue to produce renewable energy.

Finally, when the utility defaults, the opportunity to change billing methodologies should not be restricted.

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2	Q.	Would you please address the next new rule proposed for
3		REFs?
4	Α.	The next new rule proposed for REFs is 25-17.0935 As-Available
5		Energy (Exhibit (FS-1) at pages 6-8). This proposed rule parallels
6		existing Rule 25-17.0825 in its structure, although some changes
7		have been made to better reflect the part intended to be played by
8		REFs in increasing fuel diversity.
9		
10		Whereas existing Rule 25-17.0825(1) defines the rate to be paid
11		QFs as not to exceed the utility's avoided energy cost, proposed
12		Rule 25-17.0925 (1) defines the rate as not less than the utility's
13		avoided energy cost.
14		
15		Another difference is that existing Rule 25-17.0825(1) does not
16		allow capacity payments for as-available energy because of lack of
17		assurance for availability. This prohibition is deleted from the
18		Renewable Group's proposed rule 25-17.0935(1) because REFs
19		are providing fuel diversity, not deferral of specific utility capacity.
20		
21		Some of the provisions in existing Rule 25-17.0825(1) (a) regarding
22		tariffs are moved and addressed in proposed new Rule 25-
23		17.0935(2) (a).
24		
25		There is a substantive difference between proposed new Rule 25-
26		17.0935(2) (a) and existing Rule 25-17.0825(2) (a) regarding the
27		definition of avoided costs. The existing rule defines avoided cost
28		as the utility's actual avoided energy cost before interchange sales.

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The proposed new rule defines avoided cost as the utility's highest cost generation including interchange energy that could be avoided by purchases from REFs. The difference again reflects the intent of Section 366.91, Florida Statutes to diversify fuel types. If fossil generation or purchases could be avoided by REFs, regardless of whether for retail or wholesale, the avoided cost should be recognized.

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A.

Q. What is the next new rule proposed for REFs?

The next new rule proposed for REFs is 25-17.094 Firm Capacity and Energy Contracts (Exhibit (FS-1) at pages 9-32). This proposed rule parallels Rule 25-17.0832 as proposed by the Commission. The rule has been renumbered to fit in the numerical sequence of the RG's proposal for a new PART IV. The Renewables Group proposes some moderate language changes to paragraph (1) of Commission proposed Rule 25-17.0832 (Exhibit (FS-1) at page 9). In paragraph (1), the term qualifying facility is changed to renewable energy facility. The term qualifying facility is inappropriate. In subparagraph (1) (a), the information to be provided to the Commission upon contract execution is revised to better reflect REF characteristics and the intent to diversify fuel rather than avoid or defer capacity. The same is true of subparagraphs (1) (b) 2, 4, 5 and 6. 1 through 6..6. Subparagraph (1) (b) 1 contains minor revisions applicable to REFs.

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Q. What changes are you proposing to paragraph (2) of Commission proposed Rule 25-17.0832?

Paragraph (2) relates to negotiated contracts. The language is changed (Exhibit (FS-1) at page 10) to encourage utilities to negotiate with REFs and the reasons why are spelled out as they are stated in Section 366.91, Florida Statutes. In addition, the basis for considering an REF negotiated contract prudent is changed to also reflect the intent of Section 366.91, Florida Statutes. Finally, any references to negotiated contracts contributing toward a capacity subscription limit are deleted. They are inappropriate for the purposes of REFs. Instead, reference is made to negotiated contracts contributing toward a statewide requirement that 25% of generating capacity and 25% of electric energy be provided by renewable energy facilities.

A.

Α.

Q. What changes are you proposing to paragraph (3) of Commission proposed Rule 25-17.0832?

Paragraph (3) relates to cost recovery for negotiated contracts (Exhibit (FS-1) at pages 11-13). The language in subparagraph (3)(a) is changed to allow recovery when the contract promotes the purposes of Section 366.91, Florida Statutes; i.e., the use of renewable resources, diversification of the State's fuel mix and reduced reliance on natural gas for electricity generation. Subparagraph (3)(b) changes the way the Commission looks at avoided costs for REFs. It breaks away from the year-by-year deferral approach associated with deferring capacity and looks at the revenue requirements associated with the capacity of the state wide avoided unit. Again, the intent of Section 366.91, Florida Statutes is not to avoid or defer capacity, but to encourage existing and new renewable resources in order to diversify fuel mix.

Subparagraph (3)(c) addresses whether there are conditions to insure repayment in excess of avoided cost in any year in case of failure to deliver. Again, the year-by-year deferral measure is eliminated and is replaced with the levelized revenue requirement of the state wide avoided unit. Finally, subparagraph (3)(d), which addresses provisions for failure to deliver as specified in the contract, is changed to recognize the specific purposes of REFs. It excludes the provisions from being applicable to municipal solid waste, landfill gas or waste heat. It also limits the provision only to times of failure when the REP capacity is necessary to meet reserve requirements.

Q. What changes are you proposing to paragraph (4)(a) of Commission proposed Rule 25-17.0832?

A. Paragraph (4) relates to standard offer contracts. The language in subparagraph (4)(a) is changed (Exhibit (FS-1) at page 13) to require utilities to submit and continuously maintain tariffs that include standard offer contracts for the purchase of firm energy and capacity from REFs. This differs from the Commission proposal which only requires utilities to act upon petition or pursuant to Commission action. The Commission proposal does not meet the continuity requirements of Section 366.91, Florida Statutes. In addition, the Renewables Group proposal makes these standard offer contracts available to all REFs. It excludes certain QFs which fall under and will continue to fall under existing Rule 25-17.0832.

Q. What changes are you proposing to paragraph (4)(b) of Commission proposed Rule 25-17.0832?

The language in subparagraph (4)(b) is changed (Exhibit (FS-1) at pages 13-15) to require that these standard offer contracts be based upon the statewide avoided unit assumed to commence commercial operation on the date upon which each REF accepting the standard offer elects to commence delivery of firm capacity. This is completely logical because since the REF is providing capacity and energy to diversify fuel mix, any time it comes on line is beneficial for that purpose. Additional language in the Renewables Group proposed subparagraph (4)(b) requires that utilities, concurrent with the filing of their Ten Year Site Plan in April of each year, develop the annual revenue requirement for the statewide avoided unit, over the life of the plant, on a total dollar and per KW basis, including the net present value of the total annual requirements, using their financial data and operating assumptions. The rule requires that this be done for the current year of filing and each of the next nine years in the Ten Year Site Plan horizon. It requires that each utility include all assumptions used, including the cost of the unit, in such detail that the results can be readily verified. The rule provides how this data will be utilized in determining the basis for capacity payments to REFs.

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Q. What changes are you proposing to paragraph (4)(c) of Commission proposed Rule 25-17.0832?

A. The language in subparagraph (4)(c) is changed (Exhibit (FS-1) at page 15) to require standard offer contracts to remain open until the Commission determines that of at least 25% of installed generation and 25% or electric energy production in the State is from renewable energy facilities.

Q. Would you please address the changes you are proposing to paragraph (4) (d) of Commission proposed Rule 25-17.0832?

A. The Commission proposes no changes to subparagraph (4) (d) [formerly (4) (b) in the existing rule]. This subparagraph addresses the rates, terms and other conditions in a standard offer contract and ties them to the need to defer or avoid a generating unit. The Renewables Group's proposed changes (Exhibit (FS-1) at page 16 and 17) tie the conditions to the need to promote renewable resources, diversify fuel mix and the meet the other requirements of Section 366.91, Florida Statutes. In addition, the Renewable Group's proposed changes require that the rates specified in the contract be based on the avoided cost of the statewide avoided including related fixed and variable costs. The proposed changes also allow for an evidentiary hearing, upon request of an REF, on the accuracy or reasonableness of the utilities' proposed costs.

Q. And would you please discuss the changes are you proposing to paragraph (4) (e) of Commission proposed Rule 25-17.0832?

A. The Commission also proposes no changes to subparagraph (4)

(e) [formerly (4) (c) in the existing rule]. This subparagraph addresses provisions for a utility to evaluate a standard offer contract and either accept it or reject it within 60 days. The Renewables Group's proposed changes (Exhibit (FS-1) at page 17) simply require that the utility must accept and sign the contract within 60 days. After all, it is a standard offer contract that is a part of the Commission approved tariff. There is nothing to reject.

Q. What changes are you proposing to paragraph (4)(f) of Commission proposed Rule 25-17.0832?

A. Subparagraph (4) (f) relates to whether a standard offer contract applies toward the subscription limit of a utility's designated avoided unit. The Renewables Group's proposed change (Exhibit (FS-1) at pages 17 and 18) eliminates that feature as it is not applicable. The change also indicates that the contract is applicable toward meeting the statewide generating capacity and energy mix requirements of 25% from renewable energy facilities.

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Q. Would you please discuss the changes are you proposing to paragraph (4)(g) of Commission proposed Rule 25-17.0832?

Subparagraph (4) (g) provides certain minimum specifications to be included in a standard offer contract. The Renewables Group proposes changes (Exhibit (FS-1) at pages 18-21) that make the specifications compatible with the use of a statewide avoided unit, the policy objectives of Section 366.91, Florida Statutes, and the requirement for a continuing standard offer. Thus, subparagraph (4) (g) 1. indicates that the installed cost of the statewide avoided unit be specified. Subparagraph (4) (g) 2. is eliminated as it is no longer applicable. Subparagraph (4) (g) 3, renumbered to 2, provides for illustrative payment options for a ten year term contract. Subparagraph (4)(g)4, which specify when the standard offer expires is eliminated as it is no longer applicable. Subparagraph (4) (g) 5, renumbered to 3, as proposed by the Commission, specifies the date by which firm delivery must commence. We have changed that to indicate the maximum notice period a utility may require of an REF prior to it commencing

delivery of firm capacity. Subparagraph (4) (g) 6. renumbered to 4, sets the limits of a contract between a 10 year minimum and the life of the statewide avoided unit, at the option of the REF. As previously discussed in my testimony, the contract option choice must remain with the REF for financial viability. Subparagraph (4) (g) 7, renumbered to 5, regarding performance standards has been changed to tie them to those of the statewide avoided unit as limited by actual experience for the utility's base load coal units. Subparagraph (4) (g) 8, renumbered to 6 expands somewhat the description of the proposed REF. Subparagraph (4) (g) 9, renumbered to 7, which addresses provisions to ensure repayment has been modified to be consistent with the Renewable Groups revenue requirement approach as opposed to the Commission's year-by-year value-of-deferral approach for QFs.

Subparagraphs (4)(g)8 through 12, are new in the RG's proposal. They provide for additional minimum standards which the RG believes are necessary and appropriate. Subparagraph (4)(g)8. requires recognition of all non-energy attributes associated with the electric energy and capacity produced by the REF. Subparagraph (4)(g)9. requires recognition of the interconnection requirements for connecting and operating the REF. Subparagraph (4)(g)10. requires a description of the methodology for reducing capacity payments in the event that the capacity requirements are not met. Finally, subparagraph (4)(g)11. requires a description o the methodology to adjust for the difference between the capacity initially designated for sale and the capacity after start up and testing.

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Q. What changes are you proposing to paragraph (4)(h) of Commission proposed Rule 25-17.0832?

4 Α. Subparagraph (4) (h) lists certain additional provisions that a utility 5 may include in a standard offer contract. The Renewable Group proposes changes (Exhibit (FS-1) at page 21) that eliminate all but 6 7 the provision for performance security as being not applicable. The 8 performance security provision is modified primarily to exclude 9 REFs that use municipal waste, landfill gas or waste heat. It also excludes REFs that did not receive capacity payments in any year 10 in excess of the revenue requirements associated with the 11 statewide avoided unit, with an exception in the case where the 12 levelized payment option is selected. 13

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Q. Has the Renewables Group added anything to the rule with regard to provisions that a utility may not include in the standard offer contract?

A. Yes. The RG has added a new subparagraph (4)(i) (Exhibit (FS-1) at pages 21 and 22) that includes nine such provisions. All of these are provisions that are unnecessary for an REF providing capacity and energy for the purposes of Section 366.91, Florida Statutes or which would be unreasonable restrictions in the contract.

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Q. Would you now please address the changes you are proposing to paragraph (4) (i) of Commission proposed Rule 25-17.0832, which relates to the firm capacity payment options in a standard offer contract?

Renewable Group does propose that subparagraph (8)(c) be eliminated. The Commission language calls for the recovery of payments to an REF for a standard offer contract that the utility rejects, but that the Commission requires. There is no provision in the Renewable Group proposal that allows a utility to reject a standard offer. The subparagraph is not necessary.

Q. Has the RG added any additional paragraphs to Commission proposed rule 25-17.0832?

A. Yes. It has added a paragraphs (9) and (10) (Exhibit (FS-1) at pages 31 and 32). Paragraph (9) prohibits changes in the statewide standard offer contract except pursuant to a Commission order after evidentiary hearings. This protects the standard contract from manipulation by individual utilities. It is not meant to prohibit mutually agreeable changes to an executed contract. Paragraph (10) sets up a procedure for the Commission to establish a statewide standard offer contract through an evidentiary process. This will allow all parties to participate in the development of a uniform standard offer contract.

Q. Has the Renewables Group proposed any other new rules under Part IV?

A. Yes. The Renewables Group has proposed several administrative rules. One is new. The rest parallel similar rules in Chapter 25-17, Part III, F.A.C. and have been adapted to fit the conditions affecting REFs.

Q. Would you please discuss the new rule?

Yes. The RG is proposing Rule 25-17.0945 Annual Florida Renewable Energy Report. (Exhibit (FS-1) at pages 32 and 33). This proposed rule requires an annual report, by March 1st of each year, on the status of the development of renewable energy generating capacity. The rule sets out the information to be includedin the report and indicate that it be an aggregate report, jointly prepared by the utilities. The rule also requires an annual docketed inquiry of the report, concluding with a Commission order declaring findings, direction and future actions. The Renewables Group believes that without this annual procedure, there will be no way to measure the success of the Commission's rules in meeting the objectives of Section 366.91, Florida Statutes. The reporting in the Ten Year Site plans is not adequate to fully determine the makeup, status or progress of QF and small power production, let alone renewable resources.

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Q. Would you please discuss the proposed rules adapted from Part III?

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A. The Renewables Group proposes new rule 25-17.095 Settlement of Disputes in Contract Negations (Exhibit (FS-1at page 33). It parallels existing Rule 25-17.0834 with the same name. It generally follows the language in the existing rule. One difference in subparagraph (1) of the proposed rule is that only the REF may petition the Commission for relief if an agreement cannot be reached. As the utility has all of the leverage in a negotiation, they have no basis for redress. The proposed rule also provides that the Commission may order the utility to sign a contract consistent with

the rules rather than at full avoided cost, as the current rule, applicable to QFs, does. In proposed subparagraph (3), if the Commission finds the utility has not negotiated in good faith, in addition to penalties, the Commission shall order the utility to take action to remedy the failure and comply with Part IV. Existing Rule 25-17.0834(3) only allows for penalties.

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Q. Would you please discuss the next proposed rule?

The next new rule proposed is 25-17.0955 Modification to Existing Contracts; Explanation of When Approval is Required. (Exhibit (FS-1) at page 34). It parallels existing Rule 25-17.0836 with the same name. It generally follows the language in the existing rule, but is less intrusive. It basically requires a utility to notify the Commission of material modifications that have been mutually agreed upon by the utility and renewable energy facility, to existing contracts. It identifies material changes to include such things as location, prime mover technology type, fuel type and length of contract term. Unlike the existing rule, it does not include as material changes such things as performance requirements, MW output and the timing and amount of capacity payments. Therefore, the proposed rule does not require a description of such factors nor require an analysis of the benefits to the general body of ratepayers. These concepts are not applicable in the REP rules because the benefits are those set out in Section 366.91, Florida Statutes.

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Q. What is the next new proposed rule?

A. The next new rule proposed is **25-17.096 The Utility's Obligation to Sell** (Exhibit (FS-1) at page 35). It parallels existing Rule 25-17.084 with the same name. It generally follows the language in the existing rule, but is not conditional upon the Interconnection rule as is the existing rule.

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Q. What is the next new proposed rule?

The next new rule proposed is **25-17.097 Periods During Which Purchases Are Not Required** (Exhibit (FS-1at page 35). It parallels existing Rule 25-17.086 with the same name. It generally follows the language in the existing rule. There are some minimal word changes providing additional clarification, and there is emphasis on the fact that any condition warranting the utility's relief from purchasing is to be considered temporary and that the utility shall use its best efforts to minimize the period involved.

Q. Would you please describe the next new proposed rule?

A. The next new rule proposed is 25-17.098 Conditions Requiring Transmission Service for Self-Service for Renewable Energy Facilities (Exhibit (FS-1) at page 36). It parallels existing Rule 25-17.0883 with the same name, except for the reference to renewable energy facilities. It follows the language in the existing rule only to the extent of requiring utilities to provide transmission and distribution services generated by an REF from one of its locations to another, when doing so will not adversely affect the adequacy or liability of the utility's service to all customers. The proposed rule differs from the existing rule in that it does not require some cost effectiveness evaluation of whether providing such service may

allegedly result in higher costs to the general ratepayer. This change is in keeping with the policy of encouraging renewable energy within the State.

Q. What is the next new proposed rule?

A. The next new rule proposed is **25-17.099 Transmission Service for Renewable Energy Facilities** (Exhibit (FS-1) at page 36). It

parallels existing Rule 25-17.0889 with the same name, except for
the reference to renewable energy facilities. It is substantively the
same, except for the reference to renewable energy facilities
instead of qualifying facilities.

Q. Does this conclude your detailed explanation and comparison of the rules proposed by the Renewables Group to the Commission proposed modification of Rule 25-17.0832?

A. Yes it does. I would like to once again make clear that the Florida legislature, through Section 366.91, Florida Statutes, has set out a special situation for the development of renewable energy resources; that this special situation sets it apart from other cogenerators and small power producers; and that this special situation warrants separate rules that promote the development of renewable energy resources, diversification of fuel types, less dependency on natural gas for electric generation, encouragement of investment in renewable energy resources, improvement of environmental conditions and making Florida a leader in new and innovative technology.

Q. Do you have any concluding remarks?

A. Yes. I would like to emphasize the importance of the Renewables Group rule proposal in stimulating the development of REFs. Earlier in my testimony, I indicated that the Commission proposal would be ineffective in promoting the development of renewable energy resources. This is not conjecture, but based on a review of the development of QFs and small power producers (SPP) under existing rules. The majority of QF and SPP development took place in the late 1980's and early 1990's when the basis for firm capacity and energy contracts was a near term coal plant — either statewide or for an individual utility. When the Commission began allowing any type of unit to be the avoided unit, with those units fueled primarily by gas, the number of new firm contracts came to a near stand still.

This is evident from the Regional Load and Resouce Plan filed annually with the Commission by the Florida Reliability Coordination Council (FRCC). I have compared 2005 firm non-utility, QG and SPP capacity with that in 1996, when the contracts signed in the early 1990's were at the height of production:

22		<u>1996</u>	<u>2005</u>
23	FPL	881 MW	738 M W
24	PEF	1021	820
25	TEC	57	62
26	GPC	21	0
27	Total	1980	1620

The current rules have done nothing to stimulate development of any kind of alternative generation, much less renewable resources. In fact, nearly 80% of FPL's capacity (or 36% of the total capacity) is generated by "PURPA machines"; i.e. plants whose primary purpose is to generate electricity with traditional, non-renewable resources and whose secondary purpose is to sell the steam, Based on the forecast of energy sources for in-state kwh production, under current rules, it is projected that generation by natural gas will increase from 35% today to 46% by 2015. At the same time, production by non-utility and other energy sources will drop from almost 10% today to 7.5% in 2015.

Something needs to be done to stimulate growth in REFs. It is evident, from a historical perspective, that the most effective means is through the use of a statewide coal unit as the basis for pricing to REFs.

- Q. Does that conclude your testimony?
- 19 A. Yes it does.

DOCKET NO. 060555-EI

EXHIBIT FS-1 OF FRANK SEIDMAN

PROPOSED RULE SHOWING ADDITIONS & DELETIONS

PART IV -- PUBLIC UTILITIES' OBLIGATIONS WITH REGARD TO 1 2 **RENEWABLE ENERGY PRODUCERS** 3 4 25-17.092 Definitions 5 25-17.093 Utility's Obligation to Purchase; Customer's Selection of Billing Method 6 25-17.0935 As-Available Energy 7 25-17.094 Firm Capacity and Energy Contracts 25-17.0945 Annual Florida Renewable Energy Report 8 9 25-17.095 Settlement of Disputes in Contract Negotiations 10 25-17.0955 Modification to Existing Contracts; When Approval is Required 11 25-17.096 The Utility's Obligation to Sell 12 25-17.097 Periods During Which Purchases are Not Required 25-17.098 Transmission for Self-service for Renewable Energy Facilities 13 25-17.099 Transmission Service for Renewable Energy Facilities 14 15 **25-17.092 Definitions.** [See Seidman at pages 6, 7, 14] 16 17 For the purpose of these rules the Commission adopts the following definitions: "Renewable energy", as defined in Section 366.91, F.S., means electrical energy 18 produced from a method that uses one or more of the following fuels or energy sources: 19 hydrogen produced from sources other than fossil fuels, biomass, solar energy, 20 geothermal energy, wind energy, ocean energy, and hydroelectric power. The term 21. includes the alternative energy resource, waste heat, from sulfuric acid manufacturing 22 23 operations.

1 (2) "Biomass", as defined in Section 366.91, F.S., means a power source that is 2 comprised of, but not limited to, combustible residues or gases from forest products 3 manufacturing, agricultural and orchard crops, waste products from livestock and 4 poultry operations and food processing, urban wood waste, municipal solid waste, 5 municipal liquid waste treatment operations, and landfill gas. 6 **(3)** "Renewable energy facility" means a facility that produces renewable energy. 7 "Statewide avoided unit" means a generic, state-of-the-art, proven technology, 8 600 megawatt pulverized coal-fired electric utility generating plant with a useful life of 9 twenty-five years that is designed and equipped to comply with all applicable 10 environmental requirements. 11 25-17.093 Utility's Obligation to Purchase; Customer's Selection of Billing 12 13 Method. [See Seidman at pages 14,15] 14 (1) Each public utility shall purchase electricity from the owner or operator, if authorized by the owner, of renewable energy facilities at rates contained in the utility's 15 16 standard offer tariff or pursuant to a negotiated contract between the renewable energy 17 facility and the utility. Each public utility shall file a tariff or tariffs and a standard offer contract or contracts and shall continuously maintain a standard offer contract or 18 contracts for the purchase of energy and capacity from renewable energy facilities 19 which complies with the provisions of these rules. 20 (2) Unless the Commission determines that alternative metering requirements cause no 22 adverse effect on the cost or reliability of electric service to the utility's general body of

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1	customers, each tariff and standard offer contract shall specify the following metering
2	requirements for billing purposes:
3	(a) Hourly recording meters shall be required for renewable energy facilities with an
4	installed capacity of 100 kilowatts or more.
5	(b) For renewable energy facilities with an installed capacity of less than 100 kilowatts,
6	at the option of the renewable energy facility, either hourly recording meters, dual
7	kilowatt-hour register time-of-day meters, or standard kilowatt-hour meters shall be
8	installed. Unless special circumstances warrant, meters shall be read at monthly
9	intervals on the approximate corresponding day of each meter reading period.
10	(3)(a) A renewable energy facility, upon entering into a contract for the sale of firm
11	capacity and energy or prior to delivery of as-available energy to a utility, shall elect to
12	make either simultaneous purchases from and sales to the interconnected utility or net
13	sales to the purchasing utility. Once made, the selection of a billing methodology may
14	only be changed:
15	1. When a renewable energy facility selling as-available energy enters into a negotiated
16	contract or standard offer contract for the sale of firm capacity and energy; or
17	2. When a firm capacity and energy contract expires or is lawfully terminated by either
18	the renewable energy facility or the purchasing utility; or
19	3. When a utility declares a renewable energy facility to be in default pursuant to a
20	contract for firm energy and capacity; or.
21	4. When the renewable energy facility is selling as-available energy and has not
22	changed billing methods within the last two months; and

5. When the election to change billing methods will not contravene the provisions of 1 2 Rule 25-17.094, F.A.C.; or 6. When a utility defaults on a contract for firm energy and capacity with a renewable 3 energy facility. 4 5 (b) If a renewable energy facility elects to change billing methods in accordance with 6 this rule, such change shall be subject to the following provisions: 7 1. Upon at least thirty days advance written notice: 2. Upon the installation by the utility of any additional metering equipment reasonably 8 9 required to effect the change in billing and upon payment by the renewable energy 10 facility of the reasonable cost of such metering equipment and its installation, and 3. Upon completion and approval by the utility of any alterations to the interconnection 11 12 reasonably required to effect the change in billing and upon payment by the renewable energy facility of the reasonable cost for such alterations. 13 (c) Should a renewable energy facility elect to make simultaneous purchases and sales. 14 purchases of electric service by the renewable energy facility from the interconnecting 15 utility shall be billed at the retail rate schedule under which the renewable energy 16 facility load would receive service as a non-generating customer of the utility; sales of 17 electricity delivered by the renewable energy facility to the purchasing utility shall be 18 purchased at the energy and capacity rates, where applicable, in accordance with Rules 19 25-17.0935 and 25-17.094, F.A.C. 20 21 (d) Should a renewable energy facility elect a net billing arrangement, the hourly energy and capacity sold and delivered to the purchasing utility shall be purchased at the 22 energy and capacity rates, where applicable, in accordance with Rules 25-17.0935 and 23

25-17.094, F.A.C.; and, purchases from the interconnected utility shall be billed 1 2 pursuant to the utility's applicable rate schedule, including but not limited to standby 3 service or supplemental service. 4 (4)(a) Payments for energy and capacity sold by a renewable energy facility shall be 5 rendered monthly by the purchasing utility and as promptly as possible, normally by the 6 twentieth business day following the day the meter is read. The kilowatt-hours sold by 7 the renewable energy facility, the applicable energy rate at which payments were made. 8 and the rate and amount of the applicable capacity payment shall accompany the 9 payment by the utility to the renewable energy facility. Payments that are not received 10 by the renewable energy facility by the thirtieth day following the day the meter is read 11 shall accrue interest at the prime rate plus five percent until the outstanding amount due. 12 including interest, is paid in full by the purchasing utility. 13 (b) Where simultaneous purchases and sales are made by a renewable energy facility 14 from and to a single utility, energy and capacity payments to the renewable energy 15 facility may, at the option of the renewable energy facility, be shown as a credit to the 16 renewable energy facility's bill; the kilowatt-hours produced by the renewable energy 17 facility, the energy rate at which payments were made, and the rate and amount of the capacity payment shall accompany the bill to the renewable energy facility. A credit 18 19 shall not exceed the amount of the renewable energy facility's bill from the utility and 20 the excess, if any, shall be paid directly to the renewable energy facility in accordance 21 with this rule. 22 (5) Each utility shall keep separate accounts for sales to renewable energy and 23 purchases from renewable energy facilities.

2 (1) As-available energy is energy produced and sold by a renewable energy facility on 3 an hour-by-hour basis for which contractual commitments as to the quantity or time of 4 delivery are not required. Each public utility shall purchase as-available energy from 5 any renewable energy facility. As-available energy shall be sold by a renewable 6 energy facility and purchased by a public utility pursuant to the terms and conditions of 7 a published tariff or a separately negotiated contract. As-available energy sold by a 8 renewable energy facility shall be purchased by the utility at a rate, in cents per 9 kilowatt-hour, not less than the utility's avoided energy cost. 10 (a) Tariff Rates: Each public utility shall publish a tariff for the purchase of as-available 11 energy from renewable energy facilities. Each utility's published tariff shall state that the rate of payment for as-available energy is not less than the utility's avoided energy 12 13 cost as defined in subsection (2)(a) of this rule. 14 (b) Contract Rates: Each utility may enter into a separately negotiated contract for the purchase of as-available energy from a renewable energy facility. Renewable energy 15 16 facilities desiring to negotiate a contract for the sale of firm capacity and energy with terms different from those in a utility's standard offer contract may do so pursuant to 17 subsection 25-17.094(2), F.A.C. Contracts for the purchase of as-available energy 18 19 between a renewable energy facility and a utility shall be filed with the Commission within 10 working days of execution. When a renewable energy facility and a utility 20 cannot agree on the terms and conditions of a negotiated contract, the renewable energy 21 facility may apply to the Commission for relief pursuant to Rule 25-17.095, F.A.C. 22

25-17.0935 As-Available Energy. [See Seidman at pages 16,17]

(2)(a) Avoided energy costs associated with as-available energy are defined as the utility's highest cost generation, including generation for the sale of interchange energy, or purchases from another utility that could be avoided by purchases from the renewable energy facility. Avoided energy costs associated with as-available energy shall be all of the costs the utility avoided or could have avoided by purchasing asavailable energy from a renewable energy facility, and shall include but not be limited to: (i) the utility's incremental fuel cost, including fuel storage, handling and transportation; (ii) identifiable variable operating and maintenance expenses including taxes and administration; and (iii) identifiable variable utility purchases. Avoided line losses reflecting the voltage at which generation by the renewable energy facility is received by the utility shall also be included in the determination of avoided energy costs. Each utility shall calculate its avoided energy cost associated with as-available energy deterministically, on an hour-by-hour basis, using the utility's actual avoided or avoidable energy cost for the hour, as affected by the output of the renewable energy facilities delivering energy to the utility's system in such hour. A megawatt block size at no greater than the most recent available estimate of the combined average hourly generation of all renewable energy facilities making energy sales at the utility's asavailable energy rate to the utility shall be used to calculate the utility's hourly avoided or avoidable energy costs associated with as-available energy. (b) Each utility's tariff shall include a detailed description of the methodology to be used in the calculation of avoided energy cost implementing subsection (2) of this rule. Each utility's implementation methodology shall specify the method by which the

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utility's incremental fuel and operating and maintenance costs and line losses are 1 2 determined. 3 (c) For renewable energy facilities with hourly recording meters, monthly payments for 4 as-available energy shall be made and shall be calculated based on the product of: (1) 5 the utility's actual avoided or avoidable energy rate for each hour during the month; and 6 (2) the quantity of energy sold by the renewable energy facility during that hour. 7 (4) Each public utility shall file with the Commission by the twentieth business day of 8 the following month, a monthly report of its actual hourly avoided energy costs, the 9 average of its actual hourly avoided energy costs for the on-peak and off-peak periods 10 during the month, and the average of its actual hourly avoided energy costs for the 11 month with the Commission. A copy shall be furnished to any individual who requests 12 such information. 13 (5) Upon request by a renewable energy facility or any interested person, each public 14 utility shall provide within 30 days its most current projections of its generation mix, 15 fuel price by type of fuel, and at least a five-year projection of fuel forecasts to estimate 16 future as-available energy prices as well as any other information reasonably requested 17 by the renewable energy facility to project future avoided cost prices including, but not 18 limited to, a one hour advance forecast of hour-by-hour avoided energy costs. The 19 utility may charge an appropriate fee, not to exceed the actual cost of production and 20 copying, for providing such information. 21 (6) Utility payments for as-available energy made to renewable energy facilities shall be 22 recoverable by the utility through the Commission's periodic review of fuel and 23 purchased power.

1 25-17.0832-25-17.094 Firm Capacity and Energy Contracts. [See Seidman at pages 2 17-28] (1) Firm capacity and energy are capacity and energy produced and sold by a qualifying 3 renewable energy facility and purchased by a utility pursuant to a negotiated contract or 4 a standard offer contract subject to certain contractual provisions as to the quantity, 5 6 time, and reliability of delivery. (a) Within one working day of the execution of a negotiated contract or the receipt of a 7 8 signed standard offer contract, the utility shall notify the Director of the Division of 9 Economic Regulation and provide the amount of committed capacity to be sold, the 10 generating technology to be used, the renewable energy resource, and the anticipated 11 date of commencement of deliveries of capacity from the renewable energy facility and 12 the type of generating unit, if any, which the contracted capacity is intended to avoid or 13 defer. [See Seidman at pages 17] 14 (b) Within 10 working days of the execution of a negotiated contract or receipt of a 15 signed standard offer contract for the purchase of firm capacity and energy, the 16 purchasing utility shall file with the Commission a copy of the signed contract and a 17 summary of its terms and conditions. At a minimum, the summary shall include: 18 1. The name of the utility and the owner and or operator of the renewable energy 19 qualifying facility, who are parties signatories of to the contract; 20 2. The amount of committed capacity specified in the contract, the size of the facility, 21 the type of facility, its location, and its interconnection and transmission requirements; 22 3. The amount of annual and on-peak and off-peak energy expected to be delivered to 23 the utility; and,

shall not be counted apply towards the State's twenty-five percent renewable energy generating capacity mix requirement and the State's twenty-five percent renewable energy generation fuel mix requirement upon the date the renewable energy facility commences delivery of firm capacity to the utility the subscription limit of the avoided unit in a standard offer contract. (3) Cost Recovery for Negotiated Contracts. In reviewing negotiated firm capacity and energy contracts for the purpose of cost recovery, the Commission shall consider factors relating to the contract that would impact the utility's general body of retail and wholesale customers including: (a) Whether additional firm capacity from the renewable energy facility and energy will promote the use of renewable energy resources, diversify the State's fuel mix and reduce reliance on electricity generated by use of natural gas is needed by the purchasing utility and by Florida utilities from a statewide perspective; (b) Whether the cumulative present worth of firm capacity and energy payments made to the renewable energy qualifying facility over the term of the contract are projected to be no greater than: 1. The the estimated cumulative present worth of the value of the revenue requirements associated with the statewide avoided unit assumed to commerce commercial operation on the date on which the renewable energy facility elects to commence delivery of firm capacity a year-by-year deferral of the construction and operation of generation or parts thereof by the purchasing utility over the term of the contract, calculated in accordance with subsection (5) and paragraph (6)(a) of this rule, provided that the contract is designed to contribute towards the promoting the use of renewable energy resources.

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diversifying the State's fuel mix and reducing reliance on electricity generated by use of 1 2 natural gas. deferral or avoidance of such capacity; or 3 2. The cumulative present worth of other capacity and energy related costs that the contract is designed to avoid such as fuel, operation, and maintenance expenses or 4 5 alternative purchases of capacity, provided that the contract is designed to avoid such costs: [See Seidman at pages 10] 6 (c) To the extent that annual firm capacity and energy payments made to the renewable 7 8 energy qualifying facility in any year exceed that year's revenue requirements payments associated with the statewide avoided unit annual value of deferring the construction 9 10 and operation of generation by the purchasing utility or other capacity and energy related costs, whether the contract contains provisions to ensure repayment of such 11 payments exceeding that year's revenue requirements payments associated with the 12 statewide avoided unit value of deferring that capacity in the event that the renewable 13 energy qualifying facility, in the absence of a Force Majeure event, fails to deliver firm 14 capacity and energy pursuant to the terms and conditions of the contract, provided, 15 however, that provisions to ensure repayment shall not be applicable to contracts for 16 firm energy and capacity when the renewable energy facility has selected levelized 17 payments provisions to ensure repayment may be based on forecasted data; and 18 (d) Considering the technical reliability, viability, and financial stability of the 19 20 qualifying facility, whether Whether the contract contains provisions to protect the purchasing utility's ratepayers in the event the renewable energy qualifying facility fails 21 to deliver firm capacity and energy in the amount and times specified in the contract; 22 provided, however, that this factor shall not be applicable unless the capacity from the 23

renewable energy facility is necessary for the utility to meet its reserve requirements 1 2 and shall not in any event be applicable to contracts with renewable energy facilities 3 that produce electricity from municipal solid waste, landfill gas, or waste heat. [See 4 Seidman at pages 19] (4) Standard Offer Contracts. 5 6 (a) Upon petition by a utility or pursuant to a Commission action, each Each public 7 utility shall submit for Commission approval, and continuously maintain, a tariff or 8 tariffs that include and a standard offer contract or contracts for the purchase of firm 9 capacity and energy from small qualifying facilities and renewable energy facilities 10 generators, as defined by Section 366.91, F.S. In lieu of a separately negotiated 11 contract, standard offer contracts pursuant to this section are available to the following 12 types of qualifying facilities: [See Seidman at page 19] 1. A renewable generating facility energy facilities as defined by Section 366.91, F.S.; 13 14 OF 2. A qualifying facility, as defined by subsection 25-17.080(3), F.A.C., with a design 15 16 capacity of 100 kW or less; 17 (b) By April 1 of each year, concurrent with filing a Ten-Year Site Plan, each Immediately upon the effective date of this rule, each public utility shall submit and 18 19 continuously maintain standard offer contracts(s) based the statewide avoided unit 20 assumed to commercial operation on the date on which each renewable energy facility accepting such standard offer elects to commence delivery of firm 21 capacity on the next avoidable fossil-fueled generating unit of each technology type 22 identified in its Ten-Year Site Plan. Each public utility with no identified planned 23

generating units shall submit a standard offer contract based on a planned purchase. By April 1 of each year, concurrent with filing a Ten Year Site Plan, each utility shall develop: (i) the annual revenue requirement for the statewide avoided unit, over its twenty-five year useful life, on a total dollar and a dollar per KW basis, using its own financial and operating assumptions. This will be done for the current filing year and for each of the following nine years covered in each utility's Ten Year Site Plan horizon. Each utility shall include the assumptions used, including the cost of the statewide avoided unit, in such detail that the results can be readily verified. This information will form the basis for capacity payments to be made to renewable energy facilities. If the cost of such statewide avoided units included in the Ten Year Site Plans of the public utilities vary by five-percent or less, an arithmetic average of those costs shall be used; provided, however, that if the costs vary by more than five-percent, the highest of the costs shall be used. It is anticipated that the statewide avoided unit could change from year-to-year due to technological advancements, changes in environmental standards or other such factors. To the extent practicable, the cost of the statewide avoided unit shall be that forecasted and maintained by recognized industry data bases, adjusted for factors applicable to the installation of such unit in Florida; (ii) the anticipated average heat rate of the statewide avoided unit in btu per kWh for each year of the utility's Ten Year Site Plan horizon, taking into account performance deterioration over time. If the anticipated heat rates of such statewide avoided units include in the Ten Year Site Plans of the public utilities vary by five-percent or less, an arithmetic average of those heat rates shall be used; provided, however, that if the heat rates vary by more than five-percent, the highest of the heat rates shall be used; and, (iii)

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the anticipated average fixed operation and maintenance expenses associated with the statewide avoided unit for each year of each utility's Ten Year Site Plan horizon, where such expenses are to include but not be limited to the costs of overhauls and capital upgrades, plus all environmental costs including the cost of installing and maintaining emission control systems, and the costs associated with operating such systems. If the anticipated fixed operation and maintenance expenses associated with such statewide avoided units include in the Ten Year Site Plans of the public utilities vary by fivepercent or less, an arithmetic average of those expenses shall be used; provided, however, that if such expenses vary by more than five-percent, the highest of the anticipated expenses shall be used. [See Seidman at pages 19,20] (c) Individual standard offer contracts shall remain open until either: 1. a request for proposals pursuant to Rule 25-17.082, F.A.C., is issued for the generating unit; 2. the utility files a petition for need determination or commences construction for generating units not subject to Rule 25-17.082, F.A.C.; or 3. the contract's subscription limit, equal to the capacity of the avoided unit, is reached, the Commission reasonably determines. based on record evidence in an appropriately noticed and conducted evidentiary proceeding, that the State's generating capacity mix, measured by megawatts of installed generating capacity in the State, contains at least twenty-five percent of renewable energy resources, and that the State's generation fuel mix as a percentage of statewide annual megawatt hour production, includes at least twenty-five percent from renewable energy resources. Before a contract is closed, the utility shall file a petition for approval of a new contract based on the next unit of the same generating technology in its Ten-Year Site Plan, if any. If no generating unit of the same technology is in its

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rate and/or the anticipated fixed operation and maintenance expenses, and the 1 Commission may require the one or more utilities to adjust payments to renewable 2 energy facilities, both prospectively and retroactively, consistent with its findings. [See 3 4 Seidman at page 21] (e) The utility shall evaluate, select, and enter into standard offer contracts with eligible 5 qualifying facilities based on the benefits to the ratepayers. Within 60 days of receipt of 6 a signed standard offer contract, the utility shall-either: 7 8 1. Accept accept and sign the contract and return it within five days to the qualifying 9 renewable energy facility; or 10 2. Petition the Commission not to accept the contract and provide justification for the refusal. Such petitions may be based on: 11 12 a. A reasonable allegation by the utility that acceptance of the standard offer will exceed the subscription limit of the avoided unit or units; or 13 b. Material evidence showing that because the qualifying facility is not financially or 14 technically viable, it is unlikely that the committed capacity and energy would be made 15 available to the utility by the date specified in the standard offer. [See Seidman at page 16 17 21] (f) A standard offer contract which has been executed accepted by a renewable energy 18 qualifying facility shall apply towards the State's twenty-five percent generating 19 20 capacity mix requirement and the State's twenty-five percent generation fuel mix requirement as set forth in 4.(c) upon the date the renewable energy facility commences 21 delivery of firm capacity to the utility 22

1	subscription limit of the unit designated in the contract effective the date the utility
2	receives the accepted contract. If the contract is not accepted by the utility, its effect
3	shall be removed from the subscription limit effective the date of the Commission order
4	granting the utility's petition. [See Seidman at page 22]
5	(g) Minimum Specifications. [SeeSeidman at page 22] Each standard offer contract
6	shall, at minimum, specify:
7	1. The installed cost of the statewide avoided unit or units on which the contract is
8	based ;
9	2. The total amount of committed capacity, in megawatts, needed to meet the State's
10	twenty-five percent renewable energy generating capacity requirement fully subscribe
11	the avoided unit specified in the contract;
12	23. The payment options available to the renewable energy qualifying facility including
13	all financial and economic assumptions necessary to calculate the firm capacity
14	payments available under each payment option and an illustrative calculation of firm
15	capacity payments for a minimum ten year term contract commencing on January 1 of
16	each year covered by the utility's most recent Ten Year Site Plan, with such illustrative
17	calculation being updated each year with the in-service date of the avoided unit for each
18	payment option;
19	4. The date on which the standard contract offer expires;
20	35. The amount of prior notice, which may not exceed 90 days. The date that the
21	renewable energy facility shall provide to the utility prior to commencing deliveries of
22	by which firm capacity and energy deliveries from the qualifying facility to the utility

shall commence. This date shall be no later than the anticipated in-service date of the avoided unit specified in the contract; 46. The period of time over which firm capacity and energy shall be delivered from the qualifying renewable energy facility to the utility. Firm capacity and energy shall be delivered, at a minimum, for a period of ten years, and, at a maximum for a period equal to the life of the statewide avoided unit, the precise period to be selected at the sole and exclusive discretion of the renewable energy facility and such period shall commence on the date on which the renewable energy facility first commences delivery of firm capacity to the utility anticipated in-service date of the avoided unit specified in the contract. At a maximum, firm capacity and energy shall be delivered for a period of time equal to the anticipated plant life of the avoided unit, commencing with the anticipated in-service date of the avoided unit; [See Seidman at pages 7,8] 57. The minimum performance standards for the delivery of firm capacity and energy by the renewable energy qualifying facility during the utility's daily seasonal peak and off-peak periods. These performance standards shall approximate the anticipated peak and off-peak availability and capacity factor of the statewide utility's avoided unit over the term of the contract; provided, however, that the performance standards shall be no higher than the average of the utility's base load coal plants as measured over the immediately preceding 10 years. 68. The description of the proposed renewable energy facility including the location, steam host, if applicable, generation technology, and renewable fuel sources; 79. Provisions to ensure repayment of payments to the extent that annual firm capacity and energy payments made to the renewable energy qualifying facility in any year

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exceed that year's revenue requirement associated with annual value of deferring the statewide avoided unit specified in the contract in the event that the renewable energy qualifying facility fails to perform pursuant to the terms and conditions of the contract. Such provisions may be in the form of a surety bond or equivalent assurance of repayment of payments exceeding the revenue requirement associated with year-byvear-value of deferring the statewide avoided unit-specified in the contract. 8. Recognition that all non-energy attributes associated with the electric energy and capacity produced by the renewable energy facility, including but not limited to renewable energy credits, green tags, environmental attributes, etc., shall remain the sole and exclusive property of the renewable energy facility, unless the renewable energy facility agrees in its sole and absolute discretion to sell such attributes to the utility pursuant to a separate agreement. 9. The interconnection requirements for connecting and operating the renewable energy facility in parallel with the utility's system, including applicable interconnection standards, agreements and applications for large and small renewable energy facilities. and the expected time required from application to completion of interconnection. 10. A description of the methodology to be applied for reducing the capacity payments in the event the renewable energy facility fails to meet the capacity factor requirements applicable to the standard offer, provided however that such methodology shall reduce capacity payments proportionately and linearly to a minimum capacity factor of fiftypercent, below which such payments may be reduced to zero. 11. A description of the methodology to be applied for adjusting the initial amount of firm capacity designated for sale by the renewable energy facility, subsequent to the

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the qualifying facility is delivering firm capacity and energy to the utility. Where early levelized capacity payments are elected, the cumulative present value of the capacity payments made to the qualifying facility over the term of the contract shall not exceed the cumulative present value of the capacity payments which would have been made to the qualifying facility had such payments been made pursuant to subparagraph (4)(g)1. of this rule. [See Seidman at page 25] (5) Avoided Energy Payments for Standard Offer Contracts. [See Seidman at pages 25,26] (a) For the purpose of this rule, avoided energy costs payments associated with firm energy sold to a utility by a renewable energy qualifying facility pursuant to a utility's standard offer contract shall commence with capacity payments to the renewable energy facility the in-service date of the avoided unit specified in the contract. Prior to the inservice date of the avoided unit, the qualifying facility may sell as available energy to any utility pursuant to Rule 25-17.0825, F.A.C. (b) To the extent that the avoided unit would have been operated, had that unit been installed, avoided energy costs associated with firm energy shall be the energy cost of this unit. To the extent that the avoided unit would not have been operated, the avoided energy costs shall be the as-available avoided energy cost of the purchasing utility. During the periods that the avoided unit would not have been operated, firm energy purchased from qualifying facilities shall be treated as as available energy for the purposes of determining the megawatt block size in paragraph 25-17.0825(2)(a), F.A.C. (b e) The energy payments cost of associated with the statewide avoided unit and specified in the utilities' the standard offer contracts contract shall be defined as the cost

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1 of coal fuel, in cents per kilowatt-hour, which would have been burned at the avoided unit plus all delivery, storage and management costs, plus all variable operation and 2 maintenance-expense costs, -plus avoided line losses, for each monthly payment period. 3 The cost of coal fuel for each monthly payment period shall be ealculated defined as the 4 5 average market price of the appropriate quality of coal fuel delivered to each of the 6 utilities subject to these rules, in cents per million Btu, associated with the statewide 7 avoided unit multiplied by the average heat rate associated with the statewide avoided unit. The variable operating and maintenance expense costs shall be estimated based on 8 9 a the unit fuel type and state-of-the-art, proven technology of the statewide avoided 10 unit and shall include, but not be limited to, costs associated with emission control 11 devices and the cost of maintaining and administering such devices. 12 (6) Calculation of standard offer contract firm capacity payment options. [See Seidman at page 26,27] 13 (a) Calculation of the revenue requirement capacity payment option .year-by-year-value 14 15 of deferral. The year-by-year value of deferral of an avoided unit shall be the difference in revenue requirements associated with deferring the avoided unit one year and shall be 16 17 calculated as follows: The monthly revenue requirement payment is: 18 $VAC_{m} = \frac{1}{12} \frac{[KIn (1 - R)/(1 - R L) + On]}{[KIn (1 - R)/(1 - R L) + On]} \frac{1}{12} \frac{[RR_{n} + O_{0}(1 + i)^{n}]}{[RR_{n} + O_{0}(1 + i)^{n}]}$ 19 20 Where, for a one year deferral: VAC_m = the monthly capacity payment of avoided capacity, \$\footnote{KW}\text{month, for each} 21 month of year n

- 1 Where: G = The cumulative present value in the year that the contractual payments will
- 2 begin, of the avoided fixed operation and maintenance expense component of capacity
- 3 payments which would have been made had capacity payments commenced with the
- 4 anticipated in-service date of the avoided unit; and
- $5 \mid R = (1 + io)/(1 + r)$
- 6 $PL = F/12\{r/[1-(1+r)-t]\} + O$
- 7 Where: PL = the monthly levelized capacity payment, starting on or prior to the in-
- 8 service date of the avoided unit;
- 9 | F = the cumulative present value, in the year that the contractual payments will begin,
- 10 of the avoided capital cost component of the capacity payments which would have been
- 11 made had the capacity payments not been levelized;
- 12 | r = the annual discount rate, defined as the utility's incremental after tax cost of capital;
- 13 and
- 14 t = the term, in years, of the contract for the purchase of firm capacity.
- 15 O = the monthly fixed operation and maintenance component of the capacity payments,
- calculated in accordance with paragraph (5)(a) for levelized capacity payments or with
- paragraph (5)(b) for early levelized capacity payments.
- 18 (7) Upon request by a qualifying renewable energy facility or any interested person,
- each utility shall provide within 30 days its most current projections of its future
- 20 generation mix including type and timing of anticipated generation additions, and at
- 21 least a 20-year projection of fuel forecasts, as well as any other information reasonably
- 22 | required by the qualifying renewable energy facility to project future avoided cost

1	prices. The utility may charge an appropriate fee, not to exceed the actual cost of
2	production and copying, for providing such information [See Seidman at page 27]
3	(8)(a) Firm energy and capacity payments made to a qualifying renewable energy
4	facility pursuant to a separately negotiated contract shall be recoverable by a utility
5 .	through the Commission's periodic review of fuel and purchased power costs if the
6	contract is found to be prudent in accordance with-subsection (2) of this rule.
7	(b) Upon execution acceptance of the contract by the renewable energy facility and
8	delivery to the utility by both parties, firm energy and capacity payments made to a
9	qualifying renewable energy facility pursuant to a standard offer contract shall be
10	recoverable by a utility through the Commission's periodic review of fuel and
11	purchased power costs. [See Seidman at page 27,28]
12	(c) Firm energy and capacity payments made pursuant to a standard offer contract
13	signed by the qualifying facility, for which the utility has petitioned the Commission to
14	reject, is recoverable through the Commission's periodic review of fuel and purchased
15	power costs if the Commission requires the utility to accept the contract because it
16	satisfies subsection (4) of this rule.
17	(9) Changes or modifications to, or approvals of, standard offer contracts shall not be
18	valid except pursuant to an order of the Commission following an appropriately noticed
19	evidentiary proceeding with opportunity for full and fair participation by any affected
20	party. [See Seidman at page 28]
21	(10) Within 60 days of the effective date of this Part IV, the Commission shall initiate
22	and properly notice evidentiary proceedings for the purpose of developing and
23	approving a uniform standard offer contract for firm energy and capacity that must be

1 used by each public utility subject to this rule. The standard offer contracts of each utility shall be identical, with the exception of minor differences relating to utility 2 specific provisions such as line losses, contact persons, and similar such matters. Once 3 4 approved, such standard offer contract may not be modified except upon order of the Commission following further evidentiary proceedings before the Commission upon 5 petition of a renewable energy facility or a utility subject to these rules. [See Seidman 6 7 at page 28] 8 25-17.0945 Annual Florida Renewable Energy Report. [See Seidman at page 29] 9 (1) By March, 1st of each year, the State's electric utilities shall jointly prepare and file 10 an aggregated, comprehensive Florida Renewable Energy Report containing accurate, 11 12 complete and detailed information regarding existing and planned Florida renewable energy facilities for the immediately preceding calendar year. 13 (2) The information contained in the report shall include, but not be limited to: 14 (a) the current installed renewable energy generating capacity, 15 (b) the planned renewable energy generating capacity in mW, 16 (c) the annual renewable energy electrical production in mWhs. 17 (d) the number of on-going negotiations for the purchase of renewable energy. 18 (e) the number of failed negotiations for the purchase of renewable energy, and 19 (f) all other such information that may assist the Commission in determining 20 1. the rate of renewable energy development in the State, 21 2. the success of the Commission's rules in encouraging renewable energy, and 22

1 3. the extent to which the State is meeting the policy objectives articulated in Section 2 366.91. Florida Statutes. (3) Not later than 60 days following submittal of the Florida Renewable Energy Report 3 4 by the electric utilities, the Commission shall conduct a docketed inquiry and 5 evidentiary hearing with respect to each annual Florida Renewable Energy Report and 6 issue an order declaring with specificity its findings, directions to the State's electric 7 utilities, and plans for future actions regarding renewable energy facilities. 8 25-17.095 Settlement of Disputes in Contract Negotiations. [See Seidman at pages 9 10 29,301 11 (1) Public utilities shall negotiate in good faith for the purchase of capacity and energy from renewable energy facilities and interconnection with renewable energy facilities. 12 In the event that a utility and a renewable energy facility cannot agree on the rates. 13 terms, and other conditions for the purchase of capacity and energy, or the cost, terms or 14 other conditions for interconnection, the renewable energy facility may petition the 15 Commission for relief, and may request that the Commission order the utility to sign a 16 contract for the purchase of capacity and energy at rates, terms and conditions that are 17 consistent with this rule or to interconnect with the renewable energy facility for a 18 reasonable cost and in accord with other reasonable terms and conditions. 19 (2) To the extent possible, the Commission will dispose of an application for relief 20 pursuant to this rule within 90 days of the filing of a petition. 21 (3) If the renewable energy facility presents credible evidence that a utility has failed to 22 negotiate or deal in good faith with the renewable energy facility, the Commission shall 23

order the utility to immediately take action to remedy such failure, including actions 1 2 deemed necessary by the Commission to comply with this Part IV, and shall impose an appropriate penalty on the utility including, but not limited to those approved by Section 3 4 350.127, F.S. 5 25-17.0955 Modification to Existing Contracts; When Approval Is Required. [See 6 7 Seidman at page 30] 8 (1) Each public utility shall notify the Commission of material modifications that have 9 been mutually agreed upon by the utility and the renewable energy facility who are parties to an existing contract for the purchase of firm capacity and energy, the costs of 10 which are reviewed through the Commission's periodic review of fuel and purchased 11 power costs, within 30 days of the modification. At a minimum, the following 12 13 information shall be submitted: (a) A description of the modification and a statement indicating why the utility believes 14 15 that the modification is a material change; (b) A copy of the documents that evidence the modification; 16 17 (c) A detailed statement explaining whether the existing contract would be viable if no 18 modification is made; and, (d) A statement indicating whether the date of delivery of capacity and energy by the 19 20 project will change because of the modification. 21 (2) In order for a utility to recover its costs, Commission approval is required for a material modification. Such modifications may include changes to contractual terms 22 such as location, prime mover technology type, fuel type, or length of contract term. 23

(3) Commission approval is not required for any modifications explicitly contemplated 1 2 by the terms of the contract or for routine administrative changes. 3 (4) In cases where approval of a contract modification is required for utility cost 4 recovery, a utility shall file a petition for contract modification approval that provides 5 the information required by paragraphs (1)(a) through (d) above. The petition shall also 6 comply with the applicable Commission procedural requirements. When a petition is 7 filed, the petition shall serve as the notice required by subsection (1) above. 8 9 25-17.096 The Utility's Obligation to Sell. [See Seidman at page 31] Each utility shall sell electricity to renewable energy facilities at rates which are just, 10 11 reasonable, and non-discriminatory. 12 25-17.097 Periods During Which Purchases Are Not Required. [See Seidman at 13 14 page 31] Where purchases from a renewable energy facility will impair the utility's ability to 15 give adequate service to the rest of its customers or, due to operational circumstances 16 17 directly relating to reasonable minimum loading limitations of a utility unit, purchases 18 from renewable energy facilities will cause the utility to incur excessive costs which the 19 utility would not incur if it did not make such purchases, the utility shall be temporarily relieved of its obligation under these rules to purchase electricity from a renewable 20 energy facility; provided, however, that the utility shall use best efforts to minimize the 21 22 time period during which it is temporarily relieved from such obligation. If practicable, 23 the utility shall notify the affected renewable energy facility or facilities prior to the

instance giving rise to those conditions. If prior notice is not practicable, the utility shall notify the renewable energy facility or facilities as soon as practicable after the fact. In either event the utility shall notify the Commission, and the Commission staff shall, upon request of the affected renewable energy facility or facilities, investigate the utility's claim. Nothing in this section shall operate, or be construed to operate, to relieve the utility of its general obligation to purchase for a renewable energy facility pursuant to Rule 25-17.094, F.A.C 25-17.098 Transmission for Self-service for Renewable Energy Facilities. [See Seidman at pages 31,32] Public utilities are required to provide transmission and distribution services to enable a retail customer to transmit electricity generated by a renewable energy facility owned or operated by the customer at one location to the customer's facilities at another location or locations when the provision of such service in not likely to adversely affect the adequacy or reliability of electric service to all customers. 25-17.099 Transmission Service for Renewable Energy Facilities. [See Seidman at page 32] (1) Upon request by a renewable energy facility, each electric utility in Florida shall provide, subject to the provisions of subsection (3) of this rule, transmission service to 20 wheel as-available energy or firm energy and capacity produced by a renewable energy facility from the renewable energy facility to another electric utility.

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- 1 (2) The rates, terms, and conditions for transmission services as described in subsection
- 2 (1) and in Rule 25-17.098, F.A.C., which are provided by a public utility shall be those
- approved by the Federal Energy Regulatory Commission.
- 4 (3) A utility may deny, curtail, or discontinue transmission service to a renewable
- 5 energy facility on a non-discriminatory basis if the provision of such service would
- 6 adversely affect the safety, adequacy or reliability of electric service to the utility's
- 7 general body of retail and wholesale customers.

DOCKET NO. 060555-EI

EXHIBIT FS-2 OF FRANK SEIDMAN

PROPOSED RULE UNMARKED VERSION

1 PART IV -- PUBLIC UTILITIES' OBLIGATIONS WITH REGARD TO 2 RENEWABLE ENERGY PRODUCERS 3 4 25-17.092 Definitions 5 25-17.093 Utility's Obligation to Purchase; Customer's Selection of Billing Method 6 25-17.0935 As-Available Energy 7 25-17.094 Firm Capacity and Energy Contracts 8 25-17.0945 Annual Florida Renewable Energy Report 9 25-17.095 Settlement of Disputes in Contract Negotiations 10 25-17.0955 Modification to Existing Contracts; When Approval is Required 11 25-17.096 The Utility's Obligation to Sell 12 25-17.097 Periods During Which Purchases are Not Required 13 25-17.098 Transmission for Self-service for Renewable Energy Facilities 14 25-17.099 Transmission Service for Renewable Energy Facilities 15 25-17.092 Definitions. 16 17 For the purpose of these rules the Commission adopts the following definitions: 18 (1) "Renewable energy", as defined in Section 366.91, F.S., means electrical energy 19 produced from a method that uses one or more of the following fuels or energy sources: 20 hydrogen produced from sources other than fossil fuels, biomass, solar energy, 21 geothermal energy, wind energy, ocean energy, and hydroelectric power. The term 22 includes the alternative energy resource, waste heat, from sulfuric acid manufacturing

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operations.

"Biomass", as defined in Section 366.91, F.S., means a power source that is 1 (2) 2 comprised of, but not limited to, combustible residues or gases from forest products manufacturing, agricultural and orchard crops, waste products from livestock and 3 poultry operations and food processing, urban wood waste, municipal solid waste, 4 municipal liquid waste treatment operations, and landfill gas. 5 (3) "Renewable energy facility" means a facility that produces renewable energy. 6 7 "Statewide avoided unit" means a generic, state-of-the-art, proven technology, (4) 600 megawatt pulverized coal-fired electric utility generating plant with a useful life of 8 twenty-five years that is designed and equipped to comply with all applicable 9 10 environmental requirements. 11 25-17.093 Utility's Obligation to Purchase; Customer's Selection of Billing 12 Method. 13 14 (1) Each public utility shall purchase electricity from the owner or operator, if authorized by the owner, of renewable energy facilities at rates contained in the utility's 15 standard offer tariff or pursuant to a negotiated contract between the renewable energy 16 facility and the utility. Each public utility shall file a tariff or tariffs and a standard offer 17 contract or contracts and shall continuously maintain a standard offer contract or 18 19 contracts for the purchase of energy and capacity from renewable energy facilities which complies with the provisions of these rules. 20 21 (2) Unless the Commission determines that alternative metering requirements cause no adverse effect on the cost or reliability of electric service to the utility's general body of 22

- 1 customers, each tariff and standard offer contract shall specify the following metering
- 2 requirements for billing purposes:
- 3 (a) Hourly recording meters shall be required for renewable energy facilities with an
- 4 installed capacity of 100 kilowatts or more.
- 5 (b) For renewable energy facilities with an installed capacity of less than 100 kilowatts,
- 6 at the option of the renewable energy facility, either hourly recording meters, dual
- 7 kilowatt-hour register time-of-day meters, or standard kilowatt-hour meters shall be
- 8 installed. Unless special circumstances warrant, meters shall be read at monthly
- 9 intervals on the approximate corresponding day of each meter reading period.
- 10 (3)(a) A renewable energy facility, upon entering into a contract for the sale of firm
- capacity and energy or prior to delivery of as-available energy to a utility, shall elect to
- make either simultaneous purchases from and sales to the interconnected utility or net
- sales to the purchasing utility. Once made, the selection of a billing methodology may
- only be changed:
- 15 1. When a renewable energy facility selling as-available energy enters into a negotiated
- 16 contract or standard offer contract for the sale of firm capacity and energy; or
- 17 2. When a firm capacity and energy contract expires or is lawfully terminated by either
- the renewable energy facility or the purchasing utility; or
- 19 3. When a utility declares a renewable energy facility to be in default pursuant to a
- 20 contract for firm energy and capacity; or,
- 4. When the renewable energy facility is selling as-available energy and has not
- 22 changed billing methods within the last two months; and

- 1 5. When the election to change billing methods will not contravene the provisions of
- 2 Rule 25-17.094, F.A.C.; or
- 3 6. When a utility defaults on a contract for firm energy and capacity with a renewable
- 4 energy facility.
- 5 (b) If a renewable energy facility elects to change billing methods in accordance with
- 6 this rule, such change shall be subject to the following provisions:
- 7 1. Upon at least thirty days advance written notice;
- 8 2. Upon the installation by the utility of any additional metering equipment reasonably
- 9 required to effect the change in billing and upon payment by the renewable energy
- facility of the reasonable cost of such metering equipment and its installation; and
- 11 3. Upon completion and approval by the utility of any alterations to the interconnection
- reasonably required to effect the change in billing and upon payment by the renewable
- energy facility of the reasonable cost for such alterations.
- 14 (c) Should a renewable energy facility elect to make simultaneous purchases and sales,
- purchases of electric service by the renewable energy facility from the interconnecting
- utility shall be billed at the retail rate schedule under which the renewable energy
- facility load would receive service as a non-generating customer of the utility; sales of
- 18 electricity delivered by the renewable energy facility to the purchasing utility shall be
- 19 purchased at the energy and capacity rates, where applicable, in accordance with Rules
- 20 25-17.0935 and 25-17.094, F.A.C.
- 21 (d) Should a renewable energy facility elect a net billing arrangement, the hourly energy
- and capacity sold and delivered to the purchasing utility shall be purchased at the
- energy and capacity rates, where applicable, in accordance with Rules 25-17.0935 and

1 25-17.094, F.A.C.; and, purchases from the interconnected utility shall be billed pursuant to the utility's applicable rate schedule, including but not limited to standby 2 3 service or supplemental service. 4 (4)(a) Payments for energy and capacity sold by a renewable energy facility shall be 5 rendered monthly by the purchasing utility and as promptly as possible, normally by the 6 twentieth business day following the day the meter is read. The kilowatt-hours sold by 7 the renewable energy facility, the applicable energy rate at which payments were made. 8 and the rate and amount of the applicable capacity payment shall accompany the 9 payment by the utility to the renewable energy facility. Payments that are not received 10 by the renewable energy facility by the thirtieth day following the day the meter is read 11 shall accrue interest at the prime rate plus five percent until the outstanding amount due, 12 including interest, is paid in full by the purchasing utility. 13 (b) Where simultaneous purchases and sales are made by a renewable energy facility 14 from and to a single utility, energy and capacity payments to the renewable energy 15 facility may, at the option of the renewable energy facility, be shown as a credit to the 16 renewable energy facility's bill; the kilowatt-hours produced by the renewable energy 17 facility, the energy rate at which payments were made, and the rate and amount of the 18 capacity payment shall accompany the bill to the renewable energy facility. A credit 19 shall not exceed the amount of the renewable energy facility's bill from the utility and 20 the excess, if any, shall be paid directly to the renewable energy facility in accordance 21 with this rule. 22 (5) Each utility shall keep separate accounts for sales to renewable energy and 23 purchases from renewable energy facilities.

1 25-17.0935 As-Available Energy.

2 (1) As-available energy is energy produced and sold by a renewable energy facility on 3 an hour-by-hour basis for which contractual commitments as to the quantity or time of delivery are not required. Each public utility shall purchase as-available energy from 4 5 any renewable energy facility. As-available energy shall be sold by a renewable 6 energy facility and purchased by a public utility pursuant to the terms and conditions of 7 a published tariff or a separately negotiated contract. As-available energy sold by a 8 renewable energy facility shall be purchased by the utility at a rate, in cents per 9 kilowatt-hour, not less than the utility's avoided energy cost. 10 (a) Tariff Rates: Each public utility shall publish a tariff for the purchase of as-available 11 energy from renewable energy facilities. Each utility's published tariff shall state that 12 the rate of payment for as-available energy is not less than the utility's avoided energy 13 cost as defined in subsection (2)(a) of this rule. 14 (b) Contract Rates: Each utility may enter into a separately negotiated contract for the 15 purchase of as-available energy from a renewable energy facility. Renewable energy 16 facilities desiring to negotiate a contract for the sale of firm capacity and energy with 17 terms different from those in a utility's standard offer contract may do so pursuant to 18 subsection 25-17.094(2), F.A.C. Contracts for the purchase of as-available energy 19 between a renewable energy facility and a utility shall be filed with the Commission 20 within 10 working days of execution. When a renewable energy facility and a utility 21 cannot agree on the terms and conditions of a negotiated contract, the renewable energy 22 facility may apply to the Commission for relief pursuant to Rule 25-17.095, F.A.C.

1 (2)(a) Avoided energy costs associated with as-available energy are defined as the 2 utility's highest cost generation, including generation for the sale of interchange energy, 3 or purchases from another utility that could be avoided by purchases from the 4 renewable energy facility. Avoided energy costs associated with as-available energy 5 shall be all of the costs the utility avoided or could have avoided by purchasing as-6 available energy from a renewable energy facility, and shall include but not be limited 7 to: (i) the utility's incremental fuel cost, including fuel storage, handling and 8 transportation; (ii) identifiable variable operating and maintenance expenses including 9 taxes and administration; and (iii) identifiable variable utility purchases. Avoided line 10 losses reflecting the voltage at which generation by the renewable energy facility is 11 received by the utility shall also be included in the determination of avoided energy 12 costs. Each utility shall calculate its avoided energy cost associated with as-available 13 energy deterministically, on an hour-by-hour basis, using the utility's actual avoided or 14 avoidable energy cost for the hour, as affected by the output of the renewable energy 15 facilities delivering energy to the utility's system in such hour. A megawatt block size 16 at no greater than the most recent available estimate of the combined average hourly 17 generation of all renewable energy facilities making energy sales at the utility's as-18 available energy rate to the utility shall be used to calculate the utility's hourly avoided 19 or avoidable energy costs associated with as-available energy. 20 (b) Each utility's tariff shall include a detailed description of the methodology to be 21 used in the calculation of avoided energy cost implementing subsection (2) of this rule. 22 Each utility's implementation methodology shall specify the method by which the

1 utility's incremental fuel and operating and maintenance costs and line losses are 2 determined. 3 (c) For renewable energy facilities with hourly recording meters, monthly payments for 4 as-available energy shall be made and shall be calculated based on the product of: (1) 5 the utility's actual avoided or avoidable energy rate for each hour during the month; and 6 (2) the quantity of energy sold by the renewable energy facility during that hour. (4) Each public utility shall file with the Commission by the twentieth business day of 7 8 the following month, a monthly report of its actual hourly avoided energy costs, the 9 average of its actual hourly avoided energy costs for the on-peak and off-peak periods 10 during the month, and the average of its actual hourly avoided energy costs for the 11 month with the Commission. A copy shall be furnished to any individual who requests 12 such information. 13 (5) Upon request by a renewable energy facility or any interested person, each public 14 utility shall provide within 30 days its most current projections of its generation mix, 15 fuel price by type of fuel, and at least a five-year projection of fuel forecasts to estimate 16 future as-available energy prices as well as any other information reasonably requested 17 by the renewable energy facility to project future avoided cost prices including, but not 18 limited to, a one hour advance forecast of hour-by-hour avoided energy costs. The 19 utility may charge an appropriate fee, not to exceed the actual cost of production and 20 copying, for providing such information. 21 (6) Utility payments for as-available energy made to renewable energy facilities shall be 22 recoverable by the utility through the Commission's periodic review of fuel and 23 purchased power.

25-17.094 Firm Capacity and Energy Contracts.

- 2 (1) Firm capacity and energy are capacity and energy produced and sold by a
- 3 renewable energy facility and purchased by a utility pursuant to a negotiated contract or
- 4 a standard offer contract subject to certain contractual provisions as to the quantity,
- 5 time, and reliability of delivery.(a) Within one working day of the execution of a
- 6 negotiated contract or the receipt of a signed standard offer contract, the utility shall
- 7 notify the Director of the Division of Economic Regulation and provide the amount of
- 8 capacity to be sold, the generating technology to be used, the renewable energy
- 9 resource, and the anticipated date of commencement of deliveries of capacity from the
- 10 renewable energy facility.
- 11 (b) Within 10 working days of the execution of a negotiated contract or receipt of a
- signed standard offer contract for the purchase of firm capacity and energy, the
- purchasing utility shall file with the Commission a copy of the signed contract and a
- summary of its terms and conditions. At a minimum, the summary shall include:
- 15 1. The name of the utility and the owner or operator of the renewable energy facility,
- who are parties to the contract;
- 2. The amount of capacity specified in the contract, the size of the facility, the type of
- facility, its location, and its interconnection and transmission requirements,
- 19 3. The amount of annual and on-peak and off-peak energy expected to be delivered to
- 20 | the utility; and,
- 4. The anticipated date the renewable energy facility will deliver firm energy and
- capacity to the grid.

1 (2) Negotiated Contracts. Utilities are encouraged to negotiate contracts with renewable 2 energy facilities for the purchase of firm capacity and energy in order to promote the use of renewable energy resources, diversify the State's fuel mix and reduce reliance on 3 4 electricity generated by use of natural gas Negotiated contracts will be considered 5 prudent for cost recovery purposes if it is demonstrated by the utility that the purchase 6 of firm capacity and energy from the renewable energy facility pursuant to the rates, 7 terms, and other conditions of the contract can reasonably be expected to promote the 8 use renewable energy resources, diversify the State's fuel mix and reduce reliance on 9 electricity generated by use of natural gas Negotiated contracts with renewable energy 10 facilities shall apply towards the State's twenty-five percent renewable energy 11 generating capacity mix requirement and the State's twenty-five percent renewable 12 energy generation fuel mix requirement upon the date the renewable energy facility 13 commences delivery of firm capacity to the utility. (3) Cost Recovery for Negotiated Contracts. In reviewing negotiated firm capacity and 14 energy contracts for the purpose of cost recovery, the Commission shall consider factors 15 16 relating to the contract including: (a) Whether firm capacity from the renewable energy facility will promote the use of 17 18 renewable energy resources, diversify the State's fuel mix and reduce reliance on 19 electricity generated by use of natural gas from a statewide perspective, (b) Whether the cumulative present worth of firm capacity payments made to the 20 renewable energy facility over the term of the contract are projected to be no greater 21 than the estimated cumulative present worth of the value of the revenue requirements 22 23 associated with the statewide avoided unit assumed to commence commercial operation

1 on the date on which the renewable energy facility elects to commence delivery of firm 2 capacity, calculated in accordance with subsection (5) and paragraph (6)(a) of this rule, 3 provided that the contract is designed to contribute towards promoting the use of 4 renewable energy resources, diversifying the State's fuel mix and reducing reliance on 5 electricity generated by use of natural gas. 6 (c) To the extent that annual firm capacity payments made to the renewable energy 7 facility in any year exceed that year's revenue requirements payments associated with 8 the statewide avoided unit, whether the contract contains provisions to ensure 9 repayment of such payments exceeding that year's revenue requirements payments 10 associated with the statewide avoided unit in the event that the renewable energy 11 facility, in the absence of a Force Majeure event, fails to deliver firm capacity pursuant 12 to the terms and conditions of the contract, provided, however, that provisions to ensure 13 repayment shall not be applicable to contracts for firm energy and capacity when the 14 renewable energy facility has selected levelized payments; and 15 (d) Whether the contract contains provisions to protect the purchasing utility's 16 ratepayers in the event the renewable energy facility fails to deliver firm capacity and 17 energy in the amount and times specified in the contract; provided, however, that this 18 factor shall not be applicable unless the capacity from the renewable energy facility is 19 necessary for the utility to meet its reserve requirements and shall not in any event be applicable to contracts with renewable energy facilities that produce electricity from 20 21 municipal solid waste, landfill gas, or waste heat.

- 1 (4) Standard Offer Contracts.
- 2 (a) Each public utility shall submit for Commission approval, and continuously
- 3 maintain, a tariff or tariffs that include a standard offer contract or contracts for the
- 4 purchase of firm capacity and energy from renewable energy facilities. In lieu of a
- 5 separately negotiated contract, standard offer contracts pursuant to this section are
- 6 available to renewable energy facilities.
- 7 (b) Immediately upon the effective date of this rule, each public utility shall submit and
- 8 continuously maintain standard offer contracts based the statewide avoided unit
- 9 assumed to commerce commercial operation on the date on which each renewable
- energy facility accepting such standard offer elects to commence delivery of firm
- capacity. By April 1 of each year, concurrent with filing a Ten Year Site Plan, each
- 12 utility shall develop: (i) the annual revenue requirement for the statewide avoided unit,
- over its twenty-five year useful life, on a total dollar and a dollar per KW basis, using
- its own financial and operating assumptions. This will be done for the current filing
- 15 year and for each of the following nine years covered in each utility's Ten Year Site
- 16 Plan horizon. Each utility shall include the assumptions used, including the cost of the
- statewide avoided unit, in such detail that the results can be readily verified. This
- information will form the basis for capacity payments to be made to renewable energy
- 19 facilities. If the cost of such statewide avoided units included in the Ten Year Site
- 20 Plans of the public utilities vary by five-percent or less, an arithmetic average of those
- costs shall be used; provided, however, that if the costs vary by more than five-percent,
- 22 the highest of the costs shall be used. It is anticipated that the statewide avoided unit
- 23 could change from year-to-year due to technological advancements, changes in

1 environmental standards or other such factors. To the extent practicable, the cost of the 2 statewide avoided unit shall be that forecasted and maintained by recognized industry 3 data bases, adjusted for factors applicable to the installation of such unit in Florida; (ii) the anticipated average heat rate of the statewide avoided unit in btu per kWh for each 4 5 year of the utility's Ten Year Site Plan horizon, taking into account performance 6 deterioration over time. If the anticipated heat rates of such statewide avoided units 7 include in the Ten Year Site Plans of the public utilities vary by five-percent or less, an 8 arithmetic average of those heat rates shall be used; provided, however, that if the heat 9 rates vary by more than five-percent, the highest of the heat rates shall be used; and, (iii) 10 the anticipated average fixed operation and maintenance expenses associated with the 11 statewide avoided unit for each year of each utility's Ten Year Site Plan horizon, where 12 such expenses are to include but not be limited to the costs of overhauls and capital 13 upgrades, plus all environmental costs including the cost of installing and maintaining 14 emission control systems, and the costs associated with operating such systems. If the 15 anticipated fixed operation and maintenance expenses associated with such statewide 16 avoided units include in the Ten Year Site Plans of the public utilities vary by five-17 percent or less, an arithmetic average of those expenses shall be used; provided, 18 however, that if such expenses vary by more than five-percent, the highest of the 19 anticipated expenses shall be used. 20 (c) Individual standard offer contracts shall remain open until the Commission 21 reasonably determines, based on record evidence in an appropriately noticed and conducted evidentiary proceeding, that the State's generating capacity mix, measured 22 by megawatts of installed generating capacity in the State, contains at least twenty-five 23

1 percent of renewable energy resources, and that the State's generation fuel mix as a 2 percentage of statewide annual megawatt hour production, includes at least twenty-five 3 percent from renewable energy resources. Before a contract is closed, the utility shall 4 file a petition for approval of a new contract. 5 (d) The rates, terms, and other conditions contained in each utility's standard offer 6 contract or contracts shall be based on the policy of Florida to promote the use of 7 renewable energy resources, diversify the State's fuel mix and reduce reliance on 8 electricity generated by use of natural gas. Rates for payment of capacity sold by a 9 renewable energy facility shall be specified in the contract for the duration of the 10 contract and shall be based on the avoided cost of the statewide avoided unit assumed to 11 commence commercial operation on the date on which the renewable energy facility 12 accepting such standard offer elects to commence delivery of firm capacity, and shall 13 include all fixed and variable costs that would have been incurred or booked by the 14 utility, had the utility financed, installed and operated such unit. In reviewing a utility's 15 standard offer contract or contracts, the Commission shall consider the criteria specified 16 in paragraphs (3)(a) through (3)(d) of this rule, as well as any other information 17 necessary to reasonably determine that the payments to the renewable energy facility 18 are no less than the avoided cost of the statewide avoided unit assumed to commence 19 commercial operation on the date on which each renewable energy facility accepting 20 such standard offer elects to commence delivery of firm capacity. Upon request of a 21 renewable energy facility, the Commission shall conduct an evidentiary hearing on the 22 accuracy or reasonableness of one or more utilities' proposed costs for the statewide 23 avoided unit, the anticipated heat rate and/or the anticipated fixed operation and

- 1 maintenance expenses, and the Commission may require the one or more utilities to
- 2 adjust payments to renewable energy facilities, both prospectively and retroactively,
- 3 consistent with its findings.
- 4 (e) Within 60 days of receipt of a signed standard offer contract, the utility shall accept
- 5 and sign the contract and return it within five days to the renewable energy facility.
- 6 (f) A standard offer contract which has been executed by a renewable energy facility
- 7 shall apply towards the State's twenty-five percent generating capacity mix requirement
- 8 and the State's twenty-five percent generation fuel mix requirement as set forth in 4.(c)
- 9 upon the date the renewable energy facility commences delivery of firm capacity to the
- 10 utility.
- 11 (g) Minimum Specifications. Each standard offer contract shall, at minimum, specify:
- 12 1. The installed cost of the statewide avoided unit:
- meet the State's twenty-five percent renewable energy generating capacity requirement;
- 14 2. The payment options available to the renewable energy facility including all
- 15 financial and economic assumptions necessary to calculate the firm capacity payments
- available under each payment option and an illustrative calculation of firm capacity
- payments for a ten year term contract commencing on January 1 of each year covered
- by the utility's most recent Ten Year Site Plan, with such illustrative calculation being
- 19 updated each year;
- 20 3. The amount of prior notice, which may not exceed 90 days, that the renewable energy
- 21 facility shall provide to the utility prior to commencing deliveries of firm capacity;
- 22 4. The period of time over which firm capacity shall be delivered from the renewable
- 23 energy facility to the utility. Firm capacity shall be delivered, at a minimum, for a

- sole and exclusive property of the renewable energy facility, unless the renewable
- 2 energy facility agrees in its sole and absolute discretion to sell such attributes to the
- 3 utility pursuant to a separate agreement.
- 4 9. The interconnection requirements for connecting and operating the renewable energy
- 5 facility in parallel with the utility's system, including applicable interconnection
- 6 standards, agreements and applications for large and small renewable energy facilities,
- 7 and the expected time required from application to completion of interconnection.
- 8 10. A description of the methodology to be applied for reducing the capacity payments
- 9 in the event the renewable energy facility fails to meet the capacity factor requirements
- applicable to the standard offer, provided however that such methodology shall reduce
- capacity payments proportionately and linearly to a minimum capacity factor of fifty-
- percent, below which such payments may be reduced to zero.
- 13 11. A description of the methodology to be applied for adjusting the initial amount of
- 14 firm capacity designated for sale by the renewable energy facility, subsequent to the
- initial start-up and testing of the facility, provided however, that such methodology shall
- allow, at a minimum, adjustment of the capacity by the renewable energy facility at
- anytime during the first year of operation and by up to 20% of the initial capacity.
- 18 (h) The utility may include the following provisions:
- 1. Performance security in the event the renewable energy facility receives payment in
- 20 excess of the revenue requirement associated with the statewide avoided unit and fails
- 21 to deliver firm capacity and energy in the amount and times specified in the contract.
- 22 provided, however, that such security shall not be required for any renewable energy
- facility that uses municipal solid waste, landfill gas or waste heat, or that did not receive

- 1 capacity payments in any year that are in excess of the revenue requirements associated
- with the statewide avoided unit.
- 3 (i) The utility may not include the following provisions:
- 4 1. Requirements for capacity testing of a renewable energy facility more frequently
- 5 than every other year.
- 6 2. Limitations on the period or duration of a Force Majeure.
- 7 3. Unreasonable restrictions on when a renewable energy facility may perform
- 8 maintenance on the facility.
- 9 4. Requirements that the renewable energy facility be dispatchable.
- 10 5. Unreasonable default or termination provisions that do not provide reasonably
- adequate time for a renewable energy facility to cure an unanticipated problem with the
- 12 facility.
- 6. Provisions that allow the utility to terminate an agreement due to default by the
- renewable energy facility on a non-material matter.
- 7. Language that allows the severability of contract provisions without opportunity for
- the renewable energy facility to terminate if material provisions are severed;
- 8. Utility created limitations on the sale or use of the electricity produced by the
- 18 renewable energy facility;
- 19 9. Unreasonably lengthy or expensive interconnection procedures and requirements.
- 20 (j) Firm Capacity Payment Options. Each standard offer contract shall also contain, at a
- 21 minimum, the following options for the payment of firm capacity delivered by the
- 22 renewable energy facility:

1 1. Revenue requirements capacity payments: Revenue requirements capacity 2 payments shall commence on the date of delivery of capacity and energy by the 3 renewable energy facility which shall, for purposes of calculating capacity payments, be 4 assumed to be the in-service date of the statewide avoided unit. Capacity payments 5 under this option shall consist of monthly payments decreasing annually of the avoided 6 capital and fixed operation and maintenance expense associated with the avoided unit 7 and shall be equal to the revenue requirements of the statewide avoided unit, calculated 8 in accordance with paragraph (6)(a) of this rule. 9 2. Levelized capacity payments. Levelized capacity payments shall commence on the 10 date of delivery of capacity and energy by the renewable energy facility which shall, for 11 purposes of calculating capacity payments, be assumed to be the in-service date of the 12 statewide avoided unit. The capital portion of capacity payments under this option shall 13 consist of equal monthly payments over the term of the contract, calculated in 14 conformance with paragraph (6)(c) of this rule. The fixed operation and maintenance 15 portion of capacity payments shall be equal to the revenue requirements of fixed 16 operation and maintenance expense associated with the statewide avoided unit 17 calculated in conformance with paragraph (6)(a) of this rule. Where levelized capacity 18 payments are elected, the cumulative present value of the levelized capacity payments 19 made to the renewable energy facility over the term of the contract shall not exceed the 20 cumulative present value of capacity payments which would have been made to the 21 renewable energy facility had such payments been made pursuant to subparagraph (4)(22 j)1. of this rule- revenue requirements capacity payments. 23 (5) Avoided Energy Payments for Standard Offer Contracts.

- 1 (a) For the purpose of this rule, avoided energy payments associated with firm energy
- 2 sold to a utility by a renewable energy facility pursuant to a utility's standard offer
- 3 contract shall commence with capacity payments to the renewable energy facility (b)
- 4 The energy payments associated with the statewide avoided unit and specified in the
- 5 utilities' standard offer contracts shall be defined as the cost of coal fuel, in cents per
- 6 kilowatt-hour, plus all delivery, storage and management costs, plus all variable
- 7 operation and maintenance costs, plus avoided line losses, for each monthly payment
- 8 period. The cost of coal fuel for each monthly payment period shall be defined as the
- 9 average market price of the appropriate quality of coal fuel delivered to each of the
- utilities subject to these rules, in cents per million Btu, associated with the statewide
- avoided unit multiplied by the average heat rate associated with the statewide avoided
- unit. The variable operating and maintenance costs shall be estimated based on a
- state-of-the-art, proven technology statewide avoided unit and shall include, but not be
- 14 limited to, costs associated with emission control devices and the cost of maintaining
- and administering such devices. (6) Calculation of standard offer contract firm capacity
- 16 payment options.
- 17 (a) Calculation of the revenue requirement capacity payment option.
- 18 The monthly revenue requirement payment is:
- 19 VAC _m = $1/12[RR_n + O_0(1+i)^n]$
- Where:
- VAC_m = the monthly capacity payment of avoided capacity, \$\footnote{KW}\text{month}, for each
- 22 month of year n

- $1 ext{RR}_n$ = the annual revenue requirement for the carrying charges for the statewide avoided
- 2 unit \$\footnote{KW}\/year for each year, n, of year of the life of the avoided unit as determined by
- 3 rule 25-17.094(4)(b)
- 4 O_0 = the total annual fixed O&M expense for the in-service year of the statewide
- 5 avoided unit
- 6 i = the annual escalation rate associated with the fixed O&M expense of the statewide
- 7 avoided unit
- 8 n =the year for which payment is being calculated
- 9 (b) Calculation of the levelized capacity payment option.
- The monthly levelized capacity payments shall be calculated as follows:

11
$$P_L = F/12 \times [r/\{1-(1+r)^{-L}\}] + O_n$$

- Where:
- 13 P_L = the monthly levelized capacity payment starting on the in-service date of the
- 14 statewide avoided unit
- 15 F = the net present value, in the in-service year of the statewide avoided unit of the
- 16 stream of
- annual revenue requirements for the carrying charges of the statewide avoided unit
- over L, the useful life of the statewide avoided unit
- r =annual discount rate, defined as the utility's incremental after tax cost of capital;
- 20 L = useful life of the statewide avoided unit
- O_n = monthly fixed operation and maintenance component of the capacity payment in
- 22 the year n, such that:

23
$$O_n = 1/12 \times O_0 (1+i)^n$$

- 1 Where:
- O_0 = the total annual fixed O&M expense for the in-service year of the statewide
- 3 avoided unit
- 4 i = the annual escalation rate associated with the fixed O&M expense of the statewide
- 5 avoided unit in year n, of the life of the unit
- 6 n = the year for which payment is being calculated
- 7 (7) Upon request by a renewable energy facility or any interested person, each utility
- 8 shall provide within 30 days its most current projections of its future generation mix
- 9 including type and timing of anticipated generation additions, and at least a 20-year
- projection of fuel forecasts, as well as any other information reasonably required by the
- renewable energy facility to project future avoided cost prices.
- 12 (8)(a) Firm energy and capacity payments made to a renewable energy facility pursuant
- to a separately negotiated contract shall be recoverable by a utility through the
- 14 Commission's periodic review of fuel and purchased power costs if the contract is
- 15 found to be in accordance with this rule.
- 16 (b) Upon execution of the contract by the renewable energy facility and delivery to the
- 17 utility, firm energy and capacity payments made to a renewable energy facility
- pursuant to a standard offer contract shall be recoverable by a utility through the
- 19 Commission's periodic review of fuel and purchased power costs.
- 20 (9) Changes or modifications to, or approvals of, standard offer contracts shall not be
- valid except pursuant to an order of the Commission following an appropriately noticed
- 22 evidentiary proceeding with opportunity for full and fair participation by any affected
- 23 party.

- 1 (10) Within 60 days of the effective date of this Part IV, the Commission shall initiate
- 2 and properly notice evidentiary proceedings for the purpose of developing and
- 3 approving a uniform standard offer contract for firm energy and capacity that must be
- 4 used by each public utility subject to this rule. The standard offer contracts of each
- 5 utility shall be identical, with the exception of minor differences relating to utility
- 6 specific provisions such as line losses, contact persons, and similar such matters. Once
- 7 approved, such standard offer contract may not be modified except upon order of the
- 8 Commission following further evidentiary proceedings before the Commission upon
- 9 petition of a renewable energy facility or a utility subject to these rules.

- 11 25-17.0945 Annual Florida Renewable Energy Report.
- 12 (1) By March, 1st of each year, the State's electric utilities shall jointly prepare and file
- an aggregated, comprehensive Florida Renewable Energy Report containing accurate,
- 14 complete and detailed information regarding existing and planned Florida renewable
- energy facilities for the immediately preceding calendar year.
- 16 (2) The information contained in the report shall include, but not be limited to:
- 17 (a) the current installed renewable energy generating capacity,
- 18 (b) the planned renewable energy generating capacity in mW,
- 19 (c) the annual renewable energy electrical production in mWhs,
- 20 (d) the number of on-going negotiations for the purchase of renewable energy,
- 21 (e) the number of failed negotiations for the purchase of renewable energy, and
- 22 (f) all other such information that may assist the Commission in determining
- 1. the rate of renewable energy development in the State,

- 1 2. the success of the Commission's rules in encouraging renewable energy, and
- 2 3. the extent to which the State is meeting the policy objectives articulated in Section
- 3 366.91, Florida Statutes.
- 4 (3) Not later than 60 days following submittal of the Florida Renewable Energy Report
- 5 by the electric utilities, the Commission shall conduct a docketed inquiry and
- 6 evidentiary hearing with respect to each annual Florida Renewable Energy Report and
- 7 issue an order declaring with specificity its findings, directions to the State's electric
- 8 utilities, and plans for future actions regarding renewable energy facilities.

9

10 25-17.095 Settlement of Disputes in Contract Negotiations.

- 11 (1) Public utilities shall negotiate in good faith for the purchase of capacity and energy
- from renewable energy facilities and interconnection with renewable energy facilities.
- 13 In the event that a utility and a renewable energy facility cannot agree on the rates,
- terms, and other conditions for the purchase of capacity and energy, or the cost, terms or
- other conditions for interconnection, the renewable energy facility may petition the
- 16 Commission for relief, and may request that the Commission order the utility to sign a
- 17 contract for the purchase of capacity and energy at rates, terms and conditions that are
- consistent with this rule or to interconnect with the renewable energy facility for a
- reasonable cost and in accord with other reasonable terms and conditions.
- 20 (2) To the extent possible, the Commission will dispose of an application for relief
- 21 pursuant to this rule within 90 days of the filing of a petition.
- 22 (3) If the renewable energy facility presents credible evidence that a utility has failed to
- 23 negotiate or deal in good faith with the renewable energy facility, the Commission shall

1 order the utility to immediately take action to remedy such failure, including actions 2 deemed necessary by the Commission to comply with this Part IV, and shall impose an 3 appropriate penalty on the utility including, but not limited to those approved by Section 4 350.127, F.S. 5 6 25-17.0955 Modification to Existing Contracts; When Approval Is Required. 7 (1) Each public utility shall notify the Commission of material modifications that have 8 been mutually agreed upon by the utility and the renewable energy facility who are 9 parties to an existing contract for the purchase of firm capacity and energy, the costs of 10 which are reviewed through the Commission's periodic review of fuel and purchased 11 power costs, within 30 days of the modification. At a minimum, the following 12 information shall be submitted: 13 (a) A description of the modification and a statement indicating why the utility believes 14 that the modification is a material change; 15 (b) A copy of the documents that evidence the modification; 16 (c) A detailed statement explaining whether the existing contract would be viable if no 17 modification is made; and, 18 (d) A statement indicating whether the date of delivery of capacity and energy by the 19 project will change because of the modification. 20 (2) In order for a utility to recover its costs, Commission approval is required for a 21 material modification. Such modifications may include changes to contractual terms

such as location, prime mover technology type, fuel type, or length of contract term.

- 1 (3) Commission approval is not required for any modifications explicitly contemplated
- 2 by the terms of the contract or for routine administrative changes.
- 3 (4) In cases where approval of a contract modification is required for utility cost
- 4 recovery, a utility shall file a petition for contract modification approval that provides
- 5 the information required by paragraphs (1)(a) through (d) above. The petition shall also
- 6 comply with the applicable Commission procedural requirements. When a petition is
- 7 filed, the petition shall serve as the notice required by subsection (1) above.

8

- 9 25-17.096 The Utility's Obligation to Sell.
- Each utility shall sell electricity to renewable energy facilities at rates which are just,
- reasonable, and non-discriminatory.

- 25-17.097 Periods During Which Purchases Are Not Required.
- Where purchases from a renewable energy facility will impair the utility's ability to
- give adequate service to the rest of its customers or, due to operational circumstances
- directly relating to reasonable minimum loading limitations of a utility unit, purchases
- from renewable energy facilities will cause the utility to incur excessive costs which the
- 18 utility would not incur if it did not make such purchases, the utility shall be temporarily
- relieved of its obligation under these rules to purchase electricity from a renewable
- 20 energy facility; provided, however, that the utility shall use best efforts to minimize the
- 21 time period during which it is temporarily relieved from such obligation. If practicable,
- 22 the utility shall notify the affected renewable energy facility or facilities prior to the
- 23 instance giving rise to those conditions. If prior notice is not practicable, the utility

shall notify the renewable energy facility or facilities as soon as practicable after the 1 2 fact. In either event the utility shall notify the Commission, and the Commission staff 3 shall, upon request of the affected renewable energy facility or facilities, investigate the 4 utility's claim. Nothing in this section shall operate, or be construed to operate, to 5 relieve the utility of its general obligation to purchase for a renewable energy facility 6 pursuant to Rule 25-17.094, F.A.C 7 8 25-17.098 Transmission for Self-service for Renewable Energy Facilities. 9 Public utilities are required to provide transmission and distribution services to enable a 10 retail customer to transmit electricity generated by a renewable energy facility owned or 11 operated by the customer at one location to the customer's facilities at another location 12 or locations when the provision of such service in not likely to adversely affect the 13 adequacy or reliability of electric service to all customers. 14 15 25-17.099 Transmission Service for Renewable Energy Facilities. 16 (1) Upon request by a renewable energy facility, each electric utility in Florida shall 17 provide, subject to the provisions of subsection (3) of this rule, transmission service to 18 wheel as-available energy or firm energy and capacity produced by a renewable energy 19 facility from the renewable energy facility to another electric utility. (2) The rates, terms, and conditions for transmission services as described in subsection 20 (1) and in Rule 25-17.098, F.A.C., which are provided by a public utility shall be those 21 approved by the Federal Energy Regulatory Commission. 22

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- 1 (3) A utility may deny, curtail, or discontinue transmission service to a renewable
- 2 energy facility on a non-discriminatory basis if the provision of such service would
- 3 adversely affect the safety, adequacy or reliability of electric service to the utility's
- 4 general body of retail and wholesale customers.