BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Proposed revisions to Rules)
25-17.082, 25-17.0825, 25-17.083,)
25-17.0831, 25-17.088, 25-17.0882)
25-17.091, and creation of Rules)
25-17.0832, 25-17.0833, 25-17.0834,)
and 25-17.089, F.A.C., Cogeneration)
Rules.

NOTICE OF ADOPTION OF RULES

Notice is hereby given that the Commission, pursuant to section 120.54, Florida Statute, has adopted the amendments to Rules 25-17.082, 25-17.0825, 25-17.083, 25-17.0831, 25-17.0832, 25-17.0833, 25-17.0834, 25-17.087, 25-17.088, 25-17.0882, 25-17.0883, 25-17.089, and 25-17.091, F.A.C., relating to cogeneration with changes.

The rule amendment was filed with the Secretary of State on October 5, 1990, and will be effective on October 25, 1990. A copy of the relevant portions of the certification filed with the Secretary of State is attached to this Notice.

In 1978, the Public Utility Regulatory Policies Act (PURPA) was enacted. Certain provisions of PURPA require utilities to offer to purchase electric energy from qualifying facilities at rates which are just and reasonable to the electric consumers of the utility and in the public interest and which do not discriminate against qualifying facilities. In 1980, the Federal Energy Regulatory Commission (FERC) issued its regulation implementing the PURPA. Tracking the law, the FERC regulations established an obligation on the part of utilities to purchase electricity from, and sell electricity to, cogenerators and small power producers. These facilities are referred to as qualifying facilities (QFs).

This Commission originally adopted its PURPA implementing rules in 1981. In 1982, the Commission opened Docket No. 820406-EU, and codified intervening policy decisions into the rules. These rules were adopted in 1983.

In 1989, the Florida Legislature conducted a Sunset review of Chapter 366, Florida Statutes. The Legislature added some new language to the statutes regarding cogeneration. A new section was

DOCUMENT NUMBER-DATE
09229 DCT 16 1990

offer contract, thus increasing capacity payments to qualifying facilities. The standard offer contract also contains an option for qualifying facilities to receive levelized capacity payments.

Electric utilities are required to provide transmission service to transmit energy and capacity produced by qualifying facilities to the purchasing utility. Also, utilities may be required to provide transmission and distribution services to allow customers to transmit power generated by the customer at one location to its facilities at another location.

In summary, major points adopted by the Commission are: the use of individual utility avoided units; a policy that rates are established for the duration of the contract so that there is rate certainty on capacity payments; negotiated contracts do not count against the subscription cap for the avoided unit designated by standard offer contracts; utilities are required to provide projection data to qualifying facilities within a specified time standard offer contracts are authorized for small period; qualifying facilities less than 75 MW or solid waste facilities; a more flexible planning hearing procedure is set forth; utilities are required to negotiate with qualifying facilities in good faith for the purchase of capacity and energy; the Commission may impose penalties if it finds the utility failed to negotiate in good faith; new provisions regarding interconnection and insurance are included; the self-service wheeling rule is revised; and it is clarified that the avoided unit in a standard offer contract could be part of a unit rather than a whole unit.

This docket is closed upon issuance of this notice.

By DIRECTION of the Florida Public Service Commission, this 16th day of OCTOBER , 1990 .

STEWE TRIBBLE Director

Division of Records & Reporting

(SEAL)

CBM

created, section 366.051, Florida Statutes. It states that electricity produced by cogeneration and small power production is of benefit to the public when included as part of the total energy supply of the electric grid of the State or consumed by a cogenerator or small power producer. It set forth provisions relating to the rates to be paid to cogenerators by public utilities and mandated the FPSC to authorize a rate equal to the purchasing utility's full avoided costs. The statute further provides that, if the qualifying facility provides adequate security, based on its financial stability, and no costs in excess of full avoided costs are likely to be incurred by the electric utility over the term during which electricity is to be provided, the FPSC must authorize the levelization of payments and the elimination of discounts due to risk factors. The statute also addresses self-service wheeling.

Thus, the Commission addressed revisions to the rules to reflect changes to Chapter 366, Florida Statutes. In addition, the FPSC aimed to correct some administrative and technical problems that have arisen since the rules were adopted in 1983. Finally, the rule revisions were needed to reflect case law.

Rulemaking

The Commission, after a three-day rulemaking hearing and numerous comment cycles, voted September 18, 1990, to adopt a new package of cogeneration rules.

These rules reflect the Commission's policy to encourage cogeneration and small power production to the extent that it does not result in higher cost electric service to the ratepayers and citizens of the State of Florida. The rules establish a statewide wholesale market for the energy and capacity produced by qualifying facilities in order to help defer or avoid additional generating capacity construction by Florida's electric utilities and to economically conserve expensive fuels.

Public utilities are required to negotiate with qualifying cogenerators and small power producers for the purchase of capacity and energy. The rules require public utilities to negotiate with qualifying facilities in good faith and provide a mechanism for relief should a utility fail to negotiate in good faith.

To further encourage the development of qualifying facilities, public utilities are required to file tariffs for the purchase of noncontractual energy from all qualifying facilities and standard offer contracts for the purchase of firm capacity and energy for solid waste facilities and qualifying facilities under 75 megawatts. The risk factor has been removed from the standard

offer contract, thus increasing capacity payments to qualifying facilities. The standard offer contract also contains an option for qualifying facilities to receive levelized capacity payments.

Electric utilities are required to provide transmission service to transmit energy and capacity produced by qualifying facilities to the purchasing utility. Also, utilities may be required to provide transmission and distribution services to allow customers to transmit power generated by the customer at one location to its facilities at another location.

In summary, major points adopted by the Commission are: the use of individual utility avoided units; a policy that rates are established for the duration of the contract so that there is rate certainty on capacity payments; negotiated contracts do not count against the subscription cap for the avoided unit designated by standard offer contracts; utilities are required to provide projection data to qualifying facilities within a specified time standard offer contracts are authorized period; qualifying facilities less than 75 MW or solid waste facilities; a more flexible planning hearing procedure is set forth; utilities are required to negotiate with qualifying facilities in good faith for the purchase of capacity and energy; the Commission may impose penalties if it finds the utility failed to negotiate in good faith; new provisions regarding interconnection and insurance are included; the self-service wheeling rule is revised; and it is clarified that the avoided unit in a standard offer contract could be part of a unit rather than a whole unit.

This docket is closed upon issuance of this notice.

By DIRECTION of the Florida Public Service Commission, this 16th day of OCTOBER , 1990 .

STEVE TRIBBLE Director

Division of Records & Reporting

(SEAL)

CBM

CERTIFICATION OF

PUBLIC SERVICE COMMISSION ADMINISTRATIVE RULES

FILED WITH THE

DEPARTMENT OF STATE

I do hereby certify:

- /x/ (1) The time limitations prescribed by paragraph 120.54(11)(a), F.S., have been complied with; and
- /x/ (2) There is no administrative determination under section 120.54(4), F.S., pending on any rule covered, by this certification; and
- /x/ (3) All rules covered by this certification are filed within the prescribed time limitations of paragraph 120.54(11)(b), F.S. They are filed not less than 28 days after the notice required by subsection 120.54(1), F.S., and;
- // (a) And are filed not more than 90 days after the notice; or
- (b) Are filed not more than 90 days after the notice not including days an administrative determination was pending; or
- /x/ (c) Are filed within 21 days after the adjournment of the final public hearing on the rule; or
- . _ / (d) Are filed within 21 days after the date of receipt of all material authorized to be submitted at the hearing; or
- /_/ (e) Are filed within 21 days after the date the transcript was received by this agency.

Attached are the original and two copies of each rule covered by this certification. The rules are hereby adopted by the

of square, which is self-markly

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 5

undersigned agency by and upon their filing with the Department of State.

Rule No.	Specific Rulemaking Authority	Law Being Implemented, Interpreted or Made Specific
25-17.082	366.051, 350.127(2), F.S.	366.051, F.S.
25-17.0825	366.051, 350.127(2), F.S.	366.051, F.S.
5-17.083	366.04(1), 366.05(1), 366.05(9), 350.127(2), F.S.	366.05(9), F.S.
25-17.0831	366.05(9), 350.127(2), F.S.	366.05(9), 3.8.
25-17.0832	350.127, 366.04(1), 366.051, 366.05(8), F.S.	366.051, 403.503, F.S.
25-17.0833	366.05(8), 366.051, 350.127(2), F.S.	366.051, F.S.
25-17.0834	366.051, 350.127(2), F.S.	366.051, F.S.
25-17.087	366.051, 350.127(2), F.S.	366.051, F.S.
25-17.088	350.127(2), 366.051, F.S.	366.051, 366.04(3), 366.055(3),F.S.
25-17.0882	350.127(2), 366.05(1), F.S.	366.05(9), 366.04(3), 366.055(3), F.S.
25-17.0883	366.051, 350.127(2), F.S.	366.051, F.S.
25-17.089	366.051, 350.127(2), F.S.	366.051, 366.055(3), F.S.
25-17.091	350.127(2), 377.709(5), F.S.	366.051, 366.055(3), 366.709, F.S.

Under the provision of paragraph 120.54(12)(a), F.S., the rules take effect 20 days from the date filed with the Department of State or a later date as set out below:

Effective:

(month)

Director, Division of Records & Reporting Title

Number of Pages Certified

A PARTICLE CONTRACTOR AND A STATE OF THE STA

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 7

5

5

7

1

2

3

4

8

10

11

13

14

16 17

19

-21

22

23

24

25-17.082 The Utility's Obligation to Purchase; Customer's Selection of Billing Method.

- (1) Upon compliance by the qualifying facility with Rule 25-17.087, each utility shall purchase electricity produced and sold by qualifying facilities at rates which have been agreed upon by the utility and qualifying facility or at the utility's published tariff. Each utility shall file a tariff or tariffs and a standard offer contract or contracts for the purchase of energy and capacity from qualifying facilities which reflects the provisions set forth in these rules.
- (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 customers, each Back tariff and standard offer contract shall specify the following metering requirements for billing purposes:
- (a) Hourly recording meters shall be required for qualifying facilities with an installed capacity of 100 kilowatts or more.
- (b) For qualifying facilities with an installed capacity of less than 100 kilowatts, at the option of the qualifying facility, either hourly recording meters, dual kilowatt-hour register time-of-day meters, or standard kilowatt-hour meters shall be installed. Unless special circumstances warrant, meters shall be read at monthly intervals on the approximate corresponding day of each meter reading period.
 - (3)(a) A qualifying facility, upon entering into a contract

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 8

for the sale of firm capacity and energy or prior to delivery of as-available energy to a utility, shall may elect to make either simultaneous purchases from the interconnecting utility and sales to the purchasing utility or net sales to the purchasing utility. Once made, the selection of a billing methodology may only be changed:

- 1. when a qualifying facility selling as-available energy enters into a negotiated contract or standard offer contract for the sale of firm capacity and energy; or
- when a firm capacity and energy contract expires or is lawfully terminated by either the qualifying facility or the purchasing utility; or
- 3. when the qualifying facility is selling as-available energy and has not changed billing methods within the last twelve months; and
- 4. when the election to change billing methods will not contravene the provisions of Rule 25-17.0832 or any contract between the qualifying facility and the utility.

Pirm capacity and energy contracts in effect prior to the effective date of this rule shall remain unchanged. at-the-eption of-the-qualifying-facilityy-subject-to-the-following-provisions:

(b) If a qualifying facility elects to change billing methods in accordance with this rule, such change shall be subject to the

SERVICE SERVICE SERVICE SERVICE

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 9

following provisions:

2

3

4

5

6

7

8

11

12

1.3

14

17

18

19

20

21

22

23

{a}--not-more-frequently-than-once-every-tweive-months;

{b}--to-coincide-with-the-next-Fuel-and-Purchased-Power-Gost
Recovery-Factor-billing-period;
. . .

- (e) upon at least thirty days advance written notice;
- 2. (d) upon the installation by the utility of any additional metering equipment reasonably required to effect the change in billing and upon payment by the qualifying facility for such metering equipment and its installation; and
- 3. (e) 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 qualifying facility for such alterations. 7-and

 (f)--where-the-election-to-change-billing-methods will-not-contravene-the-provisions-of-the-tariff under-which-the-qualifying-facility-receives arrice-from-the-utility-or-any-other-previously agreed-upon-contractual-provision-between-the qualifying-facility-and-the-utility-
- (c) Should a qualifying facility elect to make simultaneous purchases and sales, purchases of electric service by the qualifying facility from the <u>interconnecting</u> utility shall be

.21

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 10

billed at the retail rate schedule under which the qualifying facility load would receive service as a non-generating customer of the utility; sales of electricity delivered by the qualifying facility to the <u>purchasing</u> utility shall be purchased at the utility's avoided energy and capacity rates, where applicable, in accordance with Rules 25-17.0825 and 25-17.0832 25-17.083.

(d) Should a qualifying facility elect a net billing arrangement to-make-net-sales, the hourly net energy and capacity sales delivered to the purchasing utility shall be purchased at the utility's avoided energy and capacity rates, where applicable, in accordance with Rules Rule 25-17.0825 and 25-17.0832; 25-17.0837--Per-these-hours-which-a-qualifying-facility-is-a-net purchases, purchases from the interconnecting utility shall be billed pursuant to at the utility's applicable standby service or supplemental service retail rate schedules schedule-under which-the-qualifying-facility-would-receive-service-as-a non-generating-customer-of-the-utility.

(4)(a) Payments for energy and capacity sold by a qualifying facility shall be rendered monthly by the <u>purchasing</u> utility and as promptly as possible, normally by the twentieth business day following the day the meter is read. The kilowatt-hours sold by the qualifying facility, the applicable avoided energy rate at which payments were made, and the rate and amount of the applicable capacity payment shall accompany the payment by the utility to the qualifying facility.

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 11

- (b) Where simultaneous purchases and sales are made by a qualifying facility from and to a single utility, avoided energy and capacity payments to the qualifying facility may, at the option of the qualifying facility, be shown as a credit to the qualifying facility's bill; the kilowatt-hours produced by the qualifying facility, the avoided energy rate at which payments were made, and the rate and amount of the capacity payment shall accompany the bill to the qualifying facility. A credit shall not exceed the amount of the qualifying facility's bill from the utility and the excess, if any, shall be paid directly to the qualifying facility in accordance with this rule.
- (5) A utility may require a security deposit from each interconnected qualifying facility in accordance with Rule 25-6.097 for the qualifying facility's purchase of power from the utility. Each utility's tariff shall contain specific criteria for determining the applicability and amount of a deposit from an interconnected a qualifying facility consistent with projected net cash flow on a monthly basis.
- (6) Each The utility shall keep separate accounts for sales to qualifying facilities and purchases from qualifying facilities. Specific Authority: 366.051, 350.127(2), F.S.

Law Implemented: 366.051, P.S.

History: New 5/13/81, Amended 9/4/83, formerly 25-17.82,

Amended ______.

24

1 |

2

3

4

5

6

7

8

9

11

12

13

14

15

16

17

18

19

20

.21

22

23

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 12

25-17.0825 As-Available Energy.

(1) As-available energy is energy produced and sold by a qualifying facility on an hour-by-hour basis for which contractual commitments as to the quantity, time, or reliability of delivery are not required. Each utility shall purchase as-available energy from any qualifying facility lecated-within-its-service territory--Bach-utility-may-negotiate-a-centract-for-the purchase-of-as-available-energy-from-any-qualifying-facility lecated-outside-its-service-territory. As-available energy shall be sold by a qualifying facility and purchased by a utility pursuant to the terms and conditions of a published tariff or a separately negotiated contract.

As-available energy sold by a qualifying facility shall be purchased by the utility at a rate, in cents per kilowatt-hour, not to exceed the utility's avoided energy cost. Because of the lack of assurances as to the quantity, time, or reliability of delivery of as-available energy, no capacity payments shall be made to a qualifying facility for the delivery of as-available energy.

(a) Tariff Rates: Each utility shall publish a tariff for the purchase of as-available energy from qualifying facilities. Each utility's published tariff shall state that the rate of payment for as-available energy is the utility's avoided energy cost as defined in <u>subsection Section</u> (2) of this rule, less the additional costs directly attributable to the purchase of such

water of the Control of Strate, by

CONTRACTOR PROPERTY.

and Heapti ... Subsect 1

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 13

2

3

5

6

8

9

10

11

12

13

14

15

17

18

20

21

22

23

24

energy from a qualifying facility. The additional costs directly associated with the purchase of as-available energy from qualifying facilities shall be specifically identified in the utility's tariff. $= \frac{1}{2} \cdot \frac{1}{2} \cdot$

- (b) Contract Rates: Each utility may enter into a separately negotiated contract for the purchase of as-available energy from a qualifying facility. All contracts for the purchase of as-available energy between a qualifying facility and a utility shall be filed with the Commission within 10 working days of their signing. Those qualifying facilities wishing 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 Rule 25-17.0832(2). Where parties cannot agree on the terms and conditions of a negotiated contract, either party may apply to the Commission for relief pursuant to Rule 25-17.0834.
- (2)(a) Avoided energy costs associated with as available energy are defined as ★

(a)--The-utility-a-actual-incremental-energy-cost-for-those hours-during-which-no-economy-energy-purchases-or-sales-take place;-or

... (b)--The-utility-s-actual-incremental-energy-cost-after-the
purchase-of-economy-energyy-for-those-hours-during-which-economy
purchases-take-placey-of

(e)--The the utility's actual avoided incremental energy cost before the sale of interchange economy energy,-for-those-

3

4 5

6

7

8

9

11

12

13

14

16

17

18

20

21

22

23

24

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 14

hours-during-which-economy-sales-take-place. Avoided energy costs associated with as-available energy shall be all costs the utility avoided due to the purchase of as-available energy, including include the utility's incremental fuel, and identifiable variable operating and maintenance expense, and identifiable variable utility power purchases. Demonstrable utility administrative costs required to calculate avoided energy costs may be deducted from avoided energy payments. Avoided line losses reflecting the voltage at which generation by the qualifying 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, after accounting for interchange sales economy-transactions which have taken place, using the utility's actual avoided incremental energy cost curve for the hour, as affected by firm-power purchases-and-sales-when-applicable-and the output of the qualifying facilities connected to the utility's system. A megawatt block size at least equal to the most recent available estimate of the combined average hourly generation of all qualifying facilities making as-available energy sales based on the utility's as-available energy rate and-connected to the utility utility's system shall be used to calculate the utility's hourly avoided energy costs associated with as-available energy. For the purpose of this subsection, interchange sales are

Martine with a

#MATERIAL COLUMN TO SERVE

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 15

2

3

4

6

7 8

9

10

11

13

15

16

17

19

20

21

22

23

inter-utility sales which are provided at the option of the selling utility exclusive of central pool dispatch transactions.

- (b) Each utility's tariff shall include a description

 utility-shall-submit-fer-Gemmission-approval-details of the

 methodology to be used in the calculation of avoided energy cost

 implementing subsection Section (2) of this Rule. Each utility's

 implementation methodology shall specify the method by which the

 utility's incremental fuel and operating and maintenance costs and

 line losses are determined.
- (3)(a) For qualifying facilities with hourly recording meters, monthly payments for as-available energy shall be made and shall be calculated based on the product of: (1) the utility's actual avoided energy rate for each hour during the month; and (2) the quantity of energy sold by the qualifying facility during that hour.
- (b) For qualifying facilities with dual kilowatt-hour register time-of-day meters, monthly payments for as-available energy shall be calculated based on the average of the utility's actual hourly avoided energy rate for the on-peak and off-peak periods during the month.
- (c) For qualifying facilities with standard kilowatt-hour meters, monthly payments for as-available energy shall be calculated based on the average of the utility's actual hourly avoided energy rate for the off-peak periods during the month.
 - (4) Each utility shall file with the Commission a-menthly-

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 16

monthly report of their actual hourly avoided energy costs, the average of their actual hourly avoided energy costs for the on-peak and off-peak periods during the month, and the average of their actual hourly avoided energy costs for the commission. A copy shall be furnished to any individual who requests such information.

- person, each utility shall provide within 30 days its most current projections of its generation mix, fuel price by type of fuel, and at least a five year projection of fuel forecasts to estimate future as-available energy prices as well as any other information reasonably required by the qualifying facility to project future avoided cost prices including, but not limited to, a 24 hour advance forecast of hour-by-hour avoided energy costs. The utility may charge an appropriate fee, not to exceed the actual cost of production and copying, for providing such information.

 Bach-utility-tariff-shall-includey-at-minimumy-a-ten-year-telling estimate-of-the-average-of-the-utility-annual-generation-mix and-fuel-price-by-type-of-fuely--These-estimates-shall-be-updated annually.
- (6) Utility payments for as-available energy made to qualifying facilities pursuant to the utility's tariff shall be receiverable by the utility through the Commission's periodic review of fuel and purchased power Puel-and-Purchased-Power-Cost-

1

2

4 5

6

7

8

9

10

11

12

Recovery-Glause. Utility payments for as-available energy made to qualifying facilities pursuant to a separately negotiated contract shall be recoverable by the utility through the Commission's periodic review of fuel and purchased power costs Fuel-and-Purchased-Power-Gost-Recovery-Glause if the payments are not reasonably projected to result in higher cost electric service to the utility's general body of ratepayers or adversely affect the adequacy or reliability of electric service to all customers in-the-best-interest-of-the-utility's-ratepayers. Specific Authority: 366.051, 350.127(2), F.S. Law Implemented: 366.051, F.S. History: New 9/4/83, formerly 25-17.82, Amended

25-17.083 Firm Energy and Capacity. (1) Firm energy and capacity are energy and capacity produced and sold by a qualifying facility and purchased by a utility pursuant to a negotiated contract or the utility's standard contract of er and subject to certain contractual provisions as to the quantity, lime, and reliability of delivery. 7 (2) Each utility may negotiate a contract for the purchase of firm energy and capacity from any qualifying facility. Generally, such contracts will be considered prudent for cost recovery 10 purposes if the following criteria are met: 11 (a) it is demonstrated that the purchase of firm energy and 12 capacity from the qualifying facility pursuant to the terms and conditions of the contract can resonably be expected to result in the economic deferral or avoidance of additional capacity 15 construction by Florida utilities from a statewide perspective; and 16 (b) the cumulative present worth of irm energy and capacity 17 payments made to the qualifying facility over the term of the 18 contract are to be no greater than the cumulative present worth of the value of a year-by-year deferral of the statewide avoided unit 19 over the term of the contract; and 21 (c) to the extent that the annual firm energy and capacity payments made to the qualifying facility in any year exceld that 22 23 year's annual value of deferring the statewide avoided unit the 24 | centract contains adequate provisions to protect the utility's 25 ratepayers in the event that the qualifying facility fails to

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

LEBOS SE ENTRE PER SERVICIO DE LA CONTRA DELIGIA DE LA CONTRA DELIGIA DE LA CONTRA DELA DE LA CONTRA DE LA CO

lerform pursuant to the terms and conditions of the contract.

Such provisions may be in the form of a requirement for the

repayment of firm energy and capacity payments made by the

utility, a surety bond or equivalent assurance of performance of

the contract by the qualifying facility, or payment of less than

full avoided firm energy and capacity costs.

- (3) Each utility shall submit a tariff containing a standard offer for the purchase of firm energy and capacity from any qualifying facility in the State for approval by the Commission.

 In lieu of a separately egotiated contract, a qualifying facility may accept any utility's standard offer.
- Each utility's standard offer shall contain, at a minimum, the following criteria and rates of payment:
- (a) A qualifying facility shall be eligible to receive firm
 energy and capacity payments pursuant to a utility's standard
 offer if the qualifying facility is willing to enter into a
 contract for the delivery of firm energy and capacity on the
 following terms and conditions at least two years before the
 anticipated in-service date of the statewide avoided unit:
 - (i) the qualifying facility will agree to deliver energy and capacity commencing no later than the anticipated in-service date of the statewide avoided unit and continuing for a period of at least ten years after the anticipated in-service date of the statewide avoided unit; and
 - (ii) the qualifying facility will agree to maintain a seven

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

7

13

20

21

Mercent capacity factor for energy delivered by the qualifying facility on a 12 month rolling average basis. For the purpose of 3 this absection, the capacity factor of the qualifying facility shall be defined as: the total kilowatt-hours of energy delivered to the utinty during the preceding 12 months, divided by the (1) the maximum kilowatt capacity contractually product of: committed for delivery to the utility by the qualifying facility during the preceding 12 months and (2) the sum of the total hours during the preceding & months less those hours during which the 10 utility was unable to accept energy and capacity deliveries from 11 the qualifying facility; and 12 (iii) additional criteria reasonably required by the utility planning the statewide avoided unit, related to the delivery of 14 firm energy and capacity by the qualifying facility during that 15 utility's daily and seasonal peak perhods. 16 (b) Upon approval by the Commission each utility's standard 17 offer shall provide the following payment options to a qualifying facility for the delivery of firm energy and apacity: 19 (i) Capacity payments shall be equal to the value of a 20 year-by-year deferral of the statewide avoided unide calculated in 21 accordance with Section (7) of this rule; energy payments shall be 22 calculated in accordance with Section (6) of this rule.

> CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

shall not commence until the anticipated in-service date of the 25 statewide avoided unit. At the option of the qualifying facili

Normally, payments for firm capacity pursuant to this aption

23

16-26-84

(320)

中的特別

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 21

1 Nowever, a utility may begin making early capacity payments consisting of the avoided capital cost component of the value of a year-Ny-year deferral of the statewide avoided unit starting as early as seven years prior to the anticipated in-service date of the statewide avoided unit. The avoided operating and maintenance expense component of the value of a year-by-year deferral of the statewide avoided unit shall be included in the capacity payment made to the qualifying facility starting with the anticipated in-service date of the statewide avoided unit. Where such early capacity payments are make, the cumulative present value of the avoided capital cost component of capacity payments made to the qualifying facility over the erm of the contract shall not exceed the cumulative present value of the avoided capital cost component of capacity payments which would have been made to the qualifying facility had such payments commenced with the in-service date of the statewide avoided unit. For the purpose of this option, the avoided capital cost component of capacity ayments to be made to a qualifying facility starting as early as seven years prior to the anticipated in-service date of the statewide voided unit shall be paid monthly and shall be calculated as follows: A (1+ip)n; for n = 0, nAm 12 Where: Am monthly avoided capital cost component of capacity payments to be made to the qualifying facility starting as early as seven years prid

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

11

12

14

15

16

17

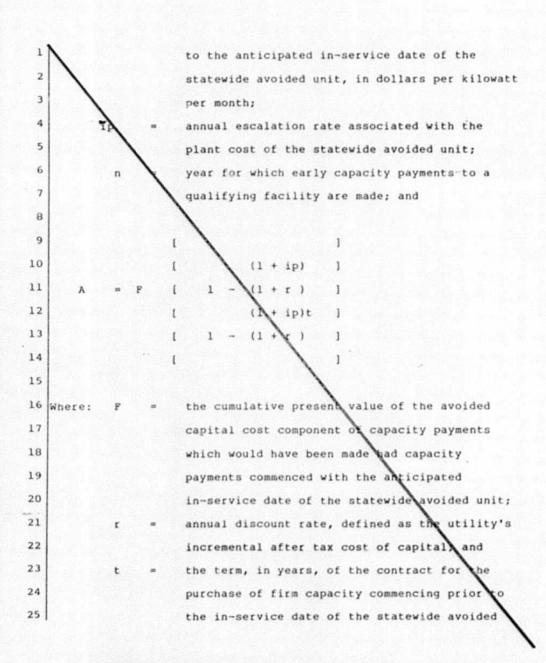
18

21

22

23

24



CODING: Words underlined are additions; words in struck-through type are deletions from existing law. 明日的品位·新设备×

2

3

13 14

15 16

17

19

20 21

unit.

(ii) Capacity payments shall be equal to the average embedded book cost of fossil steam production plant of the utility planning the statewide avoided unit; energy payments shall be calculated in ccordance with Section (6) of this rule.

Normally, payments for firm capacity pursuant to this option shall not commence until the anticipated in-service date of the statewide avoided unit At the option of the qualifying facility, however, a utility may begin making capacity payments pursuant to this option as early as seven years prior to the anticipated in-service date of the statewide unit.

- (c) If capacity payments are to be made prior to the anticipated in-service date of the statewide avoided unit, the qualifying facility shall be required to provide a surety bond or equivalent assurance of repayment of the early capacity payments if the qualifying facility is unable to meet the terms and conditions of the contract.
- (d) Each utility's standard offer shall be revised annually to reflect changes in the designation of the statewide avoided unit, its timing, and its cost; and changes in the average 22 embedded book cost of fossil steam production plant. However, the statewide avoided unit and the timing of the statewide avoided unit upon which the value of deferral and contractual rates of 25 payment for capacity pursuant to Section (3)(b)(i) of this rule

are calculated shall remain fixed for a qualifying facility upon optance of the value of deferral option of the utility's standard offer. At the choice of the qualifying facility, contract rates of payment for capacity sold by a qualifying facility pursuant to Section (3)(b)(i) of this rule may be revised 6 annually to reflect changes in the value of deferral or may, at the time a qualitying facility accepts this option of the utility's standard offer, be specified for the duration of the contract to reflect expected changes in the value of deferral. 10 Once made, the qualifying facility's election of a specified or 11 annually revised rate of payment for capacity sold pursuant to 12 Section (3)(b)(i) of this rule may not be changed for the duration of the contract. Contract rates of payment for capacity sold by a 14 qualifying facility pursuant to Section (3)(b)(ii), of this rule 15 shall be revised annually. 16 (4) The Commission shall initiate proceedings on an annual 17 basis to determine the statewide avoided unit for the purpose of 18 determining the need for, timing, and pricing of firm energy and 19 capacity purchases from qualifying facilities. No connection with 20 these proceedings: 21 (a) Each utility in the State of Plorida shall summit an 22 analysis to the Commission identifying its next planned 23 uncertified generating unit to be added to its system pursuant to 24 its most current long range generation expansion plan. The 25 analysis shall include an estimate of the size, timing, cost, and

perating characteristics of the utility's next planned
uncertified generating unit, and include all assumptions necessary
to make these estimations. The analysis shall exclude from
consideration the anticipated kilowatt and kilowatt-hour
contribution to the utility's system from existing or proposed
qualifying facilities which are not under contract for the
delivery of firm energy and capacity.

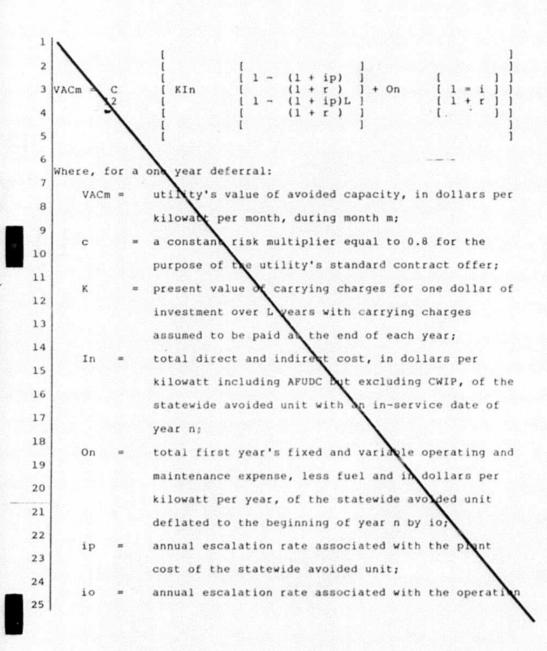
- (b) Each utility in the State which plans to construct or is constructing a proposed certified generating unit shall submit an analysis identifying these units. The analysis shall include an estimation of the construction schedule, anticipated in-service date, cost, and operating characteristics of the proposed certified unit and include a detailed time-series estimation of the cost of cancelling construction of the unit at any time up to its in-service date.
- 16 (5) To the extent that firm energy and capacity purchased from a qualifying facility by a utility pursuant to the utility's 17 standard offer is not needed by the purchasing utility or that the 18 avoided energy and capacity cost associated with the statewide 19 avoided unit exceed the purchasing utility's avoided energy and 21 capacity cost, these rules shall be construed to encourage the 22 purchasing utility to sell all or part of the energy and capacity purchased from a qualifying facility to the utility planking the statewide avoided unit. The utility which is planning the' 25 designated statewide avoided unit is expected to purchase such

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

13

14

1 nergy and capacity at the original purchasing utility's cost. (6) For the purpose of this rule, avoided energy costs associated with firm energy sold to a utility by a qualifying facility pursuant to the utility's standard offer shall be defined as the lesser of the as-available avoided energy cost of the utility planning the statewide avoided unit and the statewide avoided unit energy cost, commencing with the anticipated in-service date of the statewide avoided unit and continuing 9 throughout the term of the contract. 10 The statewide avoided unit energy cost shall be defined as the cost of fuel, in cents per ilowatt hour, which would have been 11 12 burned at the statewide avoided unit and shall be calculated as 13 follows: The average market price of fue, in cents per million Btu, 14 15 associated with the statewide avoided unit multiplied by the 16 average heat rate associated with the statewide avoided unit. 17 Before the anticipated in-service date of the statewide avoided unit, a qualifying facility who has accepted a utility's 18 19 standard offer may sell electricity pursuant to hule 25-17.0825. 20 (7) For the purpose of this rule, avoided capacity costs in 21 dollars per kilowatt per month, associated with firm appacity sold 22 to a utility by a qualifying facility pursuant to the ut lity's 23 standard offer shall be defined as the value of a year-by-year 24 deferral of the statewide avoided unit and shall be calculated 25 follows:



and maintenance expense of the statewide avoided 1 2 unit: 3 annual discount rate, defined as the utility's 4 incremental after tax cost of capital; 5 expected life of the statewide avoided unit; and 6 gear for which the statewide avoided unit is 7 deterred starting with its original anticipated 8 in-service date and ending with the termination of the contract for the purchase of firm energy and 9 10 capacity. 11 (8) Firm energy and capacity payments made to qualifying facilities pursuant to a utiliay's standard offer shall be 12 13 recoverable by a utility through the Fuel and Purchased Power Cost Recovery Clause. Firm energy and capacity payments made to a qualifying facility pursuant to a separately negotiated contract shall be recoverable by a utility through the Fuel and Purchased 16 17 Power Cost Recovery Clause if the contract I found to be prudent 18 in accordance with Section (2) of this rule. Specific Authority: 366.04(1), 366.05(1), 366.05(0), 350.127(2), 19 20 F.S. 21 Law Implemented: 366.05(9), F.S. 22 History: New 9/4/83, formerly 25-17.83, Repealed 23 24 25

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

THE PERSON NAMED IN CO.

```
1 1
        25-17.0831 Contracts.
 2
        A utility and a qualifying facility may enter into a contract
 3
   which varies from the terms and conditions specified in these
           All contracts between a utility and qualifying facility
   shall be filed with the Commission. In the event that a utility
   and a qualifying facility cannot agree on terms and conditions for
 7
   the purchase of energy or capacity, either party may apply to the
   Commission for relief, and the Commission shall grant relief in
   accordance with Rules, 25-17.080 through 25-17.088.
   Specific Authority: 366.05(9), 350.127(2), F.S.
   Law Implemented: 366.05(9), F.S.
12
   History: New 5/13/81, amended 9/4/83, formerly 25-17.831, Repealed
13
14
15
16
17
18
19
20
21
22
23
24
25
```

2

4

5

6

7

8

9

11

12

14

15

17

18

19

20

22

23

24

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 30

25-17.0832 Firm Capacity and Energy Contracts

- (1) Firm capacity and energy are capacity and energy produced and sold by a qualifying facility and purchased by a utility pursuant to a negotiated contract or a standard offer contract subject to certain contractual provisions as to the quantity, time and reliability of delivery.
- (a) Within one working day of the execution of a negotiated contract or the receipt of a signed standard offer contract, the utility shall notify the Director of the Division of Electric and Gas and provide the amount of committed capacity and the avoided unit, if any, to which the contract should be applied.
- (b) Within 10 working days of the execution of a negotiated contract for the purchase of firm capacity and energy or within 10 working days of receipt of a signed standard offer contract, 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, such a summary shall report:
 - the name of the utility and the owner and/or operator of the qualifying facility, who are signatories of the contract;
 - 2. the amount of committed capacity specified in the contract, the size of the facility, the type of the facility its location, and its interconnection and transmission requirements;

Little charge of the common and a ball of the con-

the amount of annual and on-peak and off-peak energy

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 31

1 2

3

5

6

7

9

11

13

15 16 17

18

20

22

24

expected to be delivered to the utility;

- the type of unit being avoided, its size and its in-service year;
- the in-service date of the qualifying facility; and
- the date by which the delivery of firm capacity and energy is expected to commence.
- (c) Prior to the anticipated in-service date of the avoided unit specified in the contract, a qualifying facility which has negotiated a firm capacity and energy contract or has accepted a utility's standard offer contract may sell as-available energy to any utility pursuant to Rule 25-17.0825.
- (2) Negotiated Contracts. Utilities and qualifying facilities are encouraged to negotiate contracts for the purchase of firm capacity and energy. Such contracts will be considered prudent for cost recovery purposes if it is demonstrated that the purchase of firm capacity and energy from the qualifying facility pursuant to the rates, terms, and other conditions of the contract can reasonably be expected to contribute towards the defertal or avoidance of additional capacity construction or other capacity-related costs by the purchasing utility at a cost to the utility's ratepayers which does not exceed full avoided costs, giving consideration to the characteristics of the capacity and energy to be delivered by the qualifying facility under the contract. Negotiated contracts shall not be evaluated against an avoided unit in a standard offer contract, thus preserving the

3

4

5

6

8

9

11

12

13

14

16

17

18

19

21

22

23

24 25 ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 32

standard offer for small qualifying facilities as described in subsection (3). 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 and energy is needed by the purchasing utility and by Florida utilities from a statewide perspective; and
- (b) whether the cumulative present worth of firm capacity and energy payments made to the qualifying facility over the term of the contract are projected to be no greater than:
 - the cumulative present worth of the value of 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 (4) and paragraph (5)(a) of this rule, providing that the contract is designed to contribute towards the deferral or avoidance of such capacity; or
 - 2. the cummulative present worth of other capacity and energy related costs that the contract is designed to avoid such as fuel, operation and maintenance expenses or alternative purchases of capacity, providing that the contract is designed to avoid such costs; and

STANDARD GROUP IN

Porto delegato de casa do los

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 33

1 2 3

5

7

8

9

11

12

14

16

18 19

20

22

24

payments made to the qualifying facility in any year exceed that year's annual value of deferring the construction 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 payments exceeding that year's value of deferring that capacity in the event that the qualifying facility fails to deliver firm capacity and energy pursuant to the terms and conditions of the contract; provided, however, that provisions to ensure repayment may be based on forecasted data; and

- (d) considering the technical reliability, viability and financial stability of the qualifying facility, whether the contract contains provisions to protect the purchasing utility's ratepayers in the event the qualifying facility fails to deliver firm capacity and energy in the amount and times specified in the contract.
 - (3) Standard Offer Contracts.
- (a) Upon petition by a utility or pursuant to a Commission action, each public utility shall submit for Commission approval a tariff or tariffs and a standard offer contract or contracts for the purchase of firm capacity and energy from small qualifying facilities less than 75 megawatts or from solid waste facilities as defined in Rule 25-17.091.
- (b) The rates, terms, and other conditions contained in each utility's standard offer contract or contracts shall be based on

B

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 34

the need for and equal to the avoided cost of deferring or avoiding the construction of additional generation capacity or parts thereof by the purchasing utility. Rates for payment of capacity sold by a qualifying facility shall be specified in the contract for the duration of the contract. In reviewing a utility's standard offer contract or contracts, the Commission shall consider the criteria specified in paragraphs (2)(a) through (2)(d) of this rule, as well as any other information relating to the determination of the utility's full avoided costs.

- (c) In lieu of a separately negotiated contract, a qualifying facility under 75 megawatts or a solid waste facility as defined in Rule 25-17.091(1), F.A.C., may accept any utility's standard offer contract. Qualifying facilities which are 75 megawatts or greater may negotiate contracts for the purchase of capacity and energy pursuant to subsection (2). Should a utility fail to negotiate in good faith, any qualifying facility may apply to the Commission for relief pursuant to Rule 25-17.0834, F.A.C.
- (d) Within 60 days of receipt of a signed standard offer contract, the utility shall either accept and sign the contract and return it within five days to the qualifying facility or petition the Commission not to accept the contract and provide justification for the refusal. Such petitions may be based on:
 - a reasonable allegation by the utility that acceptance of the standard offer will exceed the subscription limit of the avoided unit or units; or

is consideration committees

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 35

1 2

5

8

7

11

13

15

17

19

21

22

24

2. material evidence that because the qualifying facility is not financially or technically viable, it is unlikely that the committed capacity and energy would be made available to the utility by the date specified in the standard offer.

A standard offer contract which has been accepted by a qualifying facility shall apply towards the subscription limit of the unit designated in the contract effective the date the utility receives the accepted contract. If the contract is not accepted by the utility, its effect shall be removed from the subscription limit effective the date of the Commission order granting the utility's petition.

- (e) Minimum Specifications. Each standard offer contract shall, at minimum, specify:
 - the avoided unit or units on which the contract is based;
 - 2. the total amount of committed capacity, in megawatts, needed to fully subscribe the avoided unit specified in the contract;
 - 3. the payment options available to the qualifying facility including all 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 minimum ten year term contract commencing with

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 36

2			payment option;
3		4.	the date on which the standard contract offer
4			expires. This date shall be at least four years
5			before the anticipated in-service date of the
6			avoided unit or units unless the avoided unit could
7			be constructed in less than four years, or when the
8			subscription limit has been reached;
9		5.	the date by which firm capacity and energy
10			deliveries from the qualifying facility to the
11			utility shall commence. This date shall be no late
12			than the anticipated in-service date of the avoided
13			unit specified in the contract;
14		6.	the period of time over which firm capacity and
15			energy shall be delivered from the qualifying
16			facility to the utility. Firm capacity and energy
17			shall be delivered, at a minimum, for a period of
18			ten years, commencing with the anticipated
19	•		in-service date of the avoided unit specified in th
20			contract. At a maximum, firm capacity and energy
21			shall be delivered for a period of time equal to th

the in-service date of the avoided unit for each

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

the avoided unit;

anticipated plant life of the avoided unit,

commencing with the anticipated in-service date of

the minimum performance standards for the delivery

7.

22

23

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 38

facility and demonstration that the facility can

deliver the amount of capacity and energy specified

in the contract; and

- 2. a listing of the parameters, including any impact on electric power transfer capability, associated with the qualifying facility as compared to the avoided unit necessary for the calculation of the avoided cost.
- (g) Firm Capacity Payment Options. Each standard offer contract shall also contain, at a minimum, the following options for the payment of firm capacity delivered by the qualifying facility:
 - 1. Value of deferral capacity payments. Value of deferral capacity payments shall commence on the anticipated in-service date of the avoided unit.

 Capacity payments under this option shall consist of monthly payments escalating annually of the avoided capital and fixed operation and maintenance expense associated with the avoided unit and shall be equal to the value of a year-by-year deferral of the avoided unit, calculated in accordance with paragraph (5)(a) of this rule.
 - 2. Early capacity payments. Each standard offer contract shall specify the earliest date prior to the anticipated in-service date of the avoided unit

A COLUMN TO A COLU

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 39

22

23

when early capacity payments may commence. The early capacity payment date shall be an approximation of the lead time required to site and construct the avoided unit. Early capacity payments shall consist of monthly payments escalating annually of the avoided capital and fixed operation and maintenance expense associated with the avoided unit, calculated in conformance with paragraph (5)(b) of the rule. At the option of the qualifying facility, early capacity payments may commence at any time after the specified early capacity payment date and before the anticipated in-service date of the avoided unit provided that the qualifying facility is delivering firm capacity and energy to the utility. Where early 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 (3)(g)1 of this rule. Levelized capacity payments. Levelized capacity

payments shall commence on the anticipated in-service date of the avoided unit. The capital

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

3.

24

25

portion of capacity payments under this option shall consist of equal monthly payments over the term of the contract, calculated in conformance with paragraph (5)(c) of this rule. The fixed operation and maintenance portion of capacity payments shall be equal to the value of the year-by-year deferral of fixed operation and maintenance expense associated with the avoided unit calculated in conformance with paragraph (5)(a) of this rule. Where levelized capacity payments are elected, the cumulative present value of the levelized capacity payments made to the qualifying facility over the term of the contract shall not exceed the cumulative present value of capacity payments which would have been made to the qualifying facility had such payments been made pursuant to subparagraph (3)(g)1 of this rule, value of deferral capacity payments. Early levelized capacity payments. Each standard offer contract shall specify the earliest date prior to the anticipated in-service date of the avoided unit when early levelized capacity payments may commence. The early capacity payment date shall be an approximation of the lead time required to site and construct the avoided unit. The capital portion of capacity payments under this option shall consist

16

18

19

20

21

23

1

of equal monthly payments over the term of the contract, calculated in conformance with paragraph (5)(c) of this rule. The fixed operation and maintenance expense shall be calculated in . conformance with paragraph (5)(b) of this rule. At the option of the qualifying facility, early levelized capacity payments shall commence at any time after the specified early capacity date and before the anticipated in-service date of the avoided unit provided that 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 (3)(g)1 of this rule.

(4) Avoided Energy Payments.

(a) For the purpose of this rule, avoided energy costs associated with firm energy sold to a utility by a qualifying facility pursuant to a utility's standard offer contract shall commence with the in-service date of the avoided unit specified in the contract. Prior to the in-service date of the avoided unit,

3

4

6

8

9

10

12

13

14

15

17

18

19

20

21

23

25

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 42

the qualifying facility may sell as-available energy to the utility pursuant to Rule 25-17.0825.

- (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, firmsemergy purchased from qualifying facilities shall be treated as as-available energy for the purposes of determining the megawatt block size in Rule 25-17.0825(2)(a).
- (c) The energy cost of the avoided unit specified in the contract shall be defined as the cost of fuel, in cents per kilowatt-hour, which would have been burned at the avoided unit plus variable operation and maintenance expense plus avoided line losses. The cost of fuel shall be calculated as the average market price of fuel, in cents per million Btu, associated with the avoided unit multiplied by the average heat rate associated with the avoided unit. The variable operating and maintenance expense shall be estimated based on the unit fuel type and technology of the avoided unit.
- (5) Calculation of standard offer contract firm capacity payment options.
 - (a) Calculation of year-by-year value of deferral. The

```
year-by-year value of deferral of an avoided unit shall be the
 1
     difference in revenue requirements associated with deferring the
 2
 3
     avoided unit one year and shall be calculated as follows: -
 4
                             [1 - (1 + ip)]
 5
                             [ (1+r)] + O_n
 6
                             [ 1 - (1 + ip)L ]
               12
 7
                                  (1 + r)L]
 8
 9
11
     Where, for a one year deferral:
           VACm
                       utility's monthly value of avoided capacity, in
12
                       dollars per kilowatt per month, for each month
13
14
                       of year n;
15
                       present value of carrying charges for one dollar
           K
16
                       of investment over L years with carrying charges
                       computed using average annual rate base and
17
                       assumed to be paid at the middle of each year
18
                       and present value to the middle of the first
19
20
                       year;
                       total direct and indirect cost, in mid-year
21
           \frac{I}{n}
                       dollars per kilowatt including AFUDC but
22
                       excluding CWIP, of the avoided unit with an
23
                       in-service date of year n, including all
                       identifiable and quantifiable costs relating to
```

1			the construction of the avoided unit that would
2			have been paid had the avoided unit been
3			constructed;
4	<u>o</u> n	=	total fixed operation and maintenance expense
5			for the year n, in mid-year dollars per kilowatt
6			per year, of the avoided unit;
7	<u>i</u> p	=	annual escalation rate associated with the plant
8			cost of the avoided unit(s);
9	<u>i</u> o	=	annual escalation rate associated with the
10			operation and maintenance expense of the avoided
11			unit(s);
12	<u>r</u>	=	annual discount rate, defined as the utility's
13			incremental after tax cost of capital;
14	<u>L</u>	=	expected life of the avoided unit; and
15	<u>n</u>	=	year for which the avoided unit is deferred
16			starting with its original anticipated
17			in-service date and ending with the termination
18			of the contract for the purchase of firm energy
19	1		and capacity.
20	(b)	Calcula	tion of early capacity payments. Monthly early
21		capacit	y payments shall be calculated as follows:
22			
23	A _m	= A _C ($(m-1) + A_0 (1 + i0)^{(m-1)}$ for m=1 to t
24			12 12

```
\frac{A}{m}
 1
     Where:
                         monthly early capacity payments to be made to
 2
                         the qualifying facility for each month of the
 3
                         contract year n, in dollars per kilowatt per
 4
                         month;
 5
                         annual escalation rate associated with the
 6
                         plant cost of the avoided unit;
 7
                         annual escalation note associated with the
 8
                         operation and maintenance expense of the
 9
                         avoided unit(s);
                         year for which early capacity payments to a
              m
11
                         qualifying facility are made, starting in year
12
                         one and ending in the year t;
13
              t
                         the term, in years, of the contract for the
14
                         purchase of firm capacity;
15
16
17
                                    (1 + ip)
18
19
20
21
22
23
     Where:
                         the cumulative present value in the year that
                         the contractual payments will begin, of the
                         avoided capital cost component of capacity
```

1			payments which would have been made had
2			capacity payments commenced with the
3			anticipated in-service date of the avoided
4			unit(s); and
5		<u>r</u> =	annual discount rate, defined as the utility's
6			incremental after tax cost of capital; and
7			
8			1
9			[(<u>1 + i</u> o)] = ;
10	A _o	≈ G	$[\frac{1-(1+r)}{2}]$
11			$ (\underline{1 + io})^{t}]$
12			[1 - (1 + r) ^t]
13			1
14 15 16	Where:	<u>G</u> =	The cumulative present value in the year that
17			the contractual payments will begin, of the
18			avoided fixed operation and maintenance expense
19	1		component of capacity payments which would have
20			been made had capacity payments commenced with
21			the anticipated in-service date of the avoided
22			unit.
23	(c)	Levelize	d and early levelized capacity payments. Monthly
24	levelize	ed and ear	ly levelized capacity payments shall be
25	calculat	ed as fol	lows:

1 1-(1+r)-t 12 2 4 5 Where: the monthly levelized capacity payment, PL 6 starting on or prior to the in-service date of 7 the avoided unit; 8 F the cumulative present value, in the year that 9 the contractual payments will begin, of the avoided capital cost component of the capacity 11 payments which would have been made had the 12 capacity payments not been levelized; 13 r the annual discount rate, defined as the 14 utility's incremental after tax cost of 15 capital; and 16 the term, in years, of the contract for the 17 purchase of firm capacity. 18 0 the monthly fixed operation and maintenance 19 component of the capacity payments, calculated 20 in accordance with paragraph (5)(a) for 21 levelized capacity payments or with paragraph 22 (5)(b) for early levelized capacity payments. 23 (6) Sale of Excess Firm Energy and Capacity. To the extent that firm energy and capacity purchased from a qualifying facility pursuant to a standard offer contract or an individually

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 48

negotiated contract is not needed by the purchasing utility, these rules shall be construed to encourage the purchasing utility to sell all or part of the energy and capacity to the utility in need of energy and capacity at a mutually agreed upon price which is cost effective to the ratepayers.

(7) Upon request by a qualifying facility or any interested person, each utility shall provide within 30 days its most current projections of its future generation mix 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 qualifying facility to project future avoided cost prices. The utility may charge an appropriate fee, not to exceed the actual cost of production and copying, for providing such information.

(8)(a) Firm energy and capacity payments made to a qualifying facility pursuant to a separately negotiated contract shall be recoverable by a utility through the Commission's periodic review of fuel and purchased power costs if the contract is found to be prudent in accordance with subsection (2) of this rule.

(b) Upon acceptance of the contract by both parties, firm energy and capacity payments made to a qualifying facility pursuant to a standard offer contract shall be recoverable by a utility through the Commission's periodic review of fuel and purchased power costs.

(c) Firm energy and capacity payments made pursuant to a

standard offer contract signed by the qualifying facility, for which the utility has petitioned the Commission to reject, is recoverable through the Commission's periodic review of fuel and purchased power costs if the Commission requires the utility to accept the contract because it satisfies subsection (3) of this rule.

Specific Authority: 350.127, 366.04(1), 366.051, 366.05(8), P.S. Law Implemented: 366.051, 403.503, F.S.

History: New.

25-17.0833 Planning Hearings.

(1) Upon petition or on its own motion, the Commission shall periodically review optimal generation and transmission plans from a statewide and individual utility perspective. In connection with these proceedings, the Commission shall consider the need for capacity from both a statewide and individual utility perspective, the adequacy of the transmission grid, and other strategic planning concerns affecting the Florida electric grid.

(2) Upon petition, or on its own motion, the Commission, as needed, shall review individual utility generation and expansion plans at any time.

Specific Authority: 366.05(8), 366.051, 350.127(2), F.S.

Law Implemented: 366.051, F.S.

History: New.

18

23

24

25

1 2 3

5 6

8

7

11

13

15 16

17

19

21

22

23

25-17.0834 Settlement of Disputes in Contract Negotiations.

(1) Public utilities shall negotiate in good faith for the purchase of capacity and energy from qualifying facilities and interconnection with qualifying facilities. In the event that a utility and a qualifying facility cannot agree on the rates, terms, and other conditions for the purchase of capacity and energy, either party may apply to the Commission for relief.

Qualifying facilities may petition the Commission to order a utility to sign a contract for the purchase of capacity and energy which does not exceed a utility's full avoided costs as defined in 366.051, Florida Statutes, should the Commission find that the utility failed to negotiate in good faith.

- (2) To the extent possible, the Commission will dispose of an application for relief within 90 days of the filing of a petition by either a utility or a qualifying facility.
- (3) If the Commission finds that a utility has failed to negotiate or deal in good faith with qualifying facilities, or has explicitly dealt in bad faith with qualifying facilities, it shall impose an appropriate penalty on the utility as approved by section 350.127, Florida Statutes.
- Specific Authority: 366.051, 350.127(2), P.S.
- Law Implemented: 366.051, F.S.
 - History: New.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 52

25-17.087 Interconnection and Standards.

- (1) Each utility shall interconnect with any qualifying facility which:
 - (a) is in its service area;
 - (b) requests interconnection;
- (c) agrees to meet system standards specified in this rule: and;
 - (d) agrees to pay the cost of interconnection; and +
 - (e) signs an interconnection agreement.
- (2) Nothing in this rule shall be construed to preclude a utility from evaluating each request for interconnection on its own merits and modifying the general standards specified in this rule to reflect the result of such an evaluation.
- (3) Where a utility refuses to interconnect with a qualifying facility or attempts to impose unreasonable standards pursuant to subsection Section (2) of this rule, the qualifying facility may petition the Commission for relief. The utility shall have the burden of demonstrating to the Commission why interconnection with the qualifying facility should not be required or that the standards the utility seeks to impose on the qualifying facility pursuant to subsection Section (2) are reasonable.
- (4) Upon a showing of credit worthiness, the The qualifying facility shall have the option of making monthly installment payments over a period no longer than 36 months toward the full cost of interconnection. However, where the qualifying facility

And the second second second second

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 53

1

2

3

5

6

7 8

9

11

12

13

14

15

16

18

19

20

22

23

24

exercises that option the utility shall charge interest on the amount owing. The utility shall charge such interest at the 30-day commercial paper rate. In any event, no utility may bear the cost of interconnection.

- (5) Application for Interconnection. A qualifying facility shall not operate electric generating equipment in parallel with the utility's electric system without the prior written consent of the utility. Pormal application for interconnection shall be made by the qualifying facility prior to the installation of any generation related equipment. This application shall be accompanied by the following:
 - (a) Physical layout drawings, including dimensions;
- (b) All associated equipment specifications and characteristics including but-net-limited-te, technical parameters, ratings, basic impulse levels, electrical main one-line diagrams, schematic diagrams, system protections, frequency, voltage, current and interconnection distance;
- (c) Functional and logic diagrams, control and meter diagrams, conductor sizes and length, and any other relevant data which might be necessary to understand the proposed system and to be able to make a coordinated system;
 - (d) Power requirements in watts and vars;
- (e) Expected radio-noise, harmonic generation and telephone interference factor;
 - (f) Synchronizing methods; and;

2

3

4

5

7 8

9

10

11

13

15

16

17

18

19

21

22

23

24

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 54

- (g) Operating/instruction manuals.
- Any subsequent change in the system must also be submitted for review and written approval prior to actual modification. The above mentioned review, recommendations and approval by the utility do not relieve the qualifying facility from complete responsibility for the adequate engineering design, construction and operation of the qualifying facility equipment and for any liability for injuries to property or persons associated with any failure to perform in a proper and safe manner for any reason.
- (6) Personnel Safety. Adequate protection and safe operational procedures must be developed and followed by the joint system. These operating procedures must be approved by both the utility and the qualifying facility. The qualifying facility shall be required to furnish, install, operate and maintain in good order and repair, and be solely responsible for, without cost to the utility, all facilities required for the safe operation of the generation system in parallel with the utility's system.

The qualifying facility shall permit the utility's employees to enter upon its property at any reasonable time for the purpose of inspection and/or testing the qualifying facility's equipment, facilities, or apparatus. Such inspections shall not relieve the qualifying facility from its obligation to maintain its equipment in safe and satisfactory operating condition.

dissensibilities 1844 (1958)

The utility's approval of isolating devices used by the qualifying facility will be required to ensure that these will

1

2

3

4

5

6

7

8

11

12

13

14

15

16

18

19

20

21

22

23

comply with the utility's switching and tagging procedure for safe working clearances.

(a) Disconnect Switch. A manual disconnect switch, of the visible load break type, to provide a separation point between the qualifying facility's generation system and the utility's system, shall be required. The utility will specify the location of the disconnect switch. The switch shall be mounted separate from the meter socket and shall be readily accessible to the utility and be capable of being locked in the open position with a utility padlock. The utility may reserve the right to open the switch (i.e. isolating the qualifying facility's generation system) without prior notice to the qualifying facility. To the extent practicable, however, prior notice shall be given.

Any of the following conditions shall be cause for disconnection:

- Utility system emergencies and/or maintenance requirements;
- Hazardous conditions existing on the qualifying facility's generating or protective equipment as determined by the utility;
- Adverse effects of the qualifying facility's generation to the utility's other electric consumers and/or system as determined by the utility;
- Failure of the qualifying facility to maintain any required insurance; or;

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 56

- 5. Failure of the qualifying facility to comply with any existing or future regulations, rules, orders or decisions of any governmental or regulatory authority having jurisdiction over the qualifying facility's electric generating equipment or the operation of such equipment.
- qualifying facility shall each be responsible for its own weility ewned facilities. The utility and the qualifying facility shall each be responsible for the qualifying facility shall each be responsible for the qualifying facility shall each be responsible for the qualifying facility customers, utility and qualifying facility personnel and equipment, and for the protection of its own generating system. The utility and the qualifying facility shall each indemnify and save the other utility harmless from any and all claims, demands, costs, or expense for loss, damage, or injury to persons or property of the other timeluding-the-qualifying-facility-s-generation-system-and the-utility-s-system) caused by, arising out of, or resulting from:

Lab being bereit Labor 1871

1. Any act or omission by a party the-qualifying facility, or that party's qualifying-facility's contractors, agents, servants and employees in connection with the installation or operation of that party's the-qualifying-facility's generation system or the operation thereof in connection with

1 2 3

4

7

9

6

11

13

15 16 17

18

20

21

23

24

the other party's wtility's system;

- Any defect in, failure of, or fault related to a party's the-qualifying-facility's generation system;
- 3. The qualifying-facility's negligence of a party or negligence of that party's qualifying-facility's contractors, agents servants and employees; or;
- Any other event or act that is the result of, or proximately caused by, a party the-qualifying facility.

For the purposes of this subsection, the term party shall mean either utility or qualifying facility, as the case may be.

(c) Insurance. The qualifying facility shall deliver to the utility, at least fifteen days prior to the start of any interconnection work, a certificate of insurance certifying the qualifying facility's coverage under certified-copy-or-duplicate eriginal-of a liability insurance policy issued by a reputable insurance company authorized to do business in the State of Plorida naming the qualifying facility as named insured, jointly protecting-and-indemnifying-the-qualifying-facility and the utility as an additional named insured, which policy shall contain a broad form contractual endorsement specifically covering the liabilities accepted under this agreement its-officers, employees, and representatives against all-liability and expense on-account-of-claims and suits-for-injuries-or-damages-to-persons or-property arising out of the interconnection to the qualifying

3

4 5

6

8

10

11

13

14

16

18

19

21

22

23

24

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 58

facility, or caused by operation of any of the qualifying facility's equipment or by the qualifying facility's failure to maintain the qualifying facility's equipment in satisfactory and safe operating condition.

The policy providing such coverage shall provide public liability insurance, including property damage, in an amount not less than \$300,000 for each occurrence; more insurance may be required as deemed necessary by the utility. In addition, the above required policy shall be endorsed with a provision whereby the insurance company will notify the utility thirty days prior to the effective date of cancellation or material change in the policy.

The qualifying facility shall pay all premiums and other charges due on said policy and keep said policy in force during the entire period of interconnection with the utility.

(7) Protection and Operation. It will be the responsibility of the qualifying facility to provide all devices necessary to protect the qualifying facility's equipment from damage by the abnormal conditions and operations which occur on the utility system that result in interruptions and restorations of service by the utility's equipment and personnel. The qualifying facility shall protect its generator and associated equipment from overvoltage, undervoltage, overload, short circuits (including ground fault condition), open circuits, phase unbalance and reversal, over or under frequency condition, and other injurious

Applications are appreciately selected to the control of the

electrical conditions that may arise on the utility's system and any reclose attempt by the utility.

The utility may reserve the right to perform such tests as it deems necessary to ensure safe and efficient protection and operation of the qualifying facility's equipment.

(a) Loss of Source: The qualifying facility shall provide, or the utility will provide at the qualifying facility's expense, approved protective equipment necessary to immediately, completely, and automatically disconnect the qualifying facility's generation from the utility's system in the event of a fault on the qualifying facility's system, a fault of the utility's system, or loss of source on the utility's system. Disconnection must be completed within the time specified by the utility in its standard operating procedure for its electric system for loss of a source on the utility's system.

This automatic disconnecting device may be of the manual or automatic reclose type and shall not be capable of reclosing until after service is restored by the utility. The type and size of the device shall be approved by the utility depending upon the installation. Adequate test data or technical proof that the device meets the above criteria must be supplied by the qualifying facility to the utility. The utility shall approve a device that will perform the above functions at minimal capital and operating costs to the qualifying facility.

(b) Coordination and Synchronization. The qualifying

7 8

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 60

facility shall be responsible for coordination and synchronization of the qualifying facility's equipment with the utility's electrical system, and assumes all responsibility responsibility for damage that may occur from improper coordination or synchronization of the generator with the utility's system.

(c) Electrical Characteristics. Single phase generator interconnections with the utility are permitted at power levels up to 20 KW. For power levels exceeding 20 KW, a three phase balanced interconnection will normally be required. For the purpose of calculating connected generation, 1 horsepower equals 1 kilowatt. The qualifying facility shall interconnect with the utility at the voltage of the available distribution or the transmission line of the utility for the locality of the interconnection, and shall utilize one of the standard connections (single phase, three phase, wye, delta) as approved by the utility.

The utility may reserve the right to require a separate transformation and/or service for a qualifying facility's generation system, at the qualifying facility's expense. The qualifying facility shall bond all neutrals of the qualifying facility's system to the utility's neutral, and shall install a separate driven ground with a resistance value which shall be determined by the utility and bond this ground to the qualifying facility's system neutral.

(d) Exceptions. A qualifying facility's generator having a capacity rating that can:

1 2 3

5 6 7

8

9

4

11

13

15

17

18

21

20

23

24

- produce power in excess of 1/2 of the minimum utility customer requirements of the interconnected distribution or transmission circuit; or
- produce power flows approaching or exceeding the thermal capacity of the connected utility distribution or transmission lines or transformers;
- adversely affect the operation of the utility or other utility customer's voltage, frequency or overcurrent control and protection devices; or
- adversely affect the quality of service to other utility customers; or
- interconnect at voltage levels greater than distribution voltages,

will require more complex interconnection facilities as deemed necessary by the utility.

- (8) Quality of Service. The qualifying facility's generated electricity shall meet the following minimum guidelines:
- (a) Prequency. The governor control on the prime mover shall be capable of maintaining the generator output frequency within limits for loads from no-load up to rated output. The limits for frequency shall be 60 hertz (cycles per second), plus or minus an instantaneous variation of less than 1%.
- (b) Voltage. The regulator control shall be capable of maintaining the generator output voltage within limits for loads

3

4

5

6

7

8

10

11

12

13

14

15

17

19

21

23

25

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 62

from no-load up to rated output. The limits for voltage shall be the nominal operating voltage level, plus or minus 5%.

- (c) Harmonics. The output sine wave distortion shall be deemed acceptable when it does not have a higher content (root mean square) of harmonics than the utility's normal harmonic content at the interconnection point.
- (d) Power Pactor. The qualifying facility's generation system shall be designed, operated and controlled to provide reactive power requirements from 0.85 lagging to 0.85 leading power factor. Induction generators shall have static capacitors that provide at least 85% of the magnetizing current requirements of the induction generator field. (Capacitors shall not be so large as to permit self-excitation of the qualifying facility's generator field).
- (e) DC Generators. Direct current generators may be operated in parallel with the utility's system through a synchronous invertor. The inverter must meet all criteria in these rules.
- (9) Metering. The actual metering equipment required, its voltage rating, number of phases, size, current transformers, potential transformers, number of inputs and associated memory is dependent on the type, size and location of the electric service provided. In situations where power may flow both in and out of the qualifying facility's system, power flowing into the qualifying facility's system will be measured separately from power flowing out of the qualifying facility's system.

1

2

3

4

5

6

7

8

11

12

13

14

15

16

17

18

19

20

21

22

23

24

The utility will provide, at no additional cost to the qualifying facility, the metering equipment necessary to measure capacity and energy deliveries to the qualifying facility. The utility will provide, at the qualifying facility's expense, the necessary additional metering equipment to measure energy deliveries by the qualifying facility to the utility.

- (10) Cost Responsibility. The qualifying facility is required to bear all costs associated with the change-out, upgrading or addition of protective devices, transformers, lines, services, meters, switches, and associated equipment and devices beyond that which would be required to provide normal service to the qualifying facility if the qualifying facility were a non-generating customer no-cogeneration-were-involved. These costs shall be paid by the qualifying facility to the utility for all material and labor that is required. Prior to any work being done by the utility, the The utility shall supply the qualifying facility with a written cost estimate of all its required materials and labor and an estimate of the date by which construction of the interconnection will be completed. This estimate shall be provided to the qualifying facility within 60 days after the qualifying facility supplies the utility with its final electrical plans. prior-to-any-work-being-done- The utility shall also provide project timing and feasibility information to the qualifying facility.
 - (11) Each utility shall submit to the Commission, a standard

1	agreement for interconnection by qualifying faciliti	es	as part of
. 2	their standard offer contract or contracts required	by	Rule
3	25-17.0832(3).		
4	Specific Authority: 366.051, 350.127(2), F.S.		= .
5	Law Implemented: 366.051, P.S.		
6	History: New 9/4/83, formerly 25-17.87.		
7			
8			
9			44
10			3)
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

1.1

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 65

1 25-17.088 Transmission Service for Qualifying Facilities. The policy of this Commission as set forth in Rules 25-17.080 through 25-17.087, inclusive, is to encourage the development of cogeneration and small power production to the extent that it is cost effective to electric utility ratepayers of the State of Florida. The Commission has determined that this may be accomplished through the establishment of a statewide wholesale market for the sale of energy and capacity produced by Qualifying Facilities to the electric utilities of the state as an alternative to the constauction of additional central station 11 generating units in Florida. To enable a statewide market to 12 function in an efficient and cost-effective manner, transmission service must be available so that energy and capacity may be supplied by a Qualifying Facility to that region of the state 15 where it is needed. Therefore: 16

- (1) Each electric utility in Florida shall provide, upon request, transmission service to wheel as-available energy or firm energy and capacity produced by a Qualifying Facility from the Qualifying Facility to another electric utility.
- 20 (2) The terms and other conditions for transmission service
 21 as described in subsection (1) that is provided by an
 22 investor-owned utility shall be those approved by the Florida
 23 Public Service Commission.
- 24 (3) The charges, terms and other conditions for transmission 25 service as described in subsection (1) that is provided by a

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

17

18

- unicipal utility or Rural Electric Cooperative shall be those
 approved by the respective municipal utility or Rural Electric
 Cooperative.
- 4 (4) Each electric utility in Florida shall file a tariff
 5 containing, at a minimum, an estimate of the availability of and
 6 the charges, terms, and other conditions for transmission service
 7 as described in Subsections (2) and (3) with the Florida Public
 8 Service Commission within 90 days of the effective date of this
 9 rule.
- 10 (5) The Qualifying Racility shall be responsible for all
 11 costs associated with the provision of transmission service by any
 12 electric utility including:
 - (a) transmission service charges
 - (b) line losses incurred by the wheeling utility(s); and
- 15 (c) inadvertent energy flows resulting from the provision of transmission service.
- 17 This subsection shall apply in all circumstances, including sales
- 18 pursuant to a Qualifying Pacility's acceptance of a utility's
- 19 standard offer in accordance with Rule 25-17.083(3) when it is
- 20 necessary for the purchasing utility to resell and wheel the
- 21 Qualifying Facility's energy and capacity to another electric
- 22 utility in accordance with Rule 25-17.083(5). This subsection
- 23 shall not apply, unless agreed to by the Qualifying Facility, when
- 24 energy and capacity supplied by a Qualifying facility pursuand to
- 25 a utility's standard offer is used by the purchasing utility as

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

13

THE STREET WAS DEAD OF STREET

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 67

1 Nart of its own generating resources and then sold at a later date enother electric utility. 3 An electric utility may deny, curtail, or discontinue transmission service to a Qualifying Pacility if the provision of such service would adversely affect the adequacy, reliability, or cost of providing electric service to the utility's general body of retail and wholesale customers. 8 Specific Authority: 350.127(2), 366.051, F.S. Law Implemented: 366.051, 366.04(3), 366.055(3), P.S. History: New 10/4/85, formerly 25-17.88, Amended 2/3/87, Repealed 11 12 13 14 15 16 17 18 19 20 21 22 23 24

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

25-17.0882 Transmission Service Not Required for Self-Service. 2 Public utilities are not required to provide transmission or 3 distribution service to enable a retail customer to transmit electrical power generated by the customer at one location to the customer's Cacilities at another location unless the customer or the utility demonstrates that the provision of this service and 7 the charges, terms, and other conditions associated with the provision of this service are not likely to result in higher cost 8 electric service to the utility's general body of retail and wholesale customers or adversely affect the adequacy or reliability of electric service to all customers. Specific Authority: 350.127(24, 366.05(1), F.S. 12 Law Implemented: 366.05(9), 366.04(3), 366.055(3), F.S. 13 14 History: New 10/4/85, formerly 25-17.882, Repealed 15 16 17 18 19 20 21 22 23 24 25

A CONTRACTOR STATE OF THE PROPERTY OF

an action of the company of the comp

AND THE REST OF THE

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 69

1

2

3

4

5

6

7

8

9

Lo

11

12

13

14

15

17

18

19

20

22

23

24

5

25-17.0883 Conditions Requiring Transmission Service for Self-service.

Public utilities are required to provide transmission and distribution services to enable a retail customer to transmit electrical power generated at one location to the customer's facilities at another location when the provision of such service and its associated charges, terms, and other conditions are not reasonably projected to result in higher cost electric service to the utility's general body of retail and wholesale customers or adversely affect the adequacy or reliability of electric service to all customers. The determination of whether transmission service for self service is likely to result in higher cost electric service may be made using cost effectiveness methodology employed by the Commission in evaluating conservation programs of the utility, adjusted as appropriate to reflect the qualifying facility's contribution to the utility for standby service and wheeling charges, other utility program costs, the fact that qualifying facility self-service performance can be precisely metered and monitored, and taking into consideration the unique load characteristics of the qualifying facility compared to other conservation programs. Specific Authority: 366.051, 350.127(2), P.S.

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

History: New.

Law Implemented: 366.051, F.S.

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 70

25-17.089 Transmission Service for Qualifying Facilities.

(1) Upon request by a qualifying facility, each electric utility in Florida shall provide, subject to the provisions of subsection

(3) of this rule, transmission service to wheel as-available energy or firm energy and capacity produced by a Qualifying Facility from the Qualifying Facility to another electric utility.

(2) The rates, terms, and conditions for transmission

- services as described in subsection (1) and in Rule 25-17.0883
 which are provided by an investor-owned utility shall be those
 approved by the Federal Energy Regulatory Commission.
- (3) An electric utility may deny, curtail, or discontinue transmission service to a Qualifying Pacility on a non-discriminatory basis if the provision of such service would adversely affect the safety, adequacy, reliability, or cost of providing electric service to the utility's general body of retail and wholesale customers.

17 Specific Authority: 366.051, 350.127(2), F.S.

18 Law Implemented: 366.051, 366.055(3), P.S.

History: New.

on resembly places of the content of the

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 71

25-17.091 Governmental Solid Waste Energy and Capacity.

- (1) Definitions and Applicability:
- (a) "Solid Waste Facility" means a facility owned or operated by, or on behalf of, local government, the purpose of which is to dispose of solid waste, as that term is defined in section 403.703(13), Fla. Stat. (1988), and to generate electricity.
- (b) A facility is owned by or operated on behalf of a local
 government if the power purchase agreement is between the local
 government and the electric utility.
- 10 (c) A solid waste facility shall include a facility which is
 11 not owned or operated by a local government but is operated on its
 12 behalf. When the power purchase agreement is between a
 13 non-governmental entity and an electric utility, the facility is
 14 operated by a private entity on behalf of a local government if:
 - One or more local governments have entered into a long-term agreement with the private entity for the disposal of solid waste for which the local governments are responsible and that agreement has a term at least as long as the term of the contract for the purchase of energy and capacity from the facility; and
 - 2. The Commission determines there is no undue risk imposed on the electric ratepayers of the purchasing utility, based on:
 - a. The local government's acceptance of

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

15

16 17

18

19

20

21

22

23

24

10

11

12

13

14

15

16

17

18

19

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 72

1 responsibility for the private entity's 2 performance of the power purchase contract, or 3 Such other factors as the Commission deems 4 appropriate, including, without limitation, the 5 issuance of bonds by the local government to 6 finance all, or a substantial portion, of the 7 costs of the facility; the reliability of the 8 solid waste technology; and the financial

3. The requirements of subparagraph 2 shall be satisfied if a local government described in subparagraph 1 enters into an agreement with the purchasing utility providing that in the event of a default by the private entity under the power purchase contract, the local government shall perform the private entity's obligations, or cause them to be performed, for the remaining term of the contract, and shall not seek to renegotiate the power purchase contract.

capability of the private owner and operator.

20 (d) This rule shall apply to all contracts for the purchase of energy or capacity from solid waste facilities entered into, or renegotiated as provided in subsection (3) (5), after October 1, 23 1988.

(2) Except as provided in subsections (3) and (4) --+(6) of this rule, the provisions of Rules 25-17.080 - 25-17.089, Plorida

THE WARRANGE WINDOWS VICTOR OF

ALL WIND BUILDING

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 73

```
1 Administrative Code, are applicable to contracts for the purchase
 2 of energy and capacity from a solid waste facility.
 3
       +3}--In-addition-to-the-requirements-of-Rule-25-17-083y
 4 Plorida-Administrative-Godey-each-utility-s-standard-offer,for
  purchase-of-energy-and-capacity-from-a-solid-waste-facility-shall
   include-the-followings
 7
       (a)-Use-of-a-constant-risk-multiplier-of-lr0-in-lieu-of-the
   constant-risk-multiplier-provided-in-Rule-25-17-083r
       +b)--Ab-the-election-of-the-solid-waste-facilityy-allow_for
   early-payment-of-the-operation-and-maintenance-components-df-the
11 gapagity-paymentsy-up-to-a-Gommission-designated-number-of-years
  before-the-in-service-date-of-the-avoided-units(s),-calculated-in
13
   aggordange-with-Rule-25-17-083+3}--FrArGrr-and
14
       tel--Ab-the-election-of-the-solid-waste-facility-allow-for
15
   eithers
16
                 levelized-capital-payments-calculated-in-accordance
            tr
17
                 with-subsection-(4),-or
18
                 early-levelized-capital-paymentsy-up-to-a
                 Commission-designated-number-of-years-before-the
19
20
                 in-service-date-of-the-avoided-unity-calculated-in
21
                 accordance-with-subsection-(4)r
22
       +4+--bevelized-capital-payments-shall-be-calculated-as
23
   fellowst
24
25
```

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

the-monthly-levelized-capital-portion-of-the Wherer--Ph 2 capacity-paymenty-starting-up-to-a 3 Commission-designated-number-of-years-before 4 the-in-service-date-of-the-avoided-unit(s); 5 ---P-the-cumulative-present-value,-in-the-year-that 6 the-contractual-payments-will-beging-of-the 7 avoided-capital-cost-component-of-capacity 8 payments-which-would-have-been-made-had-the 9 capacity-payments-not-been-levelized; 10 the-annual-discount-rate,-defined-as-the 11 utility!s-incremental-after-tax-cost-of 12 eapitaly-and 13 the-termy-in-yearsy-of-the-contract-for-the 14 purchase-of-governmental-solid-waste-capacityr 15 (3)(5) Any solid waste facility which has an existing firm 16 energy and capacity contract in effect before October 1, 1988, shall have a one-time option to renegotiate that contract to 18 incorporate any or all of the provisions of subsection Subsection 19 (2) and (4) - (3) - (4) - and - (6) into their contract. 20 renegotiation shall be based on the unit that the contract was 21 designed to avoid but applying the most recent Commission-approved 22 cost estimates of Rule 25-17.0832(5)(a)25-17.083477, Florida 23 Administrative Code, for the same unit type and in-service year to 24 determine the utility's value of avoided capacity over the 25 remaining term of the contract.

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

```
(4)+6+ Because section 377.709(4), Pla. Stat., requires the
 2 local government to refund early capacity payments should a solid
 3 waste facility be abandoned, closed down or rendered illegal, a
 4 utility may not require risk-related guarantees as required in
  Rule 25-17.0832, paragraph (2)(c), (2)(d), (3)(e)8, and (3)(f)1 a
   surety-or-equivalent-assurance-of-repayment-as-required-in-Rule
  25-17,083(3),-Plorida-Administrative-Gode. However, at its
  option, a solid waste facility may provide such risk related
   guarantee surety-bond-or-equivalent-assurance.
       (5) (7) Nothing in this rule shall preclude a solid waste
  facility from electing advance capacity payments authorized
  pursuant to section 377.709(3)(b), F.S., which advanced capacity
   payments shall be in lieu of firm capacity payments otherwise
  authorized pursuant to this rule and Rule 25-17.0832, F.A.C. The
  provisions of subsection (4) +6+ are applicable to solid waste
16 facilities electing advanced capacity payments.
  Specific Authority: 350.127(2), 377.709(5), F.S.
18 Law Implemented: 366.051, 366.055(3), 377.709, F.S.
  History: New 8/8/85, formerly 25-17.91, Amended 4/26/89.
20
21
22
23
24
25
```

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

> Rules 25-17.082 25-17.0825 25-17.083 25-17.0831 25-17.0832 25-17.0833 25-17.087 25-17.088 25-17.088 25-17.0882 25-17.089 25-17.089 25-17.091 Docket No. 891049-EU

SUMMARY OF RULE

Revisions to Rule 25-17.082, F.A.C., provide for each ptility to file a standard offer contract or contracts for the purchase of energy and capacity from qualifying facilities. 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 customers, each tariff and standard offer contract must contain certain metering requirements. A qualifying facility, upon entering into a contract for the sale of firm capacity and energy or prior to the delivery of as-available energy to a utility, must elect to make either simultaneous purchases from the interconnecting utility and sales to the purchasing utility or net sales.

Qualifying facilities selling as-available energy to a utility are permitted to switch billing methods every twelve months.

Qualifying facilities are required to purchase standby service pursuant to the utility's standby service rate schedule.

Revisions to Rule 25-17.0825, F.A.C., on As-Available Energy provide that all contracts for the purchase of as-available energy between a qualifying facility and a utility must be filed with the

stell influence of the analysis (Sept. 1988).

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 77

FPSC within 10 working days of their signing. Avoided energy costs associated with as-available shall be all costs the utility avoided due to the purchase of as-available energy, including the utility's incremental fuel, identifiable variable operating and maintenance expense, and identifiable variable power purchases. Demonstrable utility administrative costs required to calculate avoided energy costs may be deducted from avoided energy payments.

Upon request by a qualifying facility or any interested person, each utility must provide within 30 days its most current projections of its generation mix, fuel price, and, at least, a five-year projection of fuel forecasts as well as other information reasonably required by the qualifying facility.

Utility payments for as-available energy are recoverable by the utility through the Commission's periodic review of fuel and purchased power costs if the payments are not reasonably projected to result in higher cost electric service to the utility's general body of ratepayers or adversely affect the adequacy or reliability of electric service to all customers.

Rule 25-17.083, F.A.C., on Firm Energy and Capacity is deleted.

Rule 25-17.0832, F.A.C., on Firm Capacity and Energy Contracts is created. Within one working day of the execution of a negotiated contract or the receipt of a signed standard offer, the utility must notify the Director of Electric and Gas. Within ten working days, a copy of the contract and a summary of its terms and conditions must be filed with the Commission.

Prior to the anticipated in-service date, a qualifying facility may sell as-available energy to any utility.

Negotiated contracts for the purchase of capacity and energy from qualifying facilities are encouraged. Negotiated contracts shall not be evaluated against an avoided unit in a standard offer contract, thus preserving the standard offer for small qualifying facilities. In reviewing negotiated contracts, the Commission must consider certain delineated factors.

Standard offer contracts are authorized for small qualifying facilities less than 75 MW or solid waste facilities.

Within 60 days of receipt of a signed standard offer contract, the utility must either accept and sign the contract or petition the Commission not to accept the contract. The petition may be based on certain justification. Until such a petition is granted by the Commission, the qualifying facility maintains its right to be paid based on the avoided unit in their contract.

A standard offer contract which has been accepted by a qualifying facility shall apply towards the subscription limit of the unit designated in the contract effective the date the utility receives the accepted contract. If the contract is not accepted by the utility, its effect shall be removed from the subscription limit effective the date of the Commission order granting the utility's petition.

Each standard offer contract is required to contain certain information.

The rule provides for provisions in the contracts which the Commission may approve.

DOM:

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 79

Firm capacity payments options are described. They include: value of deferral capacity payments, early capacity payments, levelized capacity payments.

The definition and calculation of avoided energy payments is provided. Calculation of early capacity payment is provided.

Sale of excess firm energy and capacity is authorized.

Upon request by a qualifying facility or any interested person, each utility must provide information relating to their future capacity needs within 30 days.

Payments made to a qualifying facility pursuant to a negotiated contract are recoverable by the utility when such contracts are found to be prudent in accordance with the rule.

Rule 25-17.0831 on Contracts is deleted.

Rule 25-17.0833 on Planning Hearings is created. It provides for the Commission's periodic review of optional generation and transmission plans from a statewide and individual utility perspective. The Commission, as needed, shall review individual utility generation and expansion plans.

Rule 25-17.0834 on Settlement of Disputes in Contract Negotiations is created. It requires public utilities to negotiate in good faith for the purchase of capacity and energy from qualifying facilities. Qualifying facilities may petition the Commission to order a utility to sign a contract should the Commission find the utility failed to negotiate in good faith. To the extent possible, the Commission must dispose of the application within 90 days. The Commission may impose penalties if it finds the utility failed to negotiate in good faith.

Revisions are made to Rule 25-17.087 on Interconnection and Standards. The utility and the qualifying facility shall each be responsible for its own facilities, and for ensuring adequate safeguards for other utility customers, utility and qualifying facility personnel and equipment, and for the protection of its own generating system. The utility and the qualifying facility shall each indemnify and save the other harmless. New provisions are added regarding insurance.

The subsection on Cost Responsibility is revised. Prior to any work being done by the utility, the utility must supply the qualifying facility with a written cost estimate of all its required materials and labor and an estimate of the date by which the construction of the interconnection will be completed. This estimate must be provided to the qualifying facility within 60 days after the QF supplies the utility with its final electrical plan.

Each utility must submit to the Commission a standard offer agreement for interconnection.

Rule 25-17.088 on Transmission Service for Qualifying Facilities has been deleted.

Rule 25-17.0882 on Transmission Service Not Required for Self Service has been deleted.

Rule 25-17.0883 on Conditions Requiring Transmission Service for Self-Service is created. Public utilities are requested to provide transmission and distribution service to enable a retail customer to transmit electrical power generated at one location to the customer's facilities at another location when such provisions of service are not reasonably projected to result in higher cost

electric service to the utility's general body of retail and wholesale customers or adversely affect the adequacy or reliability of electric service to all customers. Reference is made to a cost effectiveness methodology which may be used.

Rule 25-17.089 on Transmission Services for Qualifying Facilities is created. Transmission service by the electric utility for the qualifying facility is mandated under certain circumstances. Reference is made to the Federal Energy Regulatory Commission's jurisdiction over the rates, terms, and conditions for the transmission.

Rule 25-17.091 on Governmental Solid Waste Energy and Capacity is amended to reflect the applicability of other rules to the calculation of payments and to risk-related guarantees.

SUMMARY OF HEARINGS ON THE RULE

The first public hearing on the Cogeneration Rules, Docket No. 891049-EU, was held at Commission Agenda on August 29, 1989. Commission staff presented a summary of the rule proposals and rule revisions. Interested persons also presented their views at that time. Staff was directed to proceed to a workshop. A workshop was held September 18. On November 7, 1989, the Commission addressed the primary issues of whether statewide or individual utility avoided units was more appropriate; whether sufficient guidance was provided on self-service wheeling; whether the 1989 legislation was implemented through the revisions; why there was a need for any revisions, etc. On November 21, the Commission voted at this agenda to proceed to rulemaking. After the FAW publication of the

rulemaking, a full section 120.54 rulemaking hearing was held on January 9 through 11, 1990.

There were three days of rulemaking hearing, with a transcript in four volumes, with 578 pages. There were 12 participants in the hearing; they consisted of cogenerators, electric utilities, and small power producers.

Staff discussed the basis for the proposed versions. First, the revisions are intended to reflect changes to Chapter 366, Florida Statutes, enacted during the 1989 Legislature. Second, they are to fix a number of administrative and technical problems that have arisen since the rules were first adopted in 1984. A balancing of the interests of ratepayers, the cogenerators, and utilities is necessary.

Some of the cogenerators listed their primary goals of incentives to be included in the rules as the following: the options to choose standby rates; capacity payments for as-available sales; proper pricing of as-available energy; availability of real-time energy information; availability of short-term firm capacity and energy contracts; elimination of excessive assurances against risk; inclusion of all avoided cost in capacity payments; retention of statewide avoided unit; retention of base-load coal-fired unit concept; and assumptions for evaluating self-service wheeling.

Cogenerators urged that the rules should do more to encourage cogeneration.

Make Selection of the S

Utilities supported the concept of individual utility pricing and proposed many technical revisions to the rules.

A small power producer presented comments on the development of PURPA. Also, the additions to Chapter 366 from the 1989 Legislature, including changes to FEECA were assessed. Qualifying facilities supported the statewide avoided unit.

Representatives of qualifying facilities said the litmus test for standard offer contracts is whether they are financeable by a bank. They said regulatory uncertainty is the principal problem with the standard offer that makes it unfinanceable.

A Commissioner noted there are only three issues in this rulemaking: price, price, and price.

Cogenerators said the Federal Energy Regulatory Commission (FERC) rules provide that upon request of a QF, the utility shall provide standby power (referred to as backup owner and maintenance power).

There was much debate about particular and hypothetical factual scenarios.

A Houston company discussed payments for capacity in Texas and the rationale behind the PUC decision in Texas.

cogenerators said there is a void between as-available and the ten-year contract that could be filled with some type of contractual arrangements. They repeated the point that there is capacity cost deferral benefit to as-available energy, on an aggregate basis, and recommends using a probabilistic approach. They recommended that all QFs be paid the same based on the probability of reliability as a class. It would be a weighted average.

A utility said there is a problem with this "probabilistic no contractual commitment basis." Utilities have an obligation to serve and to back up the QF through standby capacity.

Utilities presented the concern that if you have the sale from a QF from one service to another, then you have to worry about the scheduling of the transaction through the point of interconnection between the two utilities. Once you start spreading out the source of the as-available energy, that is, the source from anywhere in the state into a particular utility's service area, you magnify the potential impact of losses associated with that transaction.

The debate on the use of the individual utility unit versus a statewide unit in Rule 25-17.0832 was lengthy. The qualifying facilities, in urging the statewide unit, said savings would result because when you are planning, instead of building two dozen units scattered all over the place, you may even build two units where the power can be moved around. You get economies of scale, you use less land and resources, you may use a better quality of fuel.

The concept of a bidding system was approached. One company said they have not had a satisfactory experience with it. There are people in this industry who will go in and sign a blanket contract without worrying about the economics, knowing that there is a value to that contract."

Electric utility counsel pointed out that the FERC regulation defines "avoided cost" as the incremental cost to an electric utility of electric energy or capacity or both which, but for, the purchase from the QF, such utility would generate itself or

e-step a

ORDER NO. 23623 DOCKET NO. 891049-EU PAGE 85

purchase from another source. In other words, it appears to refer to an individual utility avoided unit.

optimum statewide generation plan and the other is the individual utility generation expansion plan. The way things are actually built is pursuant to the individual utility expansion plan. FPL said one of the problems in the past was that the Commission was confronted with quantifying avoided costs associated with the next unit in the state when the unit was not needed in the near term. It put the utilities and the QFs in the posture of having to deal with one another on a price that was somewhat fictional.

Staff discussed a concern with the risk that the QF will not deliver capacity and energy as contracted, and that the utility, having the obligation to serve, will have to replace that capacity. "This is one of the risks that the risk factor will have to cover, and with the removal of the risk factor, we need provisions to protect against this type of risk." Another concern is if the QF were to go bankrupt, that there be a provision that the utility could take over the plant or take ownership and either have somebody else run it or run it themselves.

Regarding fluctuating economic parameters, an electric utility said it would be unfair to either party to change an agreement over the lifetime of it. Cogenerators agreed. Another utility said the Commission may want to have some ability to look periodically and find whether its assumptions are out of line. It was suggested it might be implemented similarly to an adjustable rate mortgage, with some caps and limitations on it. Staff clarified that the only

parameters to be adjusted are those that if the unit was built, the ratepayer would see adjustments on -- i.e., O&M, cost of capital, tax rate.

Subscription limits were discussed.

An electric utility presented the concept of categorizing the QFs by size. Also, it proposed using five performance factors. If the QF doesn't meet them, the price would be reduced. If the QF meets them, the QF would receive 100% of avoided cost.

One utility suggested language to address the concern of when the utility does not need the energy in later years and wishes to resell it.

FPSC counsel pointed out that PURPA has two mandates. One is that purchases by the electric utilities of the QFs' energy shall not discriminate against QFs. However, the other mandate is that rates shall be just and reasonable to the electric utility consumers and in the pubic interest.

Municipal electric utilities discussed the situation for municipals in purchasing energy from cogenerators.

The planning hearing rule and Rule 25-17.087 on interconnection standards were addressed. A qualifying facility recommended changes to the rule which would only allow disconnection under emergency conditions. Insurance for interconnection was addressed. One qualifying facility objected that the indemnity only goes from the QF to the utility. There is no recognition that the utility operations could have a damaging effect on the QF.

BERNESS SHARMAN SANS

The next public meeting was held May 25. This occurred after post-hearing comments were filed, staff distributed a "Proposed Final Version" and comments were received on it. At that agenda, the Commission held a lengthy debate on the following sissues: statewide avoided unit versus individual utility avoided unit; reopeners of economic and financial parameters every ten years; a utility's ability to petition the FPSC to reject a standard offer contract, including the issue of subscription caps; changes permitted in the customer's selection of billing methodology; the Commission's policies set forth in proposed Rule 25-17.081; appropriate assurances against the risk of a QF's nonperformance; the utility's marketing of excess QF generated power to other utilities; the treatment of municipal electric utilities and rural electric cooperatives in the rules on wheeling, the planning hearing, and the Commission policies rule; the concept of a 75 MW cut-off for standard offers.

Based on guidance from the Commission at the May 25 agenda, staff prepared a new set of rules. Staff mailed that proposal to participants June 21. Participants provided comments, which were reviewed and summarized. Staff prepared a new recommendation which was heard at the Commission agenda on August 28, 1990. The Commission discussion at that public meeting focused on: individual utility units versus statewide unit; the 75 MW limit for a standard offer contract; the provision of a standard offer for all solid waste facilities; negotiated contract's relationship — or lack of it — to subscription caps; the provision of a mini-

planning hearing and a more flexible, traditional planning hearing; the issue of a provision for competitive bids.

The staff then took the August 28 Commission guidance, prepared a new rule proposal and submitted it for the September 18 agenda. At that agenda, the Commission discussed the 75 MW cut-off provision in standard offers and negotiated contacts for deferral or avoidance "portions of" capacity and implementation issues.

At the September 18, 1990, agenda, the Commission took final action to adopt the rules.

FACTS AND CIRCUMSTANCES JUSTIFYING THE RULE

The Commission proposed changes in the rules on cogeneration and small power production based on direct changes in section 366.051, Florida Statutes, dealing with state policy in respect to cogeneration, and based on the Commission's experience with the existing rules since their adoption in 1984. First, there is a need to modify the rules to implement the legislative changes in section 366.051, Florida Statutes. Second, the rules need to ensure that all contracts for the purchase of firm energy and capacity accurately reflect full avoided costs of the purchasing utility. Third, the rules need to be revised to remedy a number of administrative and technical problems that have arisen since 1984 when the rules were adopted.