BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Amendment of Rules 25-17.081, 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	DOCKET NO. 891049-EU ORDER NO. 22225 ISSUED: 11/27/89

NOTICE OF RULEMAKING

NOTICE is hereby given that the Commission, pursuant to section 120.54, Florida Statutes, has initiated rulemaking to amend Rules relating to cogeneration.

The attached Notice of Rulemaking will appear in the December 1, 1989, edition of the Florida Administrative Weekly. A hearing has been scheduled for the following time and place:

9:30 a.m., January 9, 10, 11, 1990
Room 106, Fletcher Building
101 East Gaines Street
Tallahassee, Florida

Written comments or suggestions on the rules must be received by the Director, Division of Records and Reporting, Florida Public Service Commission, 101 East Gaines Street, Tallahassee, FL 32399, no later than December 22, 1989. In addition, a Prehearing Notice will be issued to participants.

By Direction of the Florida Public Service Commission, this 27th day of NOVEMBER, 1989.

STEVE TRIBBLE, Director
Division of Records & Reporting

(S E A L)

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FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 891049-EU

RULE TITLE:	RULES NOS.:
Commission Policy in Respect to Cogeneration and Small Power Production	25-17.081
The Utility's Obligation to Purchase; Customer's Selection of Billing Method	25-17.082
As-Available Energy	25-17.0825
Firm Energy and Capacity	25-17.083
Contracts	25-17.0831
Firm Capacity and Energy Contracts	25-17.0832
Planning Hearings	25-17.0833
Settlement of Disputes in Contract Negotiations	25-17.0834
Interconnection and Standards	25-17.087
Transmission Service Not Required for Self-Service	25-17.0882
Conditions Requiring Transmission Service for Self-service	25-17.0883
Transmission Service for Qualifying Facilities	25-17.088
Transmission Service for Qualifying Facilities	25-17.089
Governmental Solid Waste Energy and Capacity	25-17.091

PURPOSE AND EFFECT: These proposed revisions will modify the rules to implement legislative changes to section 366.051, Florida Statutes; they are intended to ensure that all contracts for the purchase of firm energy and capacity accurately reflect full avoided costs of the purchasing utility; they will remedy a number

of administrative and technical problems that have arisen since 1984 when the rules were initially adopted.

SUMMARY: In Rule 25-17.081, F.A.C., Commission policy in respect to cogeneration and small power production is set out. This section provides a narrative of the Commission's policy to encourage cogeneration to the extent that it is cost effective to electric utility ratepayers and the citizens of Florida.

Revisions to Rule 25-17.082, F.A.C., would alter the current language that permits a qualifying facility (QF) to switch billing methodology between simultaneous purchases and sales and net billing every 12 months. The new language would prospectively require the QF to select a billing option at the time it signs an interconnection agreement. A change in billing option is permitted when a firm capacity and energy contract commences or expires, or when there is no adverse effect on the ratepayers.

Rule 25-17.0825, F.A.C., remains essentially unchanged except that a provision has been added that permits capacity payments to be made for as-available energy under certain conditions. New provisions also require utilities to provide estimates at cost of future as-available energy projections.

Rule 25-17.0832, F.A.C., Firm Capacity and Energy, has the most extensive revisions. Subsection (2) reiterates that negotiated contracts are to be encouraged and provides the criteria under which such contracts are to be reviewed for cost recovery.

Subection (3) of Rule 25-17.0832, F.A.C., on standard offer contracts retains the value of deferral methodology, but calculate the capacity payments based on individual utility generating units consistent with the state plan. Under this provision, each utility will submit a standard offer contract incorporating the rates, terms, and conditions that qualify QFs to receive capacity payments. These contracts will be approved by the FPSC as part of the planning hearing process. The Commission has the right to reset the financial parameters used to calculate avoided cost based on prevailing tax rates, interest rates, and operation and maintenance costs.

A utility may petition the Commission to reject a standard offer contract for good cause. The QF maintains its share of the subscription limit throughout the procedure and loses it only if the Commission approves the rejection.

Criteria are specified that a utility must put in the standard offer contract. These criteria relate to the contract term, the performance standards a QF must maintain, provisions necessary to protect the utility's general body of ratepayers, and other parameters that would affect the utility's full avoided cost.

The various payment options available to QFs are specified. These options include value of deferral capacity payments, early payments, levelized payments, and early levelized payments.

The existing formulas used to calculate firm capacity and energy payments are retained. The only changes here were to put

the variable O&M component with the energy payments to reflect that variable O&M is a function of output and to add formulas to calculate levelized payments.

Finally, subsection (6) authorizes standard offers and negotiated contracts approved by the Commission to be subject to recovery through the Fuel and Purchased Power Clause.

Rule 25-17.0833, F.A.C., on Planning Hearings retains periodic planning hearings for the Commission to evaluate the generation and transmission plans on a statewide perspective and on an individual utility perspective. Optimal 20 year generation and 10 year transmission plans will be filed for peninsular Florida and for northwest Florida. Such plans will also be filed for each individual utility. Standard offer tariffs will be based on the individual utility's plans and will be judged against the statewide plans. As part of these hearings, utilities will file their standard offer tariffs as well as their standard interconnection agreements for approval by the Commission. Such hearings may be initiated by the Commission or by petition to the Commission. Finally, the rule summarizes the type of information to be developed by the utilities and submitted as part of the hearing process.

Rule 25-17.0834, F.A.C., on Settlement of Disputes in Contract Negotiations is created. This new section provides for either the QF or the utility to petition the Commission for relief in cases where negotiations are not proceeding in good faith.

On Rule 25-17.087, F.A.C., regarding Interconnection Standards, the FPSC is proposing that a qualifying facility sign an interconnection agreement as a condition of interconnection and that utilities file standard interconnection agreements for approval by the Commission. Also, the FPSC is proposing that the QF provide the utility a certificate of insurance rather than a certified copy of an insurance policy.

Rule 25-17.0883, F.A.C., on Conditions Requiring Transmission Service for Self-service has been reworded to reflect the statutory language in 366.051 requiring the provision of self-service wheeling where it does not adversely affect the general body of retail and wholesale customers.

Rule 25-17.089, F.A.C., on Transmission Service for Qualifying Facilities has been modified to reflect the FERC's decision in Docket EL-87-19-000 that the FERC had jurisdiction over the rates, terms, and conditions of wheeling. The proposed rule continues to assert FPSC jurisdiction to require wheeling.

Rule 25-17.091, F.A.C., on Governmental Solid Waste Energy and Capacity. This section has no substantive changes. The changes are administrative to make this rule comport with the language of the other rules.

RULEMAKING AUTHORITY: 366.051, 350.127(2), 366.055(3), F.S.

LAW IMPLEMENTED: 366.04, 366.051, 366.055(3), 366.05(9), 377.709, F.S.

SUMMARY OF THE ESTIMATE OF ECONOMIC IMPACT OF THESE RULES:

Rules 25-17.081 and 25-17.0834

Rule 25-17.081, F.A.C., requires each electric utility under the Commission's jurisdiction to negotiate for the purchase of energy and capacity from qualified cogenerators and small power producers and, where applicable, to provide transmission service to transmit energy and capacity produced by a qualifying facility to the purchasing utility.

Proposed Rule 25-17.081, F.A.C., in conjunction with proposed Rule 25-17.0834, F.A.C., would specifically allow the FPSC to act as arbiter should the utility and QF contract negotiations result in dispute.

--DIRECT COSTS TO THE AGENCY

Since these rules are viewed as a codification of Commission policy and practice, no change is seen from the status quo.

--COSTS AND BENEFITS TO PERSONS DIRECTLY AFFECTED BY PROPOSED RULE

No real costs or benefits are anticipated. Better information may result for some parties.

--IMPACT ON SMALL BUSINESSES

None of the companies currently affected qualifies as a small business according to criteria of section 120.54, Florida Statutes. Moreover, it is not likely that any future cogenerators or small power producers would qualify.

--IMPACT ON COMPETITION

There should be no impact on competition.

--IMPACT ON EMPLOYMENT

There should be no measurable impact on employment.

--METHODOLOGY

Estimates of the costs and benefits associated with utility and QF compliance with the proposed rules were derived through discussion with Commission staff, as well as from responses to two Research Division data surveys. These data surveys were sent to selected municipal and rural electric cooperative utilities, the investor-owned utilities, and qualifying facilities located in Florida. The effects of the proposed rules on employment and competition were derived from a general equilibrium assessment of resultant changes in household, utility, and QF expenditures.

PROPOSED REVISIONS TO RULES 25-17.082 AND 25-17.0825

--DIRECT COSTS TO THE AGENCY

Following adoption of the proposed revisions, at least some requests for changes in billing method would be reviewed by staff. Because of a lack of experience with billing change evaluation due to historic stability of the relationship between avoided costs and retail purchase rates, and due to uncertainty associated with future events, it is unclear how frequent and how involved additional contract revision reviews would be following adoption of the proposed rule revisions. Commission technical staff indicate that the number of such reviews are likely to be few. The revision to Rule 25-17.082 allowing standby rates to be billed for power purchased by QFs under the Net Bill (NB) method would merely make

the rule consistent with other Commission rules and decisions. Therefore, adoption of this portion of revised Rule 25-17.082 would have no impact on Commission staff workload or costs since no change in procedures would be required.

The proposed inclusion of a capacity component in payments for as-available energy in revised Rule 25-17.0825 may increase agency workload. This possible increase in workload would result from the necessity of determining the likelihood of capacity deferral or avoidance resulting from the contract for as-available energy purchases by the purchasing utility.

On net, Division of Electric and Gas (EAG) staff indicate that it is unlikely that Commission workload would increase sufficiently due to adoption of the proposed rule revisions to require new personnel or overtime for existing staff. Therefore, no additional Commission labor costs should accrue from compliance with this rule revision.

~~COSTS AND BENEFITS TO THOSE PARTIES DIRECTLY AFFECTED BY THE RULE

Under the proposed rule revisions, a future QF would select a billing method upon signing an interconnection agreement. Subsequently, a flip-flop could occur only with a showing of nonharmful effects on ratepayers or, for those QFs that only sell as-available energy following interconnection, upon delivery of firm capacity and energy. EAG staff expect that "a showing of nonharmful ratepayer effects" would require the net present value

(NPV) of the "new" billing method to be less than or equal to the NPV of the current billing method. In such a case, ratepayers could benefit in the short run by not having the higher avoided cost payments passed through in electric rates for the same amount of purchased power that would result subsequent to a flip-flop.

Based on two surveys of the electric utilities in the state, Tampa Electric Company (TECO) and Florida Power & Light (FPL) are the only utilities who, up to this point, have experienced changes in cogenerator billing methods.

Of the QFs responding to staff's data requests, most objected to the proposed change in Rule 25-17.082. The overriding sentiment was that since the QF had shouldered all risk associated with the decision to enter the cogeneration field, it should realize all profits which might accrue from fluctuations between avoided costs and purchased power rates. However, many of the QFs responding to the staff survey stated that the amount of power produced internally was quite small relative to their total needs and that, as a result, they were unlikely to be selling power in the near future. Thus, they are unlikely to request a change in billing method in the short run.

Proposed revisions to Rule 25-17.0825 would permit negotiated contracts for as-available energy sales that would allow capacity payments to be included in payments for such sales. Capacity payments would be allowed if the rates, terms, and other conditions

of the contract could reasonably be expected to defer or avoid additional utility capacity construction.

Investor-owned utilities (IOUs) responding to staff's data request indicated that--by definition--as-available energy could not reasonably be expected to defer or avoid capacity. In fact, it was noted by more than one respondent that a contract specifying rates, terms, and other conditions sufficient to defer or avoid capacity was not an as-available contract at all.

On the other hand, most QFs that responded to staff's survey felt that they already defer capacity without virtue of having signed contracts for as-available energy. They therefore believe they should be receiving capacity payments regardless of the outcome of this rulemaking. To the extent that a utility relies on QF-supplied energy to supply its customers, it is likely that some form of capacity would be deferred or avoided over time. It might not be the case that an additional unit would be entirely deferred or avoided, but some capacity might be deferred. For example, a planned combined cycle could be replaced with a planned combustion turbine.

Generally speaking, both arguments have some merit. Circumstances leading to deferral, avoidance, change in type, etc., are situation-specific and would, therefore, be best dealt with on a case-by-case basis. The revisions proposed to Rule 25-17.0825 would allow affected utilities and QFs to individually negotiate based on each situation, with the Commission ultimately determining

if the resultant agreement is likely to defer or avoid additions to utility capacity.

Benefits would accrue to the QFs that receive capacity payments for providing reliable power to the utility. Ratepayers of the affected utility would have the costs of payments received by such QFs passed-through in the form of higher rates. However, to the extent that utility unit construction would be deferred or avoided in the long run, these rate increases would be offset by benefits accruing due to such utility unit construction deferral or avoidance.

If restricted to a one time only choice of billing method, it is possible that the QF would choose to delay entry or delay committing firm capacity to achieve greater net payments under a specific option. If cogeneration provided more efficient short-run generating capacity than would be available with utility-only generation, these delays would be inefficient. Although use of full avoided cost pricing should leave the ratepayer indifferent as to the provider of his electricity, Florida citizens in general could forgo benefits associated with nonutility generation expansion. The extent to which these losses would occur is not estimable with accuracy: decisions of potential cogenerators would need to be analyzed on a case-by-case basis, and no attempt is made to do so here.

In the long run, if cost-effective cogeneration is delayed or discouraged due to the revision of Rule 25-17.082, Florida citizens

could be worse off. To what extent this scenario is likely cannot be estimated with accuracy. Conversations with EAG staff indicate that delay beyond the designated in-service date for the state's avoided unit(s) is unlikely because they expect avoided costs to remain above retail and standby rates in the future. Thus, they expect any delays to have small effect on utility and ratepayer costs.

If adoption of the proposed revisions to Rule 25-17.0825 encourages negotiation of as-available sales contracts between utilities and QFs, additional utility capacity could be deferred or avoided due to adoption of the revisions in the long run. To the extent that environmental or other social benefits accrue from such increased cogeneration and small power production, benefits would accrue to Florida citizens. However, if QFs are indeed already providing power that utilities rely on for capacity needs (as argued by many QFs responding to staff's survey), then AC payments would increase with no change in existing QF performance and no additional benefits accruing, with resultant increases in electric rates without offsetting benefits. Because of the highly subjective nature of the debate concerning as-available energy capacity deferral, conclusions regarding the net effects of permitting capacity payments for as-avaiable energy sales cannot be determined with accuracy. Therefore, no attempt is made to determine such net effects here.

--IMPACT ON SMALL BUSINESSES

None of the utilities or companies which would be affected by the proposed rule revisions qualifies as a small business according to the criteria of section 120.54, Florida Statutes (1987). Moreover, it is not likely that any future cogenerators or small power producers would qualify according to the above-referenced criteria.

--IMPACT ON COMPETITION

As long as applicable purchased power rates are higher than avoided costs, as they currently are, most incumbent and entering QFs will be likely to prefer the NB arrangement. Thus, the proposed revisions to Rule 25-17.082 should have no short-run impact on competition in the cogeneration market.

To the extent that fluctuations in avoided costs and purchased power rates occur in the long run, potential cogeneration entrants may be at a competitive disadvantage relative to incumbent QFs with signed firm capacity and energy contracts (at least with respect to QFs entering the field after adoption of the revised rule but before the cross-over point of purchased power rates and avoided costs). If the relationship between avoided costs and purchased power rates reverses or appears likely to, QFs (both entering and incumbent) would prefer SBS to NB. However, subsequent to adoption of the proposed rule revisions, entering QFs would only be allowed to choose SBS as an alternative at the time of signing their interconnection agreement or at the time of delivery of firm

capacity and energy if not coincident. Incumbent QFs with signed firm capacity and energy contracts allowing billing method changes would be allowed to switch billing methods every twelve months as they wish. This could enhance the financial viability of QFs fortunate enough to have entered the field under more favorable circumstances.

To the extent that higher avoided cost payments result from adoption of the revisions to Rule 25-17.0825, the competitive viability of some QF projects could increase, both for incumbent and newly-entering QFs. The degree to which these effects would occur will depend on fluctuations in avoided costs and applicable purchased power rates as well as the degree to which QFs are given disincentives, and cannot be quantified at this time.

--IMPACT ON EMPLOYMENT

Since the potential discouragement of cogenerators cannot be quantified, we cannot quantify the long-run effect of the proposed revision of Rule 25-17.082 on employment. Likewise, the potential encouragement of cogenerators that could result from adoption of revised Rule 25-17.0825 cannot be estimated with accuracy. Therefore, the net effect on employment from such QF encouragement cannot be estimated with accuracy--and no attempt is made to do so here.

--METHODOLOGY

Lists of QFs were obtained from the regulated utilities by telephone request. Questionnaires were then sent both to QFs and to

investor-owned utilities to determine the potential effects of the rule changes. Data were also requested from the regulated utilities concerning their experiences with qualifying facilities, along with estimates of costs and savings associated with electric utility compliance with the proposed rule revisions. Electric and Gas Division staff provided supporting information.

A general equilibrium analysis of resultant changes in household and utility expenditures determined the effects of the proposed revision on employment and competition.

PROPOSED RULES 25-17.0832, FIRM CAPACITY AND ENERGY AND 25-17.0833, PLANNING HEARINGS, PROPOSED REPEAL OF RULE 25-17.083 ON FIRM ENERGY AND CAPACITY'S PROPOSED REVISIONS TO RULE 25-17.091, SOLID WASTE FACILIITES

-DIRECT COSTS TO THE AGENCY

On net, the direction and magnitude of possible changes in EAG staff workload is not estimable with accuracy given uncertainties surrounding the expected implementation of the proposed rules. However, Commission staff indicate that workload changes are likely to be accommodated within existing resources. Therefore, adoption of the proposed rule revisions is not likely to increase or decrease Commission labor costs measurably.

-COSTS AND BENEFITS TO THOSE PARTIES DIRECTLY AFFECTED BY THE RULE

Subsequent to repeal of Rule 25-17.083 and adoption of proposed Rule 25-17.0832, QFs contracting for delivery of firm capacity and

energy would be allowed additional payment options not heretofore available to privately owned QFs under current standard offers. Capacity payments are currently calculated pursuant to Rule 25-17.083 for most QFs, with Governmental Solid Waste facilities (GSW's) allowed to choose payment options under Rule 25-17.091. However, proposed Rule 25-17.0832 would allow all QFs subsequently contracting for delivery of firm capacity and energy to choose standard offer payment options including value of deferral capacity payments (currently available under Rule 25-17.083), early capacity payments (also currently available under Rule 25-17.083), present value levelized capacity payments (capital component), and early present value levelized capacity payments (capital component). For qualified QFs, these payment options would further be available with a constant risk multiplier equal to 1.0 instead of the currently applicable risk multiplier of 0.8. In addition, all contracting QFs would have the option to receive early nonlevelized O&M expense payments beginning a Commission-designated number of years prior to the anticipated in-service date of the designated avoided unit(s).

Removal of the 0.8 risk factor in standard offer payment options for QFs would result in higher avoided cost (AC) payments than would be received under current Commission-approved standard offer tariffs.

In addition, the levelized capital payment option, advance O&M option, and advance levelized capital payment option would provide

higher front-end AC payments than do current standard offers pursuant to Commission rules. Thus in the short run, electric ratepayers of affected utilities could expect higher rates than would otherwise have been experienced under current rules since ACs are passed through to ratepayers.

In addition to new standard offer payment options available pursuant to proposed Rule 25-17.0832, the basis for calculation of capacity payments would become individual utility avoided units rather than a statewide avoided unit as in existing Rule 25-17.083.

Although possibly engendering higher costs of preparation, the change to individual utility avoided units should more efficiently match required capacity with those QFs able to operate most closely parallel to the avoided unit of the purchasing utility. This should result in a more efficiently encouraged wholesale bulk power market for QF capacity and energy, and create benefits for Florida citizens. Power would be solicited in the quantities and with characteristics needed by the utility that needs it, and would not be artificially encouraged through pricing based on a generic statewide avoided unit--a unit not actually planned by any utility. The benefits accruing to Florida citizens would, quite possibly, accrue in significant magnitude to offset higher tariff development and filing costs.

As indicated in numerous responses to staff's data survey, a problem that could arise with use of the individual utility avoided unit concept would be undersubscription of capacity, leading to

potentially duplicative capacity. While this problem could arise with use of a statewide avoided unit, it could theoretically be a greater problem with use of an individual utility avoided unit concept.

In addition, EAG staff conversations with affected QFs indicate that QF costs could increase from adoption of proposed Rule 25-17.0832 in that it would necessitate QF evaluation of four IOU expansion plans and standard offers rather than one statewide plan and standard offer. However, the magnitude of these additional costs cannot be estimated with accuracy and no attempt is made to do so here.

Proposed Rule 25-17.0833 would prospectively allow updating of financial parameters within QF contracts subsequent to APH proceedings. This provision should not entail substantial additional utility APH preparation time or engender significant additional utility filing costs. Although the filing of new tariffs would be required for subsequent APHs, the filing would generally come as a result of changes other than the updating of financial parameters.

The net effect of the proposed provisions in Rule 25-17.0833 that would allow updating financial parameters would depend on the extent of inefficient discouragement of QFs resulting from such provisions. Given that determination of project viability is highly individualistic, no attempt to estimate the net costs

associated with risk-and-uncertainty-discouraged QF projects was undertaken.

To the extent that adoption of proposed Rule 25-17.0833 results in less frequent planning hearings, savings from avoided hearings would accrue to affected electric utilities and their ratepayers.

Under the assumption that nonutility qualifying facilities may provide environmental and social benefits, adoption of the rule revisions may create net benefits for the citizens of Florida. Citizens of Florida would benefit from the encouragement of additional generating alternatives as well as from alternative fuel use possibilities inherent in this additional generating capacity. Benefits would also arise from the provisions requiring designation of individual utility avoided units and from provisions that would allow the updating of financial parameters to the extent that resulting cogeneration pricing would be more efficient than is currently the case.

In addition, substantial savings for utilities and their ratepayers could be engendered over time from adoption of proposed Rule 25-17.0833 specifying only "periodic" planning hearings: since hearings may be avoided relative to the current practice.

--IMPACT ON SMALL BUISNESSES

None of the entities that would be affected by adoption of the proposed rule revisions qualifies as a small business according to the criteria of section 120.54, Florida Statutes (1987). Moreover, it is not likely that any future cogenerators or small

power producers would qualify according to the above-referenced criteria.

--IMPACT ON COMPETITION

The proposed rules and rule revisions should not alter the competitive positions of Florida electric utilities since over the long run, no differential effects on affected utilities are anticipated from adoption of the proposed rules and rule revisions.

--IMPACT ON EMPLOYMENT

The net effect on employment in Florida due to adoption of the proposed rule revisions is unclear. To the extent that overall QF generation is encouraged and results in increases in the number of generating facilities and complementary industrial expansion, incremental increases in employment may result due to the revisions. However, these increases are uncertain and not estimable with accuracy.

To the extent that adoption of the proposed rule revisions results in higher electric rates for Florida ratepayers, and thus household expenditures on other consumer items fall, incremental decreases in employment may result. This results because ratepayer general expenditures are probably made on goods and services which are relatively more labor-intensive than the highly capital-intensive utility operations. Thus, reductions in general expenditures of ratepayers due to increased electric rates would likely induce reductions in labor demand within these relatively more labor-intensive industries.

--METHODOLOGY

Questionnaires were sent to QFs, municipal and rural electric cooperative utilities, and investor-owned utilities to determine the potential effects of the rule changes. Data were also requested from the regulated utilities concerning their experiences with qualifying facilities, along with estimates of costs and savings associated with electric utility compliance with the proposed rule revisions. Electric and Gas Division staff provided supporting information.

The effects of the proposed rules and revisions on employment and competition were derived from both partial and general equilibrium assessments of resultant changes in qualifying facility generating capacity, utility expenditures, and household expenditures.

PROPOSED REVISION TO RULE 25-17.087, INTERCONNECTION AND STANDARDS; PROPOSED RULES 25-17.0883, CONDITIONS REQUIRING TRANSMISSION SERVICE FOR SELF SERVICE; PROPOSED RULE 25-17.089, TRANSMISSION SERVICE FOR QUALIFYING FACILITIES; PROPOSED REPEAL OF RULE 25-17.088, TRANSMISSION SERVICE FOR QUALIFYING FACILITIES AND 25-17.0882, TRANSMISSION SERVICE NOT REQUIRED FOR SELF SERVICE

--DIRECT COSTS TO THE AGENCY

On net, adoption of proposed Rules 25-17.087, 25-17.0883, and 25-17.089 should not materially affect the workload of EAG staff: any changes in workload occasioned by adoption of these rules and rule revisions would likely be absorbed within existing resources.

--COSTS AND BENEFITS TO THOSE PARTIES DIRECTLY AFFECTED BY THE RULE

The proposed revision to Rule 25-17.087 that requires electric utilities to develop and submit standard interconnection agreements for Commission approval during hearings specified under Rule 25-17.0833 could impose additional legal and information filing costs on affected Florida electric utilities. However, in aggregate, the additional costs due to adoption of this portion of revised Rule 25-17.087 should not be significant: many electric utilities have already developed standard interconnection agreements.

Repeal of Rule 25-17.0882 and adoption of proposed Rule 25-17.0883 in the main should not result in additional costs or benefits for affected IOUs: the primary effect of the repeal/adoption is to change a statement regarding self-service wheeling framed in the negative to a statement framed in the positive. However, the provision requiring Commission determination of the cost-effectiveness of a proposed self-service wheeling request, using a Commission-designated methodology, could engender ratepayer benefits. These benefits would arise primarily from insurance of continued Commission-encouraged cost-effective cogeneration in Florida.

The proposed repeal of Rule 25-17.088 in conjunction with the adoption of proposed Rule 25-17.089 would likely result in net savings for Florida electric utilities: they would no longer be

required to submit wheeling tariffs to the Commission for approval. These savings would likely be relatively small in aggregate despite the fact that electric utilities generally file tariffs with each request for transmission service.

Because the decrease in costs of each utility is expected to be minimal, their customers are not likely to experience appreciably lower electric rates due to this rule revision, at least initially. Incremental cost savings would more probably be absorbed by other utility operations.

Each municipal and rural cooperative electric utility has filed a wheeling tariff with the Commission as required by existing Rule 25-17.088. However, EAG staff has indicated that tariffs filed in compliance with the existing rule are inadequate. Under the proposed rule changes, filings to modify charges, terms, or other conditions for transmission service would not be required. Thus, these electric utilities would not incur such additional filing costs following adoption of the proposed revisions.

The net effect of the proposed repeal of Rule 25-17.088 and adoption of proposed Rule 25-17.089 would be to reduce the overall costs associated with wheeling tariff filings for electric utilities.

To the extent that cogeneration and small power production may provide environmental and social benefits, electric utility ratepayers as citizens of Florida would accrue benefits from encouragement of these alternative generators. Thus, benefits of

the rule revisions in general would accrue to the ratepayers of Florida who would continue to receive the boon of cost-effective cogeneration and small power production. Qualifying facilities may also benefit to the extent that interconnection becomes more streamlined: costs of negotiating interconnection agreements would be lower should standard offers prove desirable.

--IMPACT ON SMALL BUSINESSES

None of the companies affected by the proposed rule qualifies as a small business according to the criteria of section 120.54, Florida Statutes (1987). Moreover, it is not likely that any future cogenerators or small power producers would qualify according to the above-referenced criteria.

--IMPACT ON COMPETITION

Compliance with the proposed rules, rule repeals, and rule revisions should have little or no impact on competition within the state. Additional costs and savings are expected to be small and occur too infrequently to affect the competitive positions or long-run viability of affected utilities materially. The cost savings likely to be experienced by the qualifying facilities over time, due to potentially lower transmission service rates and streamlined interconnection, should improve qualifying facility long-run viability.

--IMPACT ON EMPLOYMENT

There should be no measurable impact on employment from utility compliance with the proposed rule changes. Costs or savings are

likely to be too small and occur too infrequently to be passed on to customers via appreciably higher or lower rates. Thus, statewide employment would be unaffected by the proposed revision.

--METHODOLOGY

Estimates of the costs and savings associated with utility compliance with the proposed rules were arrived at through discussion with members of Commission staff, through review of in-house documents, and through review of utility and QF staff data survey responses.

The effects of the proposed revision on employment and competition were derived from a general equilibrium assessment of resultant changes in household and utility expenditures.

WRITTEN COMMENTS OR SUGGESTIONS ON THE PROPOSED RULE MAY BE SUBMITTED TO THE FPSC, DIVISION OF RECORDS AND REPORTING, WITHIN 21 DAYS OF THE DATE OF THIS NOTICE FOR INCLUSION IN THE RECORD OF THE PROCEEDING. A PREHEARING NOTICE WILL BE SENT TO ALL PARTICIPANTS.

A HEARING WILL BE HELD AT THE DATE AND PLACE SHOWN BELOW:

TIME AND DATE: 9:30 A.M., January 9, 10, 11, 1989

PLACE: Room 106, 101 East Gaines Street, Tallahassee, Florida.

THE PERSON TO BE CONTACTED REGARDING THESE RULES AND THE ECONOMIC IMPACT STATEMENT IS: Director of Appeals, Florida Public Service Commission, 101 East Gaines Street, Tallahassee, Florida 32399

THE FULL TEXT OF THE RULES IS:

25-17.080 Definitions and Qualifying Criteria.

(1) For the purpose of these rules the Commission adopts the Federal Energy Regulatory Commission Rules 292.101 through 292.207, effective March 20, 1980, regarding definitions and criteria that a small power producer or cogenerator must meet to achieve the status of a qualifying facility. Small power producers and cogenerators which fail to meet the FERC criteria for achieving qualifying facility status but otherwise meet the objectives of economically reducing Florida's dependence on oil and the economic deferral of utility power plant expenditures may petition the Commission to be granted qualifying facility status for the purpose of receiving energy and capacity payments pursuant to these rules.

(2) In general, under the FERC regulations, a small power producer is a qualifying facility if:

(a) the small power producer does not exceed 80 MW; and

(b) the primary (at least 50%) energy source of the small power producer is biomass, waste, or another renewable resource; and

(c) the small power production facility is not owned by a person primarily engaged in the generation or sale of electricity. This criterion is met if less than 50% of the equity interest in the facility is owned by a utility, utility holding company, or a subsidiary of them.

(3) In general, under the FERC regulations, a cogenerator is a qualifying facility if:

(a) the useful thermal energy output of a topping cycle

cogeneration facility is not less than 5% of the facility's total energy output per year; and

(b) the useful power output plus half of the useful thermal energy output of a topping cycle cogeneration facility built after March 13, 1980, with any energy input of natural gas or oil is greater than 42.5% or 45% if the useful thermal energy output is less than 15% of the total energy output of the facility; and

(c) the useful power output of a bottoming cycle cogeneration facility built after March 13, 1980, with any energy input as supplementary firing of natural gas or oil is not less than 45% of the natural gas or oil input on an annual basis; and

(d) the cogeneration facility is not owned by a person primarily engaged in the generation or sale of electricity. This criterion is met if less than 50% of the equity interest in the facility is owned by a utility, utility holding company, or a subsidiary of them.

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

Law Implemented: 366.051, F.S.

History: New 5/13/81, amended 9/4/83, formerly 25-17.80.

25-17.081 Commission Policy in Respect to Cogeneration and Small Power Production

The policy of this Commission as set forth in Rules 25-17.080 through 25-17.091, inclusive, is to encourage the development of cogeneration and small power production to the extent that it is cost effective to electric utility ratepayers and the citizens of

the State of Florida. The Commission has determined that this may best be accomplished through the establishment of a statewide wholesale market for the sale of energy and capacity produced by qualifying facilities to the Florida electric utilities to economically defer or avoid additional generating capacity construction by Florida's electric utilities and to economically conserve expensive fossil fuels. Therefore, in accordance with these rules, each electric utility under the Commission's jurisdiction shall negotiate for the purchase of energy and capacity from qualified cogenerators and small power producers and, where applicable, shall provide transmission service to transmit energy and capacity produced by a qualifying facility to the purchasing utility. In order to further encourage the development of qualifying facilities, each utility shall file a tariff or tariffs for the purchase of as-available energy and a standard offer contract or contracts for the purchase of firm capacity and energy at rates equal to the utility's full avoided costs taking into consideration the financial and planning uncertainty associated with purchases from qualifying facilities and with utility construction of power plants. In the event that a utility and a qualifying facility cannot agree on the rates, terms, and other conditions for the purchase of energy or capacity, either party may apply to the Commission for relief.

Specific Authority: 366.051, 350.127(2), 366.055(3), F.S.

Law Implemented: 366.051, F.S.

History: New.

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 waived by the Commission for good cause shown, each ~~Each~~ 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) At the time of signing an interconnection agreement, a ~~A~~ qualifying facility 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 not be changed unless:

1. 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
2. the qualifying facility demonstrates that the change in billing methodology is not likely 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.

Firm energy and capacity contracts in effect prior to the effective date of this rule shall remain unchanged. ~~at the option of the qualifying facility, 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 following provisions:

~~(a) not more frequently than once every twelve months;~~

~~(b) to coincide with the next Fuel and Purchased Power Cost Recovery Factor billing period;~~

1. ~~(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;

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; and

4. ~~(f)~~ where the election to change billing methods will not contravene the provisions of the tariff under which the qualifying facility receives service 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 interconnecting utility shall be 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 purchasing 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 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 Rule 25-17.0825 and 25-17.0832 ~~25-17.083~~. For those hours during which a qualifying facility is a net purchaser, 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 purchasing 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.

(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. 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, F.S.

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

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 located within its service territory. Each utility may negotiate a contract for the purchase

of as-available energy from any qualifying facility located 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, normally, 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 subsection ~~Section~~ (2) of this rule, less the additional costs directly attributable to the purchase of such 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.

(b) Contract Rates: Each utility may enter into a separately negotiated contract for the purchase of as-available energy from a qualifying facility. Such contracts may include provisions for

capacity payments if it is demonstrated that the purchase of as-available energy pursuant to the rates, terms, and other conditions of the contract can reasonably be expected to result in the economic deferral or avoidance of additional capacity construction by the purchasing utility. All contracts for the purchase of as-available energy between a qualifying facility and a utility shall be filed with the Commission within 30 days of their signing.

(2) Avoided energy costs associated with as-available energy are defined as :

(a) The utility's 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 energy, for those hours during which economy purchases take place; or

(c) The utility's actual incremental energy cost before the sale of economy energy, for those hours during which economy sales take place.

Avoided energy costs associated with as-available energy shall include the utility's incremental fuel and identifiable variable operating and maintenance expense. 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 economy transactions which have taken place, using the utility's actual 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 ~~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.

Each utility's tariff shall include ~~utility shall submit for Commission approval~~ details of the methodology to be used in the calculation of avoided energy cost implementing 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 monthly report~~ by the twentieth business day of the following month, a 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 month with the Commission. A copy shall be furnished to any individual who requests such information.

(5) Upon request by a qualifying facility or any interested 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. The utility may charge an appropriate fee, not to exceed the actual cost of production and copying, for providing such information. ~~Each~~

~~utility tariff shall include, at minimum, a ten-year rolling estimate of the average of the utility's annual generation mix and fuel price by type of fuel. 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 recoverable by the utility through the Fuel and Purchased Power Cost Recovery Clause. Utility payments for as-available energy and capacity, where applicable, made to qualifying facilities pursuant to a separately negotiated contract shall be recoverable by the utility through the Fuel and Purchased Power Cost Recovery Clause if the payments are not likely 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.

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 offer and subject to certain contractual provisions as to the quantity, time, and reliability of delivery.~~

(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 purposes if the following criteria are met:

(a) it is demonstrated that the purchase of firm energy and capacity from the qualifying facility pursuant to the terms and conditions of the contract can reasonably be expected to result in the economic deferral or avoidance of additional capacity construction by Florida utilities from a statewide perspective; and

(b) the cumulative present worth of firm energy and capacity payments made to the qualifying facility over the term of the 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 over the term of the contract; and

(c) to the extent that the annual firm energy and capacity payments made to the qualifying facility in any year exceed that year's annual value of deferring the statewide avoided unit, the contract contains adequate provisions to protect the utility's ratepayers in the event that the qualifying facility fails to perform 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 negotiated 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 seventy percent capacity factor for energy delivered by the qualifying facility on a 12 month rolling average basis. For the purpose of this subsection, the capacity factor of the qualifying facility shall be defined as: the total kilowatt hours of energy delivered to the utility during the preceding 12 months, divided-

by the product of: (i) the maximum kilowatt capacity contractually 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 12 months less those hours during which the utility was unable to accept energy and capacity deliveries from the qualifying facility; and

(iii) additional criteria reasonably required by the utility planning the statewide avoided unit, related to the delivery of firm energy and capacity by the qualifying facility during that utility's daily and seasonal peak periods.

(b) Upon approval by the Commission each utility's standard offer shall provide the following payment options to a qualifying facility for the delivery of firm energy and capacity:

(i) Capacity payments shall be equal to the value of a year by year deferral of the statewide avoided unit, calculated in accordance with Section (7) of this rule; energy payments shall be calculated in accordance 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 early capacity payments consisting of the avoided capital cost component of the value of a year by 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 made, the cumulative present value of the avoided capital cost component of capacity payments made to the qualifying facility over the term 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 payments to be made to a qualifying facility starting as early as seven years prior to the anticipated in service date of the statewide avoided unit shall be paid monthly and shall be calculated as follows:

$$Am = A\left(\frac{1+ip}{1+12}\right)^{n}; \text{ for } n = 0, n$$

Where: Am = monthly avoided capital cost component of capacity payments to be made to the qualifying facility starting as early as seven years prior to the anticipated in service date of the statewide avoided unit, in dollars per kilowatt per month;

ip = annual escalation rate associated with the

plant cost of the statewide avoided unit;

n = year for which early capacity payments to a qualifying facility are made; and

$$A = P\left[\frac{i}{(1+ip)} - \frac{i}{(1+ip)^{t}} + \frac{1}{(1+r)^{t}}\right]$$

Where: P = the cumulative present value of the avoided capital cost component of capacity payments which would have been made had capacity payments commenced with the anticipated in service date of the statewide avoided unit;

r = annual discount rate, defined as the utility's incremental after tax cost of capital; and

t = the term, in years, of the contract for the purchase of firm capacity commencing prior to the in service date of the statewide avoided 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 accordance 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 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 payment for capacity pursuant to Section (3)(b)(i) of this rule are calculated shall remain fixed for a qualifying facility upon acceptance 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 annually to reflect changes in the value of deferral or may, at the time a qualifying 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. Once made, the qualifying facility's election of a specified or annually revised rate of payment for capacity sold pursuant to 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 qualifying facility pursuant to Section (3)(b)(ii), of this rule shall be revised annually.

(4) The Commission shall initiate proceedings on an annual basis to determine the statewide avoided unit for the purpose of determining the need for, timing, and pricing of firm energy and capacity purchases from qualifying facilities. In connection with these proceedings:

(a) Each utility in the State of Florida shall submit an analysis to the Commission identifying its next planned uncertified generating unit to be added to its system pursuant to its most current long range generation expansion plan. The analysis shall include an estimate of the size, timing, cost, and operating 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.

(5) To the extent that firm energy and capacity purchased from a qualifying facility by a utility pursuant to the utility's standard offer is not needed by the purchasing utility or that the avoided energy and capacity cost associated with the statewide avoided unit exceed the purchasing utility's avoided energy and capacity costs, these rules shall be construed to encourage the purchasing utility to sell all or part of the energy and capacity purchased from a qualifying facility to the utility planning the statewide avoided unit. The utility which is planning the designated statewide avoided unit is expected to purchase such energy 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 throughout the term of the contract.

The statewide avoided unit energy cost shall be defined as the cost of fuel, in cents per kilowatt hour, which would have been burned at the statewide avoided unit and shall be calculated as follows:

The average market price of fuel, in cents per million Btu, associated with the statewide avoided unit multiplied by the average heat rate associated with the statewide avoided unit.

Before the anticipated in service date of the statewide avoided unit, a qualifying facility who has accepted a utility's standard offer may sell electricity pursuant to Rule 25-17.0825.

(7) For the purpose of this rule, avoided capacity costs in dollars per kilowatt per month, associated with firm capacity sold to a utility by a qualifying facility pursuant to the utility's standard offer shall be defined as the value of a year by year deferral of the statewide avoided unit and shall be calculated as follows:

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$$VAC_m = C \times K \times \left[I_n \times \left(\frac{1 + i_p}{1 + r} \right)^{12} + O_n \times \left(\frac{1 + i_p}{1 + r} \right)^{b} \right] \times \left(\frac{1}{1 + r} \right)^{n}$$

Where, for a one year deferral:

VAC_m = utility's value of avoided capacity, in dollars per kilowatt per month, during month m;

C = a constant risk multiplier equal to 0.8 for the purpose of the utility's standard contract offer;

K = present value of carrying charges for one dollar of investment over b years with carrying charges assumed to be paid at the end of each year;

I_n = total direct and indirect cost, in dollars per kilowatt including AFUDC but excluding CWIP, of the statewide avoided unit with an in service date of year n;

O_n = total first year's fixed and variable operating and maintenance expense, less fuel and in dollars per kilowatt per year, of the statewide avoided unit deflated to the beginning of year n by i_p;

i_p = annual escalation rate associated with the plant cost of the statewide avoided unit;

~~io = annual escalation rate associated with the operation and maintenance expense of the statewide avoided unit;~~

~~r = annual discount rate, defined as the utility's incremental after tax cost of capital;~~

~~b = expected life of the statewide avoided unit; and~~

~~n = year for which the statewide avoided unit is deferred starting with its original anticipated in service date and ending with the termination of the contract for the purchase of firm energy and capacity.~~

~~(8) Firm energy and capacity payments made to qualifying facilities pursuant to a utility's standard offer shall be 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 Power Cost Recovery Clause if the contract is found to be prudent in accordance with Section (2) of this rule.~~

~~Specific Authority: 366.04(1), 366.05(1), 366.05(9), 350.127(2), F.S.~~

~~Law Implemented: 366.05(9), F.S.~~

~~History: New 9/4/83, formerly 25-17.83.~~

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 the utility's standard offer contract subject to certain contractual provisions as to the quantity, time and reliability of delivery.

(a) Within 10 working days of the execution of a negotiated contract for the purchase of firm capacity and energy or within 10 days of receipt of a standard offer contract, the purchasing utility shall file with the Commission a summary of the terms and conditions of the contract. At a minimum, such a summary shall report:

1. the amount of committed capacity specified in the contract;
2. the amount of committed energy based on the minimum availability of on-peak and off-peak energy;
3. the type of unit being avoided and its in-service year; and
4. the date by which the delivery of firm capacity and energy shall commence.

(b) Within 60 days of the execution of a negotiated contract for the purchase of firm capacity and energy or within 60 days of receipt of a standard offer contract, the purchasing utility shall file with the Commission a copy of such contract.

(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. Generally, 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 result in the deferral or avoidance of additional capacity construction by the purchasing utility at a cost to the utility's ratepayers which does not exceed the utility's full avoided costs. In reviewing negotiated firm capacity and energy contracts for the purpose of cost recovery, the Commission shall consider, but not be limited to the consideration of:

(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

purchasing utility's avoided unit or units over the term of the contract; calculated in accordance with section (5)(a) of this rule; and

(c) to the extent that annual firm capacity and energy payments made to the qualifying facility in any year exceed that year's annual value of deferring the purchasing utility's avoided unit or units, whether the contract contains adequate provisions to ensure repayment of such payments exceeding that year's value of deferring the avoided unit in the event that the qualifying facility fails to deliver firm capacity and energy pursuant to the terms and conditions of the contract; and

(d) based on the technical reliability, viability and financial stability of the qualifying facility, whether the contract contains adequate 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 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 any qualifying facility. At a minimum, each utility shall submit revised tariffs and standard offer contracts in conjunction with the filing of its plans for the planning hearings specified in Rule 28-17.0833. The

avoided unit or units upon which each standard offer contract is based shall be derived from the utility's most current long range generation and transmission expansion plan and shall be substantially consistent with the 20-year least cost generation and transmission plans for the State of Florida approved by the Commission pursuant to Rule 25-17.0833. Any variation from the statewide plan shall be justified by the utility and approved or disapproved by the Commission. Each utility's standard offer contract shall specify that the avoided unit, its timing and direct construction costs shall remain fixed over the term of the contract. The financial and economic factors used to calculate the annual revenue requirements of the avoided unit, such as the income tax rate, weighted cost of capital, and operating and maintenance expense, may be revised consistent with the findings of the planning hearing specified in Rule 25-17.0833 to reflect actual changes in these parameters, subject to approval by the Commission. In reviewing a utility's standard offer contracts the Commission shall consider, but not be limited to the consideration of, the criteria specified in sections (2)(a) through (2)(d) of this rule.

(b) In lieu of a separately negotiated contract, a qualifying facility may accept any utility's standard offer contract. Within 60 days of receipt of a signed standard offer contract including an interconnection agreement, the utility shall either accept and sign the contract or petition the Commission not to accept the

contract and provide justification for the refusal. 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 approving the refusal.

(c) Minimum Specifications. Each utility standard offer contract shall, at minimum, specify:

1. the avoided unit or units on which the purchasing utility's avoided costs are based;
2. the total amount of committed capacity, in megawatts, represented by negotiated or standard offer contracts needed to fully subscribe the avoided unit or units;
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 the in-service date of the avoided unit for each payment option;
4. the date on which the standard contract offer expires. Unless waived by the Commission, this date

shall be at least two years before the anticipated in-service date of the utility's avoided unit or units, or when the subscription limit has been reached;

5. the date by which firm capacity and energy deliveries from the qualifying facility to the utility shall commence. Unless waived by the Commission for good cause shown, this date shall be no later than the anticipated in-service date of the utility's avoided unit;

6. the period of time over which firm capacity and energy shall be delivered from the qualifying facility to the utility. Unless waived by the Commission for good cause shown, firm capacity and energy shall be delivered, at a minimum, for a period of ten years, commencing with the anticipated in-service date of the utility's avoided unit. At a maximum, firm capacity and energy shall be delivered for a period of time equal to the anticipated plant life of the utility's avoided unit, commencing with the anticipated in-service date of the utility's avoided unit;

7. the minimum performance standards for the delivery of firm capacity and energy by the qualifying facility during the utility's daily and seasonal

peak and off-peak periods. Unless waived by the Commission for good cause shown, these performance standards approximate the anticipated peak and off-peak availability and economic dispatch of the utility's avoided unit over the term of the contract;

8. adequate provisions to ensure repayment of payments to the extent that annual firm capacity and energy payments made to the qualifying facility in any year exceed that year's annual value of deferring the purchasing utility's avoided unit or units in the event that the qualifying facility fails to perform pursuant to the terms and conditions of the contract. Such provisions may be in the form of a surety bond or equivalent assurance of repayment of payments exceeding the year-by-year value of deferring the avoided unit specified in the contract;

9. adequate 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 based on the technical reliability and financial stability of the qualifying facility; and

10. a listing of the parameters, including any impact on electric power transfer capability, associated with the qualifying facility as compared to the utility's

avoided unit necessary for the calculation of the utility's avoided cost.

(d) 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 purchasing utility's 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 utility's avoided unit and shall be equal to the value of a year-by-year deferral of the utility's avoided unit, calculated in accordance with section (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 purchasing utility's avoided unit when early capacity payments may commence. The early capacity payment date shall be an approximation, subject to Commission approval, of the lead time required to site and construct the utility's 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 utility's avoided unit, calculated in conformance with Section (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 utility's avoided unit. 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 subsection (3)(d)1 of this rule, value of deferral capacity payments.

3. Levelized capacity payments. Levelized capacity payments shall commence on the anticipated in-service date of the purchasing utility's avoided unit. The capital portion of capacity payments under this option shall consist of equal monthly payments over the term of the contract, calculated in conformance with Section (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 Section (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 subsection (3)(d)1 of this rule, value of deferral capacity payments.

4. Early levelized capacity payments. Each standard offer contract shall specify the earliest date prior to the anticipated in-service date of the utility's avoided unit when early levelized capacity payments may commence. The early capacity payment date shall be an approximation, subject to Commission approval, of the lead time required to site and construct the utility's avoided unit. The capital portion of capacity payments under this option shall consist of equal monthly payments over the term of the contract, calculated in conformance with Section (5)(c) of this rule. The fixed operation and

maintenance expense shall be calculated in conformance with Section (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 utility's avoided unit. 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 section (3)(d)1 of this rule, value of deferral capacity payments.

(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 utility's avoided unit. Prior to the in-service date of the avoided unit, the qualifying facility may sell as-available energy to the utility.

(b) To the extent that the avoided unit would have been economically dispatched, had the avoided unit been in the utility's dispatch, avoided energy costs associated with firm

energy shall be the energy cost of the purchasing utility's avoided unit. To the extent that the avoided unit would not have been economically dispatched, the avoided energy costs shall be the as-available avoided energy cost of the purchasing utility.

(c) The purchasing utility's avoided unit energy cost shall be defined as the cost of fuel, in cents per kilowatt-hour, which would have been burned at the utility's avoided unit plus variable operation and maintenance expense. The cost of fuel shall be calculated as the average market price of fuel, in cents per million Btu, associated with the utility's avoided unit multiplied by the average heat rate associated with the utility's avoided unit. The variable operating and maintenance expense shall be estimated based on the unit fuel type and technology of the utility's 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 difference in revenue requirements associated with deferring the avoided unit one year and shall be calculated as follows:

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$$VAC_m = \frac{1}{12}\left[KI_n \left[\frac{\left[1 - \frac{(1+ip)}{(1+r)} \right]}{\left[1 - \frac{(1+ip)^L}{(1+r)^L} \right]} \right] + O_n \left[\frac{1+io}{1+r} \right] \right]$$

Where, for a one year deferral:

VAC_m = utility's monthly value of avoided capacity, in dollars per kilowatt per month, for each month of year n;

K = present value of carrying charges for one dollar of investment over L years with carrying charges assumed to be paid at the end of each year;

I_n = total direct and indirect cost, in mid-year dollars per kilowatt including AFUDC but excluding CWIP, of the avoided unit with an in-service date of year n;

O_n = total first year's fixed operation and maintenance expense, in dollars per kilowatt per year, of the avoided unit deflated to the beginning of year n by i_o;

i_p = annual escalation rate associated with the plant cost of the avoided unit(s);

i_o = annual escalation rate associated with the operation and maintenance expense of the avoided unit(s);

r = annual discount rate, defined as the utility's incremental after tax cost of capital;

L = expected life of the avoided unit; and

n = year for which the avoided unit is deferred starting with its original anticipated in-service date and ending with the termination of the contract for the purchase of firm energy and capacity.

(b) Calculation of early capacity payments. Monthly early capacity payments shall be calculated as follows:

$$A_m = A_c \frac{(1 + ip)^{(m-1)}}{12} + A_o \frac{(1 + io)^{(m-1)}}{12} \quad \text{for } m=1 \text{ to } t$$

Where: A_m = monthly early capacity payments to be made to the qualifying facility for each month of the contract year n, in dollars per kilowatt per month;

i_p = annual escalation rate associated with the plant cost of the avoided unit;

i_o = annual escalation note associated with the operation and maintenance expense of the avoided unit(s);

m = year for which early capacity payments to a qualifying facility are made, starting in year one and ending in the year t;

t = the term, in years, of the contract for the purchase of firm capacity;

$$A_C = F \left[\frac{1 - \frac{(1 + ip)}{(1 + r)}}{1 - \frac{(1 + ip)^t}{(1 + r)^t}} \right]$$

Where: F = the cumulative present value in the year that the contractual payments will begin, of the avoided capital cost component of capacity payments which would have been made had capacity payments commenced with the anticipated in-service date of the avoided unit(s); and

r = annual discount rate, defined as the utility's incremental after tax cost of capital; and

$$A_o = G \left[\frac{(1+io)}{1-\frac{(1+io)^t}{(1+r)^t}} \right]$$

Where: G = The cumulative present value in the year that the contractual payments will begin, of the avoided fixed operation and maintenance expense component of capacity payments which would have been made had capacity payments commenced with the anticipated in-service date of the avoided unit.

(c) Levelized and early levelized capacity payments. Monthly levelized and early levelized capacity payments shall be calculated as follows:

$$P_L = \frac{F}{12} \times \frac{r}{1-(1+r)^{-t}} + O$$

Where: P_L = the monthly levelized capacity payment, starting on or prior to the in-service date of the avoided unit;

F = the cumulative present value, in the year that the contractual payments will begin, of the avoided capital cost component of the capacity payments which would have been made had the capacity payments not been levelized;

r = the annual discount rate, defined as the utility's incremental after tax cost of capital; and

t = the term, in years, of the contract for the purchase of firm capacity.

O = the monthly fixed operation and maintenance component of the capacity payments, calculated in accordance with Section (5)(a) for levelized capacity payments or with Section (5)(b) for early levelized capacity payments.

(6)(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 Fuel and Purchased Power Cost Recovery Clause if the contract is found to be prudent in accordance with subsection (2) of this rule.

(b) Firm energy and capacity payments made to a qualifying facility pursuant to a standard offer contract shall be

recoverable by a utility through the Fuel and Purchased Power Cost Recovery Clause upon acceptance of the contract by both parties.

(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 Fuel and Purchased Power Cost Recovery Clause 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), 366.05(9), F.S.

Law Implemented: 366.05(9), F.S.

History: New.

~~25-17.0831 Contracts.~~

~~A utility and a qualifying facility may enter into a contract which varies from the terms and conditions specified in these rules. 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 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.~~

~~History: New 5/13/81, amended 9/4/83, formerly 25-17.831.~~

25-17.0833 Planning Hearings.

(1) Upon petition or on its own motion, the Commission shall periodically, but not more often than every year, conduct planning hearings for the review and approval of optimal generation and transmission plans from a statewide and individual utility perspective and to set individual utility avoided costs for the purchase of firm capacity and energy from qualifying facilities and to approve standard offer contracts for each investor owned utility. In connection with these proceedings:

(a) Each electric utility in the State of Florida, or its designee, shall submit a 20-year optimal generation and a 10-year optimal transmission expansion plan for the State of Florida, without regard to individual utility service territories. These plans shall be the lowest cost present worth revenue requirements plans for the State of Florida taking risks and strategic concerns into account. Unless the Commission specifies other electrical planning subregions, the statewide plan shall separately reflect the electrical planning in the State of Florida of the Florida and the Southern subregions as established by the Southeastern Electric Reliability Council. Each electric utility's filing of a proposed statewide plan shall contain planning and forecast data specified by the Commission.

(b) Each electric utility in the State of Florida, or its designee, shall submit a 20-year optimal generation and a 10-year optimal transmission expansion plan for its individual service

area. These plans shall be the lowest cost present worth revenue requirements plans for each utility taking risks and strategic concerns into account. Each individual utility plan shall contain planning and forecast data specified by the Commission.

(2) Each plan required in sections (1)(a) and (1)(b) shall include, an analysis identifying each uncertified generating unit and associated transmission line addition to be added to its system within the next ten years pursuant to its most current long range generation and transmission expansion plan. The analysis shall include an estimate of the location, size, timing, cost, and operating characteristics of each uncertified generating unit addition and its associated transmission, and include all assumptions necessary to make these estimates. Each plan shall include, at a minimum, the following scenarios:

(a) a 20-year optimal generation and a 10-year optimal expansion including all existing, planned and proposed qualifying facilities; and

(b) a 20-year optimal generation and a 10-year optimal transmission expansion including only existing and proposed qualifying facilities, to the extent applicable, for which a contract for the purchase of capacity and energy has been signed.

(3) In conjunction with the filing of the plans required in subsection (1)(b), each public utility in the State of Florida shall file the following:

(a) a tariff or tariffs and a standard offer contract or contracts for the purchase of capacity and energy pursuant to Rule 25-17.0832; and

(b) a standard interconnection agreement.

Specific Authority: 366.04(3), 366.05(8), 366.051, 366.05(3), 350.127(2), F.S.

Law Implemented: 366.051, F.S.

History: New.

25-17.0834 Settlement of Disputes in Contract Negotiations.

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 energy and capacity, either party may apply to the Commission for relief.

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

Law Implemented: 366.051, F.S.

History: New.

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 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 Section (2) are reasonable.

(4) Upon a showing of credit worthiness, the ~~The~~ qualifying facility shall have the option of making monthly installment payments toward the full cost of interconnection. However, where the qualifying facility 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. Formal 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 not limited to, 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;

(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.

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

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

(b) Responsibility and Liability. The utility shall be responsible for utility owned facilities. The qualifying facility shall be responsible for the qualifying facility's entire system, ensuring adequate safeguards for other utility customers, utility personnel and equipment, and for the protection of its own generating system. The qualifying facility shall indemnify and save the utility harmless from any and all claims, demands, costs, or expense for loss, damage, or injury to persons or property (including the qualifying facility's generation system and the utility's system) caused by, arising out of, or resulting from:

1. Any act or omission by the qualifying facility, or qualifying facility's contractors, agents, servants and employees in connection with the installation or operation of the qualifying facility's generation system or the operation thereof in connection with the utility's system;
2. Any defect in, failure of, or fault related to the qualifying facility's generation system;
3. The qualifying facility's negligence or negligence of qualifying facility's contractors, agents servants and employees or;
4. Any other event or act that is the result of, or proximately caused by, the qualifying facility.

(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 original of~~ a liability insurance policy issued by a reputable insurance company authorized to do business in the State of Florida naming the qualifying facility as named insured, ~~jointly protecting and indemnifying the qualifying facility~~ and the utility as an additional 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 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 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 facility shall be responsible for coordination and synchronization of the qualifying facility's equipment with the utility's electrical system, and assumes all responsibility ~~responsibilty~~ 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. produce power in excess of 1/2 of the minimum utility customer requirements of the interconnected distribution or transmission circuit; or
2. produce power flows approaching or exceeding the thermal capacity of the connected utility distribution or transmission lines or transformers; or
3. adversely affect the operation of the utility or other utility customer's voltage, frequency or overcurrent control and protection devices; or
4. adversely affect the quality of service to other utility customers; or

5. 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) Frequency. 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 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 Factor. 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.

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. The utility shall supply the qualifying facility with a written cost estimate of all its required materials and labor 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 for Commission approval a standard agreement for interconnection by qualifying facilities. At a minimum, each utility's standard interconnection agreement shall be subject to review in conjunction with the hearings specified in Rule 25-17.0833.

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

Law Implemented: 366.05(9), F.S.

History: New 9/4/83, formerly 25-17.87.

~~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-construction-of-additional-central-station-

~~generating units in Florida. To enable a statewide market to 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 where it is needed. Therefore:~~

~~(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.~~

~~(2) The terms and other conditions for transmission service as described in subsection (1) that is provided by an investor owned utility shall be those approved by the Florida Public Service Commission.~~

~~(3) The charges, terms and other conditions for transmission service as described in subsection (1) that is provided by a municipal utility or Rural Electric Cooperative shall be those approved by the respective municipal utility or Rural Electric Cooperative.~~

~~(4) Each electric utility in Florida shall file a tariff containing, at a minimum, an estimate of the availability of and the charges, terms, and other conditions for transmission service as described in Subsections (2) and (3) with the Florida Public Service Commission within 90 days of the effective date of this rule.~~

~~(5) The Qualifying Facility shall be responsible for all costs associated with the provision of transmission service by any electric utility including:~~

~~(a) transmission service charges~~

~~(b) line losses incurred by the wheeling utility(s); and~~

~~(c) inadvertent energy flows resulting from the provision of transmission service.~~

~~This subsection shall apply in all circumstances, including sales pursuant to a Qualifying Facility's acceptance of a utility's standard offer in accordance with Rule 25-17.083(3) when it is necessary for the purchasing utility to resell and wheel the Qualifying Facility's energy and capacity to another electric utility in accordance with Rule 25-17.083(5). This subsection shall not apply, unless agreed to by the Qualifying Facility, when energy and capacity supplied by a Qualifying facility pursuant to a utility's standard offer is used by the purchasing utility as part of its own generating resources and then sold at a later date to another electric utility.~~

~~(6) An electric utility may deny, curtail, or discontinue transmission service to a Qualifying Facility 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.~~

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

Law Implemented: 366.051, 366.04(3), 366.055(3), F.S.

History: New 10/4/85, formerly 25-17.88, Amended 2/3/87.

~~25-17.0882 Transmission Service Not Required for Self-Service.~~

~~Public utilities are not required to provide transmission or distribution service to enable a retail customer to transmit electrical power generated by the customer at one location to the customer's facilities at another location unless the customer or the utility demonstrates that the provision of this service and the charges, terms, and other conditions associated with the provision of this service are not likely 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.~~

~~Specific Authority: 350.127(2), 366.05(1), F.S.~~

~~Law Implemented: 366.05(9), 366.04(3), 366.055(3), F.S.~~

~~History: New 10/4/85, formerly 25-17.882.~~

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 likely to result in higher cost electric service to the utility's

general body of retail and wholesale customer or adversely affect the adequacy or reliability of electric serve to all customers. The determination of whether transmission service for self service is likely to result in higher cost electric service shall be made using a Commission prescribed cost effectiveness methodology as a guideline.

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

Law Implemented: 366.051, F.S.

History: New.

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 (2) 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) An electric utility may deny, curtail, or discontinue transmission service to a Qualifying Facility 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.

Specific Authority: 366.051, 350.127(2), 366.055(3), F.S.

Law Implemented: 366.051, F.S.

History: New.

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.

(c) A solid waste facility shall include a facility which is not owned or operated by a local government but is operated on its behalf. When the power purchase agreement is between a non-governmental entity and an electric utility, the facility is operated by a private entity on behalf of a local government if:

1. 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 responsibility for the private entity's performance of the power purchase contract, or

b. Such other factors as the Commission deems appropriate, including, without limitation, the issuance of bonds by the local government to finance all, or a substantial portion, of the costs of the facility; the reliability of the solid waste technology; and the financial capability of the private owner and operator.

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.

(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 (5), after October 1, 1988.

(2) Except as provided in subsections (3) and (4) ~~(6)~~ of this rule, the provisions of Rules 25-17.080 - 25-17.089, Florida Administrative Code, are applicable to contracts for the purchase of energy and capacity from a solid waste facility.

(3) In addition to the requirements of Rule 25-17.083, Florida Administrative Code, each utility's standard offer for purchase of energy and capacity from a solid waste facility shall include the following:

(a) Use of a constant risk multiplier of 1.0 in lieu of the constant risk multiplier provided in Rule 25-17.083;

(b) At the election of the solid waste facility, allow for early payment of the operation and maintenance components of the capacity payments, up to a Commission designated number of years before the in-service date of the avoided units(s), calculated in accordance with Rule 25-17.083(3), F.A.C.; and

(c) At the election of the solid waste facility allow for either:

1. levelized capital payments calculated in accordance with subsection (4), or

2. early levelized capital payments, up to a Commission designated number of years before the in-service date of the avoided unit, calculated in accordance with subsection (4).

(4) Levelized capital payments shall be calculated as follows:

$$PL = P \times \frac{r}{12 \times 1 - (1+r)^{-t}}$$

Where: PL = the monthly levelized capital portion of the capacity payment, starting up to a-

~~Commission-designated-number-of-years-before the-in-service-date-of-the-avoided-unit(s);~~

~~P~~ = ~~the-cumulative-present-value,-in-the-year-that the-contractual-payments-will-begin,-of-the avoided-capital-cost-component-of-capacity payments-which-would-have-been-made-had-the capacity-payments-not-been-levelized;~~

~~r~~ = ~~the-annual-discount-rate,-defined-as-the utility's-incremental-after-tax-cost-of capital;-and~~

~~b~~ = ~~the-term,-in-years,-of-the-contract-for-the purchase-of-governmental-solid-waste-capacity.~~

(3)~~(5)~~ Any solid waste facility which has an existing firm energy and capacity contract in effect before October 1, 1988, shall have a one-time option to renegotiate that contract to incorporate any or all of the provisions of subsection ~~Subsection~~ (2) and (4)~~,-(3),-(4),-and-(6)~~ into their contract. This renegotiation shall be based on the unit that the contract was designed to avoid but applying the most recent Commission-approved cost estimates of Rule 25-17.083(7), Florida Administrative Code, for the same unit type and in-service year to determine the utility's value of avoided capacity over the remaining term of the contract.

(4)~~(6)~~ Because section 377.709(4), Fla. Stat., requires the local government to refund early capacity payments should a solid

waste facility be abandoned, closed down or rendered illegal, a utility may not require risk-related guarantees as required in Rule 25-17.0832, paragraph (2)(c), (2)(d), (3)(a)8, and (3)(a)(9) ~~a surety or equivalent assurance of repayment as required in Rule 25-17.083(3), Florida Administrative Code~~. However, a solid waste facility may provide such risk related guarantee if it chooses to ~~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 facilities electing advanced capacity payments.

Specific Authority: 350.127(2), 377.709(5), F.S.

Law Implemented: 366.051, 366.055(3), 377.709, F.S.

History: New 8/8/85, formerly 25-17.91, Amended 4/26/89.

NAME OF PERSON ORIGINATING PROPOSED RULE: Jennifer Harvey, Division of Electric and Gas

NAME OF SUPERVISOR OR PERSON(S) WHO APPROVED THE PROPOSED RULES: Florida Public Service Commission

DATE PROPOSED RULES APPROVED: November 21, 1989

If any person decides to appeal any decision of the Commission with respect to any matter considered at the rulemaking hearing, if held, a record of the hearing is necessary. The appellant must

ensure that a verbatim record, including testimony and evidence forming the basis of the appeal is made. The Commission usually makes a verbatim record of rulemaking hearings.

Rules 25-17.081,
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, 25-17.0883, 25-17.089,
25-17.091
Docket No. 891049-EU

STATEMENT OF FACTS AND CIRCUMSTANCES
JUSTIFYING RULE

The Commission is proposing 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.

STATEMENT ON FEDERAL STANDARDS

The Federal standards can be found in the Public Utility Regulatory Policies Act (PURPA) and in the regulations adopted by the Federal Energy Regulatory Commission (FERC) to implement the Act. There has been no evidence that these proposed rules establish standards more restrictive than Federal standards, as

far as we can determine. However, there has been a question reaised about whether revisions to Rule 25-17.082(3) which restrict a customer's selection of billing methods would be more restrictive than Federal guidelines; and there may be an issue as to whether the proposed rule on transmission, Rule 17.089, would be more stringent. A rulemaking hearing has been set for January 9-11, 1989. These issues will be addressed. At this point, these issues are not areas of direct Federal preemption, but instead are "gray areas."

STATEMENT OF IMPACT ON SMALL BUSINESS

There has been no impact on small business determined.