COMMISSION WORKSHOP

ON

UNDOCKETED MERCHANT PLANT STUDY

Florida Public Service Commission

May 13, 1999, 10:00 a.m.

Betty Easley Conference Center, Room 148

4075 Esplanade Way

Tallahassee, Florida 32399-0850

TABLE OF CONTENTS

Any person requiring some accommodation at this workshop because of a physical impairment should call the Division of Records and Reporting at (850) 413-6770 at least 48 hours prior to the workshop. Any person who is hearing or speech impaired should contact the Florida Public Service Commission by using the Florida Relay Service, which can be reached at 1-800-955-8771 (TDD).

JURISDICTION

Jurisdiction is vested in this Commission pursuant to Chapter 366, Florida Statutes. The workshop will be governed by the provisions of that Chapter and Chapters 25-6, 25-17, 25-22 and 28-106, Florida Administrative Code.

By DIRECTION of the Florida Public Service Commission, this 12th day of April, 1999.

BLANCA S. BAYÓ, Director
Division of Records and Reporting

(S E A L)

LJP

A G E N D A

FLORIDA PUBLIC SERVICE COMMISSION WORKSHOP

UNDOCKETED - MERCHANT PLANT STUDY

Thursday, May 13, 1999
Room 148, Betty Easley Conference Center
4075 Esplanade Way
Tallahassee, Florida
10:00 a.m. - 5:00 p.m.

The purpose of this Commission Workshop is to explore issues of concern raised by Commissioners regarding merchant plant activity in Florida. Topics raised by Commission staff and other interested persons will also be discussed.

10:00 a.m.	Introductory Remarks by Staff (Jenkins)
10:30 a.m.	Discussion of Topics
12:00 p.m.	Lunch
1:00 p.m.	Continuation of Discussion of Topics
5:00 p.m.	Adjourn

This meeting is open to the public.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

NOTICE OF COMMISSION WORKSHOP

TO

ALL ELECTRIC UTILITIES

AND

ALL OTHER INTERESTED PERSONS

UNDOCKETED
MERCHANT PLANT STUDY

ISSUED: April 12, 1999

NOTICE is hereby given that the Staff of the Florida Public Service Commission will conduct a workshop, in the above-referenced undocketed matter, to which all persons are invited, at the following time and place:

10:00 a.m., Thursday, May 13, 1999
Room 148, Betty Easley Conference Center
4075 Esplanade Way
Tallahassee, Florida

PURPOSE

The purpose of this workshop is to explore issues relative to merchant power plants in Florida.

If you wish to comment but cannot attend the workshop, please file your comments with the Director, Division of Records and Reporting, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, on or before May 6, 1999, specifically referencing Undocketed Merchant Plant Study.

A copy of the agenda for this workshop is attached. Additional copies may be obtained by writing to the Director, Division of Records and Reporting, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850.

AGENDA

FLORIDA PUBLIC SERVICE COMMISSION

UNDOCKETED - MERCHANT PLANT STUDY

Thursday, May 13, 1999
Room 148, Betty Easley Conference Center
4075 Esplanade Way
Tallahassee, Florida
10:00 a.m. - 5:00 p.m.

The purpose of this Commission Workshop is to explore issues of concern raised by Commissioners regarding merchant plant activity in Florida. Topics raised by Commission staff and other interested persons will also be discussed.

I. Introductory remarks by Staff (Jenkins)

   A. Purpose of workshop (history and future)

   B. Proposed Agenda

II. Presentation of Requests for Cancellation

   A. Tampa Electric Company

   B. Florida Power Corporation

III. Discussion of proposed Merchant Plant related topics as categorized by Staff

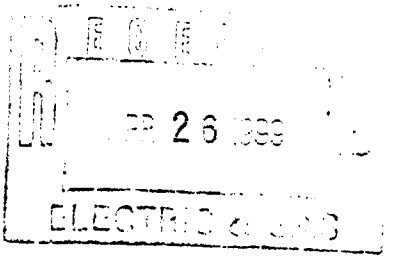
IV. Presentation of Comments addressing Merchant plant related topics

V. Commission Direction/Remaining Matters

VI. Adjourn

TECO ENERGY

April 26, 1999



Chairman Joe A. Garcia
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Merchant Plant Study (Undocketed)

Dear Chairman Garcia:

Tampa Electric requests that the undocketed staff workshop regarding the general subject of merchant plants not be conducted as scheduled on May 3, 1999. Attached for your reference is a copy of the April 6, 1999 notice regarding the proposed workshop. Our request also applies to the Commission workshop scheduled for May 13.

Notices of Appeal of the Commission's Final Order in the Duke New Smyrna Beach Need Determination proceeding were filed last week in the Supreme Court of Florida and in the First District Court of Appeals. The final resolution of those appeals will impact any issue that could be the subject of a merchant plant workshop at this time.

Proceeding now to address issues that are intertwined with legal issues on appeal would be premature and inappropriate. Preservation of the legal rights of all parties and the worthy goal of administrative efficiency strongly support postponing any decision to conduct Staff or Commission workshops until after final resolution of the pending appeals.

Sincerely,

Thomas L. Hernandez
Vice President
Regulatory Affairs

cc: Commissioner Julia L. Johnson
Commissioner J. Terry Deason
Commissioner E. Leon Jacobs, Jr.
Commissioner Susan F. Clark
Joseph D. Jenkins
Leslie Paugh

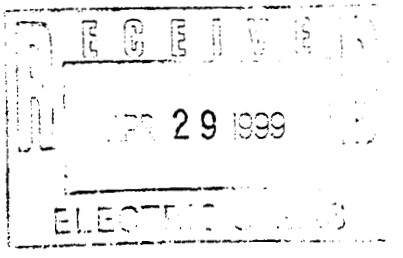
Attachment

5

TECO ENERGY, INC.
101 NORTH MONROE STREET, SUITE 1060 TALLAHASSEE, FL 32301
AN EQUAL OPPORTUNITY COMPANY
(850) 681-6785
FAX (850) 681-6654
HTTP://WWW.TECOENERGY.COM

George L. Campbell
Vice President, Public Affairs

April 26, 1999



Chairman Joe A. Garcia
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Dear Chairman Garcia:

We have reviewed the letter from Tampa Electric Company to you dated April 23, 1999, and wish to inform you that Florida Power concurs with Tampa Electric's request that the upcoming staff and Commission workshops regarding merchant plant issues be postponed.

Sincerely,

Cc: Commissioner Julia L. Johnson
Commissioner J. Terry Deason
Commissioner E. Leon Jacobs, Jr.
Commissioner Susan F. Clark
Joseph D. Jenkins
Leslie Paugh

6

Categorization of Issues/Topics

to be Discussed at the

May 13, 1999, Commission Workshop

Room 148 Easley Bldg

10:00 a.m.

Notes:

(1) As agreed to at the May 3, 1999 staff workshop, staff grouped all issues submitted as of that date into numbered unnamed categories. Participants could not agree on staff naming the categories.

(2) Workshop participants agreed to make opening remarks addressing any or all categories and issues in each category.

(3) Tampa Electric Company and Florida Power Corporation hope to begin the workshop arguing that it should be cancelled because of the Duke Order appeals.

(4) The Commission should decide at the May 13, 1999 Commission Workshop whether to proceed with the Reserve Margin docket, Docket No. 981890-EU.

Category 1

FPC III-1	What is a merchant plant?
FPC III-2	Would a merchant plant still quality as a merchant plant if it entered into a contract with a utility?
FPL 15*	Are Merchants capable of capturing economic benefits for their stockholders in excess of those permitted by the FPSC for regulated utilities?
FPL 20*	What are the impacts of Merchant Plants on retail electric customers?
FECA 1	Does a merchant plant which is certified for need by the Florida Public Service Commission have an obligation to sell a portion (or any) of its generating capability to Florida electric utilities for the benefit of their end-use consumers?
FICA 1	FICA's primary interest in this proceeding is to preserve the right of its members to self-generate electricity by means of Qfs or otherwise.

Category 2

FPC I-1	Does the Commission have statutory authority to promulgate rules regulating the development of merchant plants in Florida?
FPC I-2	May the Commission establish policy concerning the development of new merchant plants in this State by some means other than rulemaking?
FPC I-3	Does the Commission have any basis in its enabling statutes for discriminating among different types of new merchant plants for purposes of need determinations (e.g., projects that have a photovoltaic component, plants with different heat rates or emission standards)?
FPC I-4	What is the appropriate role of the Legislature in addressing merchant plant issues?
FPC I-5	What jurisdictional authority would the Commission have over merchants once they are constructed?
FPL 7	Which of the following actions are among the FPSC powers under the "Grid Bill"? (See following issues 7a-7h).
FPL 7a	to order an electric utility to build or otherwise acquire generating capacity to serve its own firm retail electric service obligations

FPL 7b	to order an electric utility to build or otherwise acquire generating capacity to serve its own firm wholesale electric service obligations.
FPL 7c	to order an electric utility to build or otherwise acquire generating capacity to serve the firm electric retail service obligations of another electric utility
FPL 7d	to order an electric utility to build or otherwise acquire generating capacity to serve the firm electric wholesale service obligations of another electric utility
FPL 7e	to order an electric utility to build or otherwise acquire transmission to serve its own firm retail electric service obligations
FPL 7f	to order an electric utility to build or otherwise acquire transmission to serve its own firm wholesale electric service obligations
FPL 7g	to order an electric utility to build or otherwise acquire transmission to serve the firm electric retail service obligations of another electric utility
FPL 7h	to order an electric utility to build or otherwise acquire transmission to serve the firm electric wholesale service obligations of another utility
FPL 8	Has the Commission ever defined or addressed the term "benefits" or "mutual benefits" as used in the Grid Bill?
FPL 9	Does the Commission also have jurisdiction over an EWG to prescribe uniform systems and classifications of accounts and prescribe a rate structure as addressed by F.S. §366.04 (2)(a) and (b) or address territories as specified by 366.04 (2)(d) and (e)?
FPL 10	What obligations to provide electric services does an EWG have independent of any bilateral agreement for such service?
FPL 11	What obligations do cogenerators and small power producers and others owning generating facilities have under the Grid Bill?
FPL 19*	Does the Commission have the authority to require Merchants to sell, the output from their plants, at any time, and under any circumstances, and if so, at what rates?
FPL 20a*	Does the FPSC have the same authority over Merchant Plants as it does over Utilities?
FPL 20b*	Do utilities and Merchant Plants have the same obligations?

FPL 20c*	Do utilities and Merchant Plants follow the same rules for interconnection and operations?
FPL 20d*	If the rules are different, do these different rules result in additional costs being imposed on retail customers?
OUC 2	Should existing Florida Utilities be relieved of their obligation to serve retail customers when, in the interest of the utility, it is not cost effective to do so?

Category 3

FPC II-1	What is the purposes of this workshop?
FPC II-2	What, if any, problem is the Commission proposing to address?
FPC II-4	If the Commission does have a concern about utility site plans or FRCC methodology, what is the appropriate means to address that concern?
FPC II-5	What steps have been taken to address that concern?

Category 4

Staff 1	Whether merchant capacity should be considered to supplement the FRCC's 15% reserve margin. If so, what amount of supplementary reserve margin is considered reasonable and prudent for reliability purposes?
Staff 11	Appropriate Peninsular Florida minimum percent planning reserve margin. Percent of firm load unserved when another Christmas 1989 occurs.
Staff 15	Continuing, closing, or deferring until 2000, Docket No. 981890-EU, Generic Investigation Into The Aggregate Electric Utility Reserve Margins Planned For Peninsular Florida.
OUC 1	Should merchant plants be required to meet the 15% reserve margin requirements consistent with Florida utility responsibilities?
FPC II-3	If the Commission is proposing to address the need for generating capacity in Florida, does the Commission have a basis to conclude that existing utility Ten Year Site Plans and FRCC methodology are inadequate?
FPC II-6	Should utilities build capacity sufficient to cope with Christmas 1989 weather conditions?

FPC III-3	Why does the Commission believe that merchant plants are needed?
FPC III-7	What impact would merchants have on statewide reserve margins?
FPC III-8	What impact would merchants have on individual utility reserve margins?
FPC III-18	What rules would govern merchant sales during statewide emergencies?
FPL 1	How does actual loss of load a) for FPL and b) for Peninsular Florida for the last fifteen years compare to a loss of load reliability level of one day in ten years?
FPL 4	What reports has the PSC issued in connection with the so-called "Christmas freeze"?
FPL 6	On what occasions has the Commission established reliability criteria that public utilities or electric utilities, subject to its jurisdiction, must meet.

Category 5

Staff 2	The number of merchant plants which should be permitted in Florida and the maximum amount of supplementary reserve margin considered reasonable and prudent for reliability purposes.
Staff 3a	Consideration of a selection criterion for subscription under a merchant power plant MW cap based on number of proposed megawatts of solar photovoltaic capacity.
Staff 3b	Consideration of selection criterion based on efficiency ratings of plants.
FPC III-4	How many are needed?
FPC III-5	Does the Commission have any basis to impose a cap on the number or size of merchant plants entering the State?
FPC III-6	How would the Commission determine who gets to build merchant plants?
CFR 1-6	See FAX to Joe Jenkins from The Corporation for Future Resources (CFR), dated April 20, 1999.

Category 6

Staff 9	Minimum reporting requirements for entities owning merchant transmission, generation or distribution. (For example, size, type and location.)
FPL 2	What reporting rules are there at the state and federal level for loss of load?
FPL 3	As to reporting rules for loss of load, to what extent do they apply to municipals, REA's and joint power authorities.
FPL 5	What annual or other periodic reports has the PSC issued to the legislature concerning the adequacy of the 10-year site plans?
FPL 12	Does Rule 25-22.082 apply to Duke re: RFP's?
FPL 13*	How is Merchant capacity to be treated in future need proceedings?
FPL 14*	Should investor-owned public utilities with an obligation to serve be required to purchase any of the Merchant Plant's output?
FPC II-3	If the Commission is proposing to address the need for generating capacity in Florida, does the Commission have a basis to conclude that existing utility Ten Year Site Plans and FRCC methodology are inadequate?
FPC III-9	What impact would merchants have on current utility generation expansion plants (Ten Year Site Plans)?
FPC III-20	What impact would merchants have on existing rules and policies, e.g., the Ten Year Site Plan process, the bid rule?

Category 7

Staff 12	Diversity of ownership with respect to market power issues.
Staff 14	Florida retail-serving electric utilities being allowed to build merchant plants in Florida and being allowed to charge market prices.
FPL 17*	Should investor-owned public utilities, with an obligation to serve, be able to obtain a determination of need under the same basis and justification as Merchants?

Developers' Group Issue 1*

The necessary market structure that is conducive to merchant plant development and/or integration into Florida's bulk power supply supply system.

Category 8

Staff 4	The impact, if any, of merchant plants on investment in, and operation of, existing plants in utilities' rate base.
FPC III-11	What impact would merchants have on the retirement of existing power plants in Florida?
FPC III-12	What impact would merchants have on stranded costs?
FPC III-21	What would be the short-term and long-term financial impact of merchants on existing investor-owned utilities?
FPC III-22	What impact will a future technology shift in generation have on proposed merchant plants?

Category 9

FPC III-16	What impact would merchant plants have on the transmission system in the State?
FPL 20e*	What "services" must a Merchant Plant purchase or otherwise provide for in order to participate in the "wholesale" market?
FPL 20f*	Are these "services" regulated or unregulated?
FPL 20g*	What are the costs of these services and who pays for them?
FPL 20h*	If a utility is obligated to provide some or all of these "services" are the rates fully compensatory to that utility's retail customers?
FPL 20i*	If the rates are not fully compensatory, should the Commission be encouraging new entrants that will take such services and therefore shift costs to retail customers?
FPL 20j*	Could Merchant Plants result in new additional obligations being imposed on utilities to support their participation in the market? If so, what is the cost of those obligations, who regulates them and who pays for them?

Category 10

Staff 6	Establishment of a wholesale, market price, merchant cost-effectiveness standard. Reporting requirements for wholesale market prices for the purpose of determining the optimum level of merchant power plants.

FPC III-10	What impact would merchants have on the dispatch of existing generation in the State?
FPC III-13	What impact would merchants have on retail ratepayers?
FPC III-14	What impact would merchant plants have on the current level of economy interchange sales of existing investor-owned utilities and associated benefits that currently accrue to Florida's retail ratepayers?
FPL 16*	If a Merchant displaces an inter-utility sale, are the customers in Florida benefitting equally?

Category 11

Staff 7a	Use of allowable ambient air pollution increments by merchant power plants.
Staff 7b	Use of available power plant sites and other finite resources.
FPC III-15	What impact would merchant plants have on the environment of the State?
FPC III-23	If merchant plants are built and are rendered unprofitable by technology advances or market saturation, what impact would this have on the environment?
FPL 18*	Will the use of limited resources and infrastructure in Florida by Merchants affect investor-owned public utilities with an obligation to serve, ability to use that infrastructure for public purpose? (gas transportation, transmission line capacity, air, water, land, etc.)

Category 12

Staff 5a	Job creation/enhancement.
Staff 5b	Increase in state and local tax base.

Category 13

Staff 8	Impact, if any, of merchant plants on conservation goals and plans.
FPC III-19	What impact would merchants have on DSM programs and the DSM goals process in Florida?

FPL 21 Will Merchant Plants frustrate DSM/Conservation programs goals of improved efficiency and/or power plant avoidance by either building additional capacity or lowering costs that must be considered in utilities cost-effectiveness calculations?

FPL 22* Should utility conservations cost-effectiveness tests be performed anticipating lower marginal costs in Florida due to Merchants? Will this result in same or less conservation measures by utilities?

Category 14

Staff 13 Fuel diversity - what is it and is it needed?

FPC III-17 What impact would merchants have on the fuel supply system in the State?

*Issues submitted at the May 3, 1999 staff workshop that were numbered by staff.

BEFORE THE PUBLIC SERVICE COMMISSION

Merchant Plant Workshop	)	May 13, 1999
	)	
	)	
	)	

JOINT COMMENTS OF
DUKE ENERGY NEW SMYRNA BEACH POWER COMPANY,
CONSTELLATION POWER DEVELOPMENT,
RELIANT ENERGY, AND U.S. GENERATING COMPANY

With respect to many of the topics they wish to address, Duke Energy New Smyrna Beach Power Company Ltd., L.L.P. (Duke New Smyrna), Constellation Power Development (Constellation), Reliant Energy (Reliant), and U.S. Generating Company (USGen) find that their positions are aligned. To facilitate a more efficient presentation, the developers have decided to sponsor these comments jointly. The developers reserve the opportunity to supplement these comments with individual remarks or to address other topics, as their individual interests and separate positions may require.

Duke New Smyrna, Constellation, Reliant, and USGen understand that one of the chief purposes of this workshop is to address certain policy concerns that arose in the form of questions from Commissioners during the Duke New Smyrna Beach case. These concerns were faithfully recorded in the Tentative Issue List that Staff prepared and attached to the Notice of the May 3 Staff workshop. During the May 3 workshop, numerous additional issues were proffered, many of which -- in the opinion of these developers -- are irrelevant to the effort to establish a dialogue on the legitimate subjects previously raised by the Commissioners. These joint comments will be limited -- not only to those topics on which the sponsoring developers have found common

ground -- but also to those topics that the developers believe are germane and relevant to the purpose of the workshop.

We begin with a general observation, on which we will elaborate in responses to individual topics. In the Duke New Smyrna Beach case, the Commission recognized that merchant capacity can play a valuable role in creating a more competitive wholesale market that will deliver cheaper and more reliable service to consumers. However, in general, we believe the tenor of some of Staff's tentative issues is inclined too much toward the view that the Commission needs to strictly limit and control the development of merchant capacity to avoid undesirable results.

Duke New Smyrna, Constellation, Reliant, and USGen submit that, after an appropriate analysis, the Commissioners will realize that their interests, and the interests of the consumers, coincide with the interests of merchant developers. On behalf of consumers, the Commission wants the quantity of merchant capacity that yields economic benefits for them; no more and no less. We urge the Commission to make consumers' interests the paramount consideration as it considers the role that merchant capacity should play in the wholesale market. If the Commission does, it will look to the market as the appropriate optimizing mechanism, and it will structure a regulatory framework that is conducive to the ability of developers to respond to the market.

Duke New Smyrna, Constellation, Reliant, and USGen provide the following comments to the categories of issues prepared by Staff:

Category 1

FPC III-1 What is a merchant plant?

FPC III-2 **Would a merchant plant still qualify if it entered into a contract with a utility?**

Response: A merchant plant is a power generation facility whose owners bear all development, financial, business and operational risks, and whose electrical output is sold exclusively into the competitive wholesale market. Because a merchant plant is not part of a utility's rate base, the utility's retail customers are shielded from development, construction, interest rate, fuel, operating, and other risks. Further, a merchant plant is not necessarily limited in sales to a single wholesale customer; rather, it will likely seek contracts with varying time frames with multiple wholesale customers throughout Florida. Finally, a merchant plant is characterized by its performance. Because it sells into a competitive market whereby cost and reliability considerations are paramount to a merchant plant's financial success, consumers are assured that they will receive electricity at the lowest possible prices and at the highest levels of reliability.

The essence of a merchant plant is that the developer accepts the investment and business risk associated with constructing and operating the plant; it is not in the rate base of a retail-serving utility. Once the developer has contracted to supply the capacity, energy, and, if applicable, ancillary services of the unit to wholesale customers such as utilities, municipal electric authorities, and electric cooperatives, the developer will have managed that initial risk, but only because the purchasers found it in their customers' best interests to obtain the merchant's capacity, energy, and other services.

FPL 20 **What are the impacts of merchant plants on retail electric customers?**

Response: A prudent retail-serving utility will purchase capacity, energy, and other services from a merchant supplier if that capacity and energy is advantageous (cost-effective) when compared to the purchaser's alternatives, e.g., its own generation resources or other purchase options. Accordingly, retail customers will benefit from merchant plants because merchants will impose downward pressure on wholesale power costs, thereby reducing retail-serving utilities' purchased power costs, which reductions are in turn passed through to retail customers. Merchant plants will also improve the reliability of Florida's power supply system, while relieving retail customers of capital, investment, and operating risk. To be clear, merchant plants will sell only to the wholesale market.

FPC I-3 **Does the Commission have any basis in its enabling statutes for discriminating among different types of new merchant plants for purposes of need determinations (e.g. projects that have a photovoltaic component, plants with different heat rates or emission standards)?**

Response: The proper role of the Commission is to ensure that merchant projects are developed by qualified market participants who will agree to abide by the rule established by an appropriately governed regional transmission organization and in accordance with all necessary State permits. The Commission should rely upon market forces (proven in other areas of the country) to "discriminate" among or between merchant projects to ensure that only those projects that can ultimately benefit consumers are built.

FPL 10 **What obligations to provide electric service does an EWG have independent of any bilateral agreement for such service?**

Response: In accordance with what we believe should be a generator's obligation to become a member and abide by the duly established rules of an appropriately governed regional transmission organization, such generators (including EWG's) will be required to operate in the best interest of the interconnected grid when it is called upon for support in emergency situations.

OUC 2 **Should existing Florida utilities be relieved of their obligation to serve retail customers when, in the interest of the utility, it is not cost effective to do so?**

Response: [This topic is irrelevant to the purpose of the workshop.] No. Regulated utilities have an obligation to serve all the retail load in their service areas. The Commission affords the regulated utility an opportunity to earn a return on its investment and to recover its reasonable costs. Outside of an environment of retail customer choice, there is no reason why a utility should be allowed to avoid its obligation to serve. However, one of the ways to lower electric prices is to have a competitive and vibrant wholesale market.

Category 3

FPC II - 1 **What is the purpose of this workshop?**

Response: We understand the purpose to be to allow interested parties to engage in a dialogue on the implications of the Duke New Smyrna Beach decision for future applications for merchant plants, and to address the questions raised by the Commissioners in their deliberations on the New Smyrna Beach Power Project

need determination. We believe that the implications are positive for Florida's electric customers because merchant plants will enhance system reliability and reduce wholesale power costs, thereby also reducing retail power supply charges, at no risk to Florida's electric customers.

FPC II - 2 **What, if any, problem is the Commission proposing to address?**

Response: Correctly perceived from the perspective of consumers, the willingness of developers to place efficient new generators in the wholesale market at their own risk presents an opportunity, not a problem. The appropriate question is how to structure a framework that will maximize the benefits that merchants can provide to the ultimate consumers. These benefits include lower costs, enhanced reliability, and environmental improvements -- all resulting from competition in the generation sector.

Category 4

Staff 1 **Whether merchant capacity should be considered to supplement the FRCC's 15% reserve margin. If so, what amount of supplementary reserve margin is considered reasonable and prudent for reliability purposes?**

Response: "Reserve Margin" is a measurement of generation capacity above some identified load requirement after prudent consideration of appropriate contingencies. This calculation is intended to be a "floor" for reliability purposes and not a "ceiling." Once the established reserve margin in a region is attained, there is no need to monitor, regulate, or classify additional reserves, especially when those reserves are from facilities not included in rate base. In fact, as long as the additional

reserves above an established margin are constructed and operated at the expense of the developer, and not the ratepayer, these additional reserves simply add to reliability within the region they serve. Also, reserve margin requirements are a responsibility of load-serving entities (LSEs) such as utilities who serve retail customers. Practically speaking, in a competitive wholesale market, LSEs will look to merchant generators to help them meet their reserve margin obligations.

Staff 11 **Appropriate Peninsular Florida minimum percent planning reserve margin. Per cent of firm load unserved when another Christmas 1989 occurs.**

Response: See response to Staff 1 above. This issue is properly addressed in Docket No. 981890-EU, the Reserve margin docket.

OUC 1 **Should merchant plants be required to meet the 15% reserve margin requirements consistent with Florida utility responsibilities?**

Response: See response to Staff 1, above. This issue is properly addressed in Docket No. 981890-EU, the Reserve Margin docket.

FPC II-3 **If the Commission is proposing to address the need for generating capacity in Florida, does the Commission have a basis to conclude that existing utility Ten-Year Site Plans and FRCC methodology are inadequate?**

FPC II-6 **Should utilities build capacity sufficient to cope with Christmas 1989 weather conditions?**

Response: See response to Staff 1, above. These issues are properly addressed in Docket No. 981890-EU, the Reserve Margin docket.

FPC III-3 **Why does the Commission believe that merchant plants are needed?**

Response: Based on the decision in the Duke New Smyrna Beach case, these developers conclude the Commission has recognized the benefits that merchant capacity confer on ratepayers: lower costs and additional reliability. If risk free, they are beneficial, regardless of the criteria employed.

FPC III-7 **What impact would merchants have on statewide reserve margins?**

FPC III-8 **What impact would merchants have on individual utility reserve margins?**

Response: It is important to bear in mind that a reserve margin standard is a floor. Any measure that increases actual reserve margin without increasing risk to ratepayers is a welcome development for consumers. A utility that contracts to purchase from a merchant developer would include the purchase in its available resources. When individual resources are aggregated, the amount of committed merchant power would increase both the utilities' and the indicated statewide reserve. Uncommitted merchant capacity will improve statewide (or Peninsular-wide) reserve margins and will also improve other reliability calculations, e.g., LOLP.

FPC III-18 **What rules would govern merchant sales during statewide emergencies?**

Response: See response to FPL 10, above.

Category 5

Staff 2 **The number of merchant plants which should be permitted in Florida and the maximum amount of supplementary reserve margin considered reasonable and prudent for reliability purposes.**

Staff 3a **Consideration of a selection criterion for subscription under a merchant power plant MW cap based on number of proposed megawatts of solar photovoltaic capacity.**

Staff 3b **Consideration of selection criterion based on efficiency ratings of plants.**

FPC III-4 **How many are needed?**

FPC III-5 **Does the Commission have any basis to impose a cap on the number or size of merchant plants entering the State?**

FPC III-6 **How would the Commission determine who gets to build merchant plants?**

CFR 1-6 **See FAX to Joe Jenkins from The Corporation for Future Resources (CFR), dated April 20, 1999.**

Response: All of the topics in Category 5 relate to the subject of limiting the number of merchant plants based on selection criteria. The emphasis is misplaced. The number of merchant plants that should be permitted is the number that can provide benefits to consumers; it will be determined by the market. The Commission should gauge proposals on their individual merits.

Category 6

Staff 9 **Minimum reporting requirements for entities owning merchant transmission, generation or distribution. (For example, size, type and location.)**

FPL 13 **How is merchant capacity to be treated in future need proceedings?**

FPC III-9 **What impact would merchants have in current utility generation expansion plans (Ten-Year Site Plans)?**

FPC III-20 **What impact would merchants have on existing rules and policies, e.g., the Ten-Year Site Plan process, the bid rule?**

Response: Other than with their interconnection requirements, Duke New Smyrna, Constellation, Reliant, and USGen have no plans to engage in "merchant transmission" activities, and are responding to these issues as developers of merchant generation. In all future need proceedings, the applicant will have the burden to show that its proposed plant meets the statutory criteria. Prior to filing an application for a determination of need, an investor-owned utility will be required to demonstrate that it has issued a Request for Proposals and its project is the most cost-effective alternative. If existing merchant plants avail themselves of the opportunity to respond to the RFP, the applicant must factor such merchant power into its evaluation of cost effectiveness.

With respect to the utilities' Generation Expansion Plans, a utility would include any merchant capacity for which it contracts on a firm basis in the resources reported in the Ten-Year Site Plan. Uncommitted merchant capacity should be incorporated into utilities' LOLP and related calculations as potentially available uncommitted capacity, just as the possibility of being able to purchase capacity from other retail-utility-owned resources is presently factored into such calculations.

Category 7

Staff 12 **Diversity of ownership with respect to market power issues.**

Staff 14 **Florida retail-serving electric utilities being allowed to build merchant plants in Florida and being allowed to charge market prices.**

FPL 17* **Should investor-owned public utilities, with an obligation to serve, be able to obtain a determination of need under the same basis and justification as Merchants?**

Developers' Group Issue 1*

The necessary market structure that is conducive to merchant plant development and/or integration into Florida's bulk power supply system.

Response: Any player should be able to build merchant capacity. The ability of retail-serving electric utilities to apply for a determination of need and build a merchant plant would be contingent on the willingness of the utility to accept all of the risk associated with the plant, promulgation of measures (such as a code of conduct and structural separation), and the ability of the Commission to ensure that none of that risk is transferred to retail ratepayers through the ratemaking process. To maximize benefits that merchants can provide to consumers, the Commission should promote a framework characterized by: 1) genuine open access overseen by an independent regional transmission operator; and 2) a liquid wholesale market whose chief attributes are price transparency, vigorous trading, numerous buyers and sellers, multiple products and transactions, and minimal barriers to market entry.

Category 9

FPC III-16 **What impact would merchant plants have on the transmission system in the State?**

Response: The transmission impact of a merchant plant will be evaluated by the transmission provider. Like any other independent, a merchant developer would be required

to pay in accordance with the current methodology for recovery of impacts to the grid.

Category 10

Staff 6 **Establishment of a wholesale, market price, merchant cost-effectiveness standard. Reporting requirements for wholesale market prices for the purpose of determining the optimum level of merchant power plants.**

Response: We do not believe that reported wholesale prices would constitute an appropriate mechanism for determining the optimal level of merchant power plants. As was demonstrated in the Duke New Smyrna Beach case, a more appropriate measure would be the ability of a proposed merchant plant to economically displace existing generating capacity, or economically serve new load.

FPL III-10 What impact would merchants have on the dispatch of existing generation in the State?

Response: Where merchant plants are more efficient and cost-effective than existing generation resources, they will enhance the overall dispatch efficiency of Florida's generation resources. In other words, in a competitive market, efficient, cost-effective merchant generation can be dispatched ahead of existing, less efficient and less cost-effective resources. Where merchant plants are not as efficient and cost-effective as other available resources, their presence will have no impact on the dispatch order.

Category 11

Staff 7a **Use of allowable ambient air pollution increments by merchant power plants.**

Staff 7b **Use of available power plant sites and other finite resources.**

FPC III-15 **What impact would merchant plants have on the environment of the State?**

FPC III-23 **If merchant plants are built and are rendered unprofitable by technology advances or market saturation, what impact would this have on the environment?**

FPL 18* **Will the use of limited resources and infrastructure in Florida by Merchants affect investor-owned public utilities with an obligation to serve, ability to use that infrastructure for public purpose? (gas transportation, transmission line capacity, air, water, land, etc.)**

Response: By operating new, state-of-the-art plants that must conform to stringent standards, merchant plants will likely result in a net gain for the environment. Moreover, existing retail-serving utilities have no priority right to such infrastructure.

Category 12

Staff 5a **Job creation/enhancement.**

Staff 5b **Increase in state and local tax base.**

Response: To the extent that merchant plants drive the cost of wholesale power down by increasing competition in the wholesale market, they will stimulate economic growth and development. To the extent that the advent of a policy that allows merchants to participate fully in the market results in more total capacity being built than if market entry were constrained, there will be a corresponding effect on the tax base.

Category 13

Staff 8 **Impact, if any, of merchant plants on conservation goals and plans.**

FPC III-19 **What impact would merchants have on DSM programs and the DSM goals process in Florida?**

FPL 21 **Will Merchant Plants frustrate DSM/Conservation programs goals of improved efficiency and/or power plant avoidance by either building additional capacity or lowering costs that must be considered in utilities cost-effectiveness calculations?**

FPL 22 **Should utility conservations cost-effectiveness test be performed anticipating lower marginal costs in Florida due to Merchants? Will this result in same or less conservation measures by utilities?**

Response: There should be no significant impact on the goals process. However, the price transparency provided by the competitive wholesale market may facilitate better conservation decisions.

Category 14

Staff 13 **Fuel diversity - what is it and is it needed?**

FPC III-17 **What impact would merchants have on the fuel supply system in the State?**

Response: The topic of fuel diversity is not appropriately limited to merchants: If anything, the development of merchant plants would create incentives to improve the fuel supply system in the State, because the fuel supply industry is market-driven as well. With respect to the question of back-up fuel, the decision as to whether to provide back-up fuel at a particular site should be left to the developer, based on proper economic decisions.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Merchant Power Plant Issues Workshops	))	UNDOCKETED
	)	SUBMITTED: MAY 10, 1999

PRELIMINARY COMMENTS OF DUKE ENERGY NEW SMYRNA BEACH POWER COMPANY, LTD., L.L.P.

Pursuant to the schedule established by the Commission Staff, Duke Energy New Smyrna Beach Power Company, Ltd., L.L.P. ("Duke New Smyrna") hereby submits its preliminary comments regarding the issues raised by the Staff and other participants in these workshops. These comments represent Duke New Smyrna's efforts to set forth its thoughts on the numerous issues raised to date; however, Duke New Smyrna's positions are preliminary and tentative, pending further discussion, refinement of the issues and positions thereon, and, in a few instances, on further research.

Preliminary Matters

Two retail-serving utilities have requested that this workshop be canceled. Duke New Smyrna opposes canceling this workshop. The Commission, in its deliberations regarding the New Smyrna Beach Power Project need determination,

has raised significant issues that should be addressed. Canceling the workshop will only leave the Commission months behind the curve if the Supreme Court upholds the Commission's order granting a determination of need for the New Smyrna Beach Project. In order to be prepared to take advantage of the benefits offered by merchant plants, the Commission should proceed with this workshop process now.

The Commission should also proceed with the Reserve Margin Docket, Commission Docket No. 981890-EU. Duke New Smyrna has no objection to a modest, reasonable extension of applicable dates in the current procedural schedule for this docket. Realistically, given the current procedural status, at least an extension of testimony filing dates is probably warranted. The Commission should not terminate this docket – the stakes are too high, particularly in light of tight generation supplies last summer and the fact that Peninsular Florida has already experienced energy capacity alerts this spring.

Specific Issues

Category 1

FPC III-1 What is a merchant plant?

> A merchant plant is a generating plant that sells wholesale electricity on a for-profit basis but that is not included in the rate base of any retail-serving utility.

FPC III-2 Would a merchant plant still qualify as a merchant plant if it entered

into a contract with a utility?

The answer to this question depends on what application the designation would have. For example, capacity under contract for 10 years might not be considered merchant capacity for that term. However, the merchant utility would still be a merchant in that the rate base of its plant or plants would not be included in the rate base of any retail-serving utility and would not be subject to cost recovery from any body of captive retail electric customers; the purchasing utility's customers would, depending on the terms of the contract, be obligated to pay the contract prices, but these would not be traditional rate-base type rates.

FPL 15* Are Merchants capable of capturing economic benefits for their stockholders in excess of those permitted by the FPSC for regulated utilities?

This issue is irrelevant to the questions raised by the Commission at the March 4 agenda conference and to any reasonable discussion of how to assure that the benefits offered by merchant power plants are realized for Florida's electric customers. Merchant plants do have an opportunity, in return for taking the capital, investment, and operating risk, to achieve returns above regulated levels. As a factual question, they may, under some circumstances, be able to achieve returns greater than those permitted for regulated utilities, while under other circumstances, they may not be able to achieve returns as great as those permitted for regulated utilities. In the latter instance, they have no opportunity to seek the FPSC's authority to increase their rates to achieve a regulated rate of return.

* This and other issues marked by an asterisk (*) indicate issues submitted at the May 3, 1999 Staff workshop that were numbered by the Commission Staff.

FPL 20* What are the impacts of Merchant Plants on retail electric customers?

Merchant plants will benefit retail electric customers by enhancing wholesale competition, thereby providing downward pressure on wholesale prices, resulting in reduced retail prices as lower power supply costs are, more or less automatically, passed through to retail customers. Merchant plants will, under most foreseeable scenarios, also improve reliability of the Florida bulk power supply system. Merchant plants will also result in an appropriate transfer of capital, investment, and operating risk away from retail ratepayers and onto the merchants' developers, owners, and operators.

FECA 1 Does a merchant plant which is certified for need by the Florida Public Service Commission have an obligation to sell a portion (or any) of its generating capability to Florida electric utilities for the benefit of their end-use consumers?

Pursuant to Section 366.055, Florida Statutes, the Commission has, at least under most circumstances, authority to require reserves to be made available during energy emergencies. Outside such emergency circumstances, merchant plants would not have an obligation of the type suggested by this issue until Florida retail-serving utilities entered into contracts for the purchase of the merchant's output.

FICA 1 FICA's primary interest in this proceeding is to preserve the right of its members to self-generate electricity by means of QFs or otherwise.

While Duke has no objection to FICA's protecting its members' rights, Duke believes that this issue is irrelevant to these workshops.

Category 2

FPC I-1 Does the Commission have statutory authority to promulgate rules regulating the development of merchant plants in Florida?

Yes, at least to the same degree that it has authority to promulgate rules

regulating the development of power plants within the grid by any other utility. Merchant plants (actually their owners) will be federally-regulated public utilities under the Federal Power Act and state-regulated electric utilities under Chapter 366.

FPC I-2 May the Commission establish policy concerning the development of new merchant plants in this State by some means other than rulemaking?

Yes.

FPC I-3 Does the Commission have any basis in its enabling statutes for discriminating among different types of new merchant plants for purposes of need determinations (e.g., projects that have a photovoltaic component, plants with different heat rates or emission standards)?

Yes, although Duke New Smyrna would counsel against such efforts. The Commission could, if it were shown to be necessary, discriminate among different types of merchant plants on bases similar to those on which it may grant or deny any need determination. For example, contributions to the overall efficiency of electricity and natural gas production and use may properly be considered as another matter within the Commission's jurisdiction that might be considered when deciding whether to grant any particular petition for determination of need.

FPC I-4 What is the appropriate role of the Legislature in addressing merchant plant issues?

The Legislature may act to the extent that its acts do not run afoul of the U.S. Constitution, the Florida Constitution, or federal preemption doctrine. Duke New Smyrna believes that the Legislature's most appropriate role in addressing merchant plant issues would be to receive input from the Commission regarding any needed legislative changes to assure and promote the realization of the benefits provided by merchant plants for Florida's citizens and electric customers, and if needed, to take action to accomplish same. The Legislature should not act to limit or prohibit the development of merchant plants.

FPC I-5 What jurisdictional authority would the Commission have over merchants once they are constructed?

The Commission will have the same authority that it has over electric utilities to the extent not preempted by federal law. Basically, this means that they will have the same authority over merchant utilities as they have over municipal and cooperative utilities, but no authority over rates.

FPL 7 Which of the following actions are among the FPSC powers under the "Grid Bill"? (See following issues 7a-7h).

This batch of issues is irrelevant to the Commission's consideration of merchant plants and does not belong in this workshop or any other workshops or other proceedings. This set of issues poses a topic for a generic investigation or perhaps a rulemaking docket applicable to all electric utilities.

FPL 7a to order an electric utility to build or otherwise acquire generating capacity to serve its own firm retail electric service obligations

FPL 7b to order an electric utility to build or otherwise acquire generating capacity to serve its own firm wholesale electric service obligations.

FPL 7c to order an electric utility to build or otherwise acquire generating capacity to serve the firm electric retail service obligations of another electric utility

FPL 7d to order an electric utility to build or otherwise acquire generating capacity to serve the firm electric wholesale service obligations of another electric utility

FPL 7e to order an electric utility to build or otherwise acquire transmission to serve its own firm retail electric service obligations

FPL 7f to order an electric utility to build or otherwise acquire transmission to serve its own firm wholesale electric service obligations

FPL 7g to order an electric utility to build or otherwise acquire transmission to

serve the firm electric retail service obligations of another electric utility

FPL 7h to order an electric utility to build or otherwise acquire transmission to serve the firm electric wholesale service obligations of another utility

FPL 8 Has the Commission ever defined or addressed the term "benefits" or "mutual benefits" as used in the Grid Bill?

No position pending further research.

FPL 9 Does the Commission also have jurisdiction over an EWG to prescribe uniform systems and classifications of accounts and prescribe a rate structure as addressed by F.S. §366.04 (2)(a) and (b) or address territories as specified by 366.04 (2)(d) and (e)?

No. As to the accounting and rate structure aspects of this issue, these are rate matters that are preempted. As to the territorial aspects of this issue, these are retail service issues and, since EWGs cannot serve at retail, they are irrelevant.

FPL 10 What obligations to provide electric services does an EWG have independent of any bilateral agreement for such service?

Pending further research into the interplay between federal and state laws and regulations applicable in energy emergencies, Duke New Smyrna believes that as an electric utility, an EWG in Florida would probably be obliged to adhere to orders of the Commission to produce and deliver power during an energy emergency declared by the Governor and Cabinet pursuant to Section 366.055, Florida Statutes.

FPL 11 What obligations do cogenerators and small power producers and others owning generating facilities have under the Grid Bill?

Same as #FPL 10, to the extent not preempted by PURPA.

FPL 19* Does the Commission have the authority to require Merchants to sell, the output from their plants, at any time, and under any circumstances, and if so, at what rates?

See response to #FPL 10. The statute provides that the Commission shall assure that utilities who produce in compliance with the Commission's orders during emergencies are paid their latest applicable FERC-approved rates. Because an EWG's rates will generally be market-based rates, this means that the Commission shall assure that the EWG is compensated at the then-current market value of power for any power that it produces in compliance with a Commission order issued during an energy emergency.

FPL 20a* Does the FPSC have the same authority over Merchant Plants as it does over Utilities?

Ambiguous. See response to #s FPC I-1, FPL 9, and FPL 10,

FPL 20b* Do utilities and Merchant Plants have the same obligations?

Ambiguous. Merchant plants are utilities, both public utilities under federal law and electric utilities under state law.

FPL 20c* Do utilities and Merchant Plants follow the same rules for interconnection and operations?

Ambiguous. Merchant plants are utilities, both under federal law and under state law. Generally, since merchant plants will be members of the FRCC, it is reasonable to expect that they will follow the same rules for interconnection and operations that are applicable to all FRCC members.

FPL 20d* If the rules are different, do these different rules result in additional costs being imposed on retail customers?

Not applicable.

OUC 2 Should existing Florida Utilities be relieved of their obligation to serve retail customers when, in the interest of the utility, it is not cost

effective to do so?

This issue is irrelevant to this workshop process. The retail obligation to serve is independent of the wholesale power supply market. Merchant plants are simply one additional type of power supply resource in the wholesale market.

Category 3

FPC II-1 What is the purposes of this workshop?

To address the issues voiced by the Commissioners during their March 4 agenda conference discussion of the New Smyrna Beach need determination application.

FPC II-2 What, if any, problem is the Commission proposing to address?

Duke New Smyrna believes that the Commission is not proposing to address any "problems," rather that the Commission is proposing to address implementation issues that have an effect on the Commission's ability to realize the benefits of merchant plants for Florida's electric customers.

FPC II-4 If the Commission does have a concern about utility site plans or FRCC methodology, what is the appropriate means to address that concern?

This issue is irrelevant to this workshop process. It is appropriately addressed in the Reserve Margin Docket and in the Commission's review of ten-year site plants pursuant to Section 186.801, Florida Statutes, and Rule 25-22.070-.072, F.A.C.

FPC II-5 What steps have been taken to address that concern?

This issue is irrelevant to this workshop process. Without agreeing that this issue is relevant here, Duke New Smyrna notes that the Commission has opened the Reserve Margin Docket to address such concerns.

Category 4

Staff 1 Whether merchant capacity should be considered to supplement the FRCC's 15% reserve margin. If so, what amount of supplementary reserve margin is considered reasonable and prudent for reliability purposes?

Merchant capacity should be considered in reliability evaluations for Peninsular Florida. The FRCC's 15% reserve margin is only that -- the FRCC's target number. Merchant capacity, whether committed to other Florida utilities or uncommitted at a given point in time, will supplement reserves in Peninsular Florida. Contractually committed merchant capacity will normally be included in the reserves of those utilities who purchase it. The Commission can and should consider uncommitted, operational merchant capacity when evaluating the total reserve margins for Peninsular Florida. Duke New Smyrna believes that actual experience will show that the amount of uncommitted merchant capacity sold in Peninsular Florida during peak times will approximate 100% of all such uncommitted merchant capacity.

The more reserves, the better especially where they are provided at no risk to captive ratepayers.

Staff 11 Appropriate Peninsular Florida minimum percent planning reserve margin. Percent of firm load unserved when another Christmas 1989 occurs.

This is really an issue that is more appropriate to FPSC Docket No. 981890-EU, the Commission's generic investigation into Peninsular Florida reserve margins.

There are at least two issues inherent in this subject: (1) what level of reserve margin is reasonable and prudent when it is to be funded by captive ratepayers and (2) what level of reserve margin is desirable for the purpose of assuring reliability. The answers to these two questions could be widely different. For example, a 15 percent reserve margin for rate-based capacity might be the maximum reasonable and prudent level, but, particularly

considering the Christmas 1989 event, a 30 percent (or greater) reserve margin might be considered desirable.

More reserves are better, especially when they are provided by merchant operators at no risk to Florida electric customers. If additional reliability can be provided at no capital cost risk to ratepayers, at competitively reasonable incremental supply (fuel) cost, and with no (or little) adverse environmental consequences, then it should be added to the power supply system at least to the point that it became grossly redundant; e.g., a reserve margin of 100% might be considered, depending on the economics, to be grossly redundant.

Staff 15 Continuing, closing, or deferring until 2000, Docket No. 981890-EU, Generic Investigation Into The Aggregate Electric Utility Reserve Margins Planned For Peninsular Florida.

The Commission should continue the Reserve Margin Docket. It would be reasonable, and probably necessary, to provide for extensions of the filing dates for testimony in this docket. Any other scheduling changes are up to the Commission.

OUC 1 Should merchant plants be required to meet the 15% reserve margin requirements consistent with Florida utility responsibilities?

No. Reserves are the responsibility of purchasing utilities.

FPC II-3 If the Commission is proposing to address the need for generating capacity in Florida, does the Commission have a basis to conclude that existing utility Ten Year Site Plans and FRCC methodology are inadequate?

This issue is appropriately addressed in the Reserve Margin Docket.

FPC II-6 Should utilities build capacity sufficient to cope with Christmas 1989 weather conditions?

Retail-rate-regulated utilities should not be required to build additional rate-based capacity sufficient to cope with Christmas 1989 weather conditions

when merchant capacity is available to provide additional protection against such contingencies.

FPC III-3 Why does the Commission believe that merchant plants are needed?

As reflected in the Commission's decision to grant the need determination for the New Smyrna Beach Power Project, it appears that the Commission recognizes the reliability and economic benefits that merchant plants will provide to Florida's electric customers, without exposing them to the development, investment, and operating risk associated with conventional utility-rate-based plants. See Order No. PSC-99-0535-FOF-EM.

FPC III-7 What impact would merchants have on statewide reserve margins?

Merchant plants would improve statewide or Peninsula-wide reserve margins.

FPC III-8 What impact would merchants have on individual utility reserve margins?

None until an individual utility entered into a contract to purchase firm capacity from a merchant. However, the presence of uncommitted merchant capacity in Peninsular Florida WOULD have an effect on individual utilities' LOLP and similar reliability calculations.

FPC III-18 What rules would govern merchant sales during statewide emergencies?

Subject to further research into the interplay between federal and state laws and rules applicable during energy emergencies, Duke New Smyrna believes that Section 366.055, Florida Statutes, would govern.

FPL 1 How does actual loss of load a) for FPL and b) for Peninsular Florida for the last fifteen years compare to a loss of load reliability level of one day in ten years?

This issue is irrelevant to this workshop proceeding, but would be appropriately addressed in the Reserve Margin Docket.

FPL 4 What reports has the PSC issued in connection with the so-called "Christmas freeze"?

Duke New Smyrna is aware that the Commission issued an order and an associated report to the Legislature regarding the Christmas 1989 Cold Weather Emergency. It would be appropriate to address this issue in the Reserve Margin Docket.

FPL 6 On what occasions has the Commission established reliability criteria that public utilities or electric utilities, subject to its jurisdiction, must meet.

This issue is appropriately addressed in the Reserve Margin Docket.

Category 5

Staff 2 The number of merchant plants which should be permitted in Florida and the maximum amount of supplementary reserve margin considered reasonable and prudent for reliability purposes.

With respect to the concept of determining an "optimum" amount of merchant capacity, such an approach is probably inappropriate at this time. Ultimately, while the Commission has an important role to play in determining need for all power plants, including merchant plants, and in assuring that the benefits of merchant power are realized for Florida's electric customers, the market for merchant power should be the optimizing mechanism for the amount of merchant capacity developed.

In general, "the more the merrier, as long as ratepayers are protected." If the amount of merchant capacity became very large, the Commission could address the question of overall overbuilding of power plants in future need determination proceedings.

The question as to "what amount of supplementary reserve margin is considered reasonable and prudent for reliability purposes" is probably not an appropriate question to ask with respect to merchant plants, because the

standard ("reasonable and prudent") is more appropriate in the context of conventional utility-rate-base-financed power plants. For example, would it be reasonable and prudent for the Commission to reject a proposed merchant power plant that would suppress wholesale (and indirectly retail) power prices at no risk to ratepayers? Duke New Smyrna submits that such a decision cannot be considered reasonable and prudent.

Staff 3a Consideration of a selection criterion for subscription under a merchant power plant MW cap based on number of proposed megawatts of solar photovoltaic capacity.

There should not be a selection process for merchant plants at this time. The current process, wherein the Commission rules on all merchant plant proposals on their individual merits on a case-by-case basis, i.e., granting need determinations on the basis of the statutory criteria, should remain in place .

It would be reasonable for the Commission to consider (as another matter within its jurisdiction) ancillary benefits provided by any given merchant plant application, such as photovoltaic demonstration projects or other innovative efficiency measures, in evaluating any given need determination application.

There should be no Commission-imposed cap on merchant plants or merchant plant capacity in Florida. However, in all likelihood, market forces will limit construction of merchant capacity in Florida to a level that will not represent uneconomic duplication of resources but that will produce measurable, probably significant, improvements in Peninsular Florida reliability. If total reserve margins became obviously excessive, e.g., 50-60%, the Commission or the Siting board could decline to authorize additional construction.

Staff 3b Consideration of selection criteria based on efficiency ratings of plants.

It is inappropriate to establish a selection process for merchant plants. Each petition for determination of need should be considered on its merits; merchant proposals are not mutually exclusive. However, the Commission may consider the generation efficiency of any proposed power plant, as a matter within its jurisdiction, in making its decision whether to grant a

requested determination of need.

FPC III-4 How many are needed?

The state needs approximately 10,000 MW of new capacity over the next ten years, just to maintain minimum reliability criteria. The state would benefit significantly from merchant plant construction over the same period, whether it was part of the "reliability need" of approximately 10,000 MW or whether it was additional merchant capacity above that amount. The simple answer is "as many as we can get, consistent with environmental requirements and transmission reliability concerns."

FPC III-5 Does the Commission have any basis to impose a cap on the number or size of merchant plants entering the State?

No.

FPC III-6 How would the Commission determine who gets to build merchant plants?

Each merchant plant, like each retail-serving utility proposal, should be considered on its own merits. There should be no cap or limit on the amount of merchant plants or capacity.

CFR 1-6 See FAX to Joe Jenkins from The Corporation for Future Resources (CFR), dated April 20, 1999.

No position.

Category 6

Staff 9 Minimum reporting requirements for entities owning merchant transmission, generation or distribution. (For example, size, type and location.)

The minimum reporting requirements would be ten-year site plans plus

whatever reporting requirements FERC imposes on utilities subject to its jurisdiction. If the Commission needs additional information to discharge its responsibilities, merchants will work with the Commission to assure that such information is provided. Reporting size, type, location, and annual generation would be acceptable.

EWGs do not own transmission facilities. While there are no "merchant" transmission utilities at the present time, such an entity would be a public utility under the Federal Power Act and would be required to comply with all applicable FERC reporting requirements, including filing a FERC Form 1.

FPL 2 What reporting rules are there at the state and federal level for loss of load?

This issue is appropriately addressed in the Reserve Margin Docket.

FPL 3 As to reporting rules for loss of load, to what extent do they apply to municipals, REA's and joint power authorities.

This issue is appropriately addressed in the Reserve Margin Docket.

FPL 5 What annual or other periodic reports has the PSC issued to the legislature concerning the adequacy of the 10-year site plans?

This issue is appropriately addressed in the Reserve Margin Docket.

FPL 12 Does Rule 25-22.082 apply to Duke re: RFP's?

No.

FPL 13* How is Merchant capacity to be treated in future need proceedings?

The Commission should recognize the presence and availability of uncommitted merchant capacity in future need proceedings. For a retail-serving utility's application for determination of need, the answer to this question depends on whether the applicant has conducted an appropriate bid process prior to its need determination.

FPL 14* Should investor-owned public utilities with an obligation to serve be required to purchase any of the Merchant Plant's output?

Not by rule. They should, however, be held to a prudence standard when their purchased power costs are evaluated for cost recovery – they should not be allowed to recover from ratepayers costs for self-generation greater than the cost of similar amounts of power available in the wholesale market, regardless whether such power were available from merchants or from other retail-serving utilities.

FPC II-3 If the Commission is proposing to address the need for generating capacity in Florida, does the Commission have a basis to conclude that existing utility Ten Year Site Plans and FRCC methodology are inadequate?

This issue is appropriately addressed in the Reserve Margin Docket.

FPC III-9 What impact would merchants have on current utility generation expansion plans (Ten Year Site Plans)?

The answer to this question depends on several factors: if a merchant had contractually committed some of its capacity to a utility, that capacity would count as a firm resource. Uncommitted merchant capacity could also be considered by the utility as an option for future unspecified purchases.

FPC III-20 What impact would merchants have on existing rules and policies, e.g., the Ten Year Site Plan process, the bid rule?

No effect on these rules.

Category 7

Staff 12 Diversity of ownership with respect to market power issues.

This issue is irrelevant to this proceeding. This is a FERC issue that would relate to a power supplier's ability to obtain market-based rate authority. The

Commission may, if it deems it appropriate, participate in FERC proceedings re: market-based rate applications.

Staff 14 Florida retail-serving electric utilities being allowed to build merchant plants in Florida and being allowed to charge market prices.

Duke New Smyrna believes that this is a non-issue, because as a general matter, they already have that opportunity, assuming (1) that they can pass FERC's market-power-test muster and (2) that they can satisfy the Florida Public Service Commission that their participation in the wholesale markets in this way will not harm their captive ratepayers.

FPL 17* Should investor-owned public utilities, with an obligation to serve, be able to obtain a determination of need under the same basis and justification as Merchants?

Yes.

Developers' Group Issue 1* The necessary market structure that is conducive to merchant plant development and/or integration into Florida's bulk power supply system.

Characteristics of a market structure that would be conducive to merchant plant development and integration into Florida's bulk power supply system include: open access to participation in the generation market and to the transmission system, minimal barriers to entry, and robust participation by numerous buyers and sellers.

Category 8

Staff 4 The impact, if any, of merchant plants on investment in, and operation of, existing plants in utilities' rate base.

There would be no effect on utility rate base. Merchant plants simply represent another power purchase option from which load-serving utilities might choose to purchase. New, efficient merchant capacity would be

expected to cause inefficient generation resources in Florida's supply stack to run less, resulting in lower operating costs being incurred and passed on to retail customers.

Any analysis of stranded costs must also, necessarily, address "stranded benefits." It is unlikely that the introduction of merchant plants into Florida's generation supply system would create any stranded costs because of the tremendous need for new generation facilities. Projections indicate that Peninsular Florida needs approximately 10,000 MW of new capacity over the next 10 years for reliability purposes.

FPC III-11 What impact would merchants have on the retirement of existing power plants in Florida?

Probably very little, in practical terms. The presence of new, efficient, cost-effective merchant capacity in Florida could, hypothetically, cause old, inefficient, non-cost-effective plants to be retired earlier than they would otherwise.

FPC III-12 What impact would merchants have on stranded costs?

None. See response to # Staff 12 above.

FPC III-21 What would be the short-term and long-term financial impact of merchants on existing investor-owned utilities?

Unknown and irrelevant to this proceeding.

FPC III-22 What impact will a future technology shift in generation have on proposed merchant plants?

The answer to this question depends on the technology shift. Assuming that this question contemplates a shift to a more efficient and cost-effective technology, such a shift would cause proposers of merchant plants to select the more cost-effective technology. The introduction of more cost-effective technologies into the power supply market will, over the long run, cause less efficient units to run less.

Category 9

FPC III-16 What impact would merchant plants have on the transmission system in the State?

In general, merchant plants will have no adverse effects on the transmission system in Florida, because operators of new merchant plants are subject to being required, as a condition of obtaining transmission service, to pay for necessary upgrades to the transmission system to accommodate power deliveries from their plants. Properly located merchant plants can benefit transmission capacity in Florida by alleviating constraints and other transmission problems. A Regional Transmission Organization with the ability to conduct transmission planning for the entire state, and to examine and recommend favorable sites for new merchant capacity, will enhance the benefits that merchant capacity can provide to the Florida transmission system.

FPL 20e* What "services" must a Merchant Plant purchase or otherwise provide for in order to participate in the "wholesale" market?

None.

FPL 20f* Are these "services" regulated or unregulated?

Yes, they are regulated. The degree to which ancillary services are regulated depends on whether FERC has granted the providers market-based rate authority for such services.

FPL 20g* What are the costs of these services and who pays for them?

Costs are what they are. Who pays depends on the contracts and the purchasers. For example, if a merchant purchases ancillary services, it pays for them and may or may not recover amounts sufficient to cover them from its power sales. If a traditional rate-regulated utility purchases them, it will likely pass them on to its ratepayers through its regulated rates.

FPL 20h* If a utility is obligated to provide some or all of these "services" are the rates fully compensatory to that utility's retail customers?

It is fair to assume that the FERC would authorize rates for such services that are fair, just, and reasonable.

FPL 20i* If the rates are not fully compensatory, should the Commission be encouraging new entrants that will take such services and therefore shift costs to retail customers?

This question is premised on a dubious assumption. It is not the "new entrants" that take services, but rather customers. Moreover, rates for such services will be fair, just, and reasonable as determined by the FERC. The Commission could support fair, just, and reasonable rates before the FERC. Before any consideration of this issue should be given, it should be demonstrated that there is a real problem of the type that this FPL issue hypothesizes.

FPL 20j* Could Merchant Plants result in new additional obligations being imposed on utilities to support their participation in the market? If so, what is the cost of those obligations, who regulates them and who pays for them?

No.

Category 10

Staff 6 Establishment of a wholesale, market price, merchant cost-effectiveness standard. Reporting requirements for wholesale market prices for the purpose of determining the optimum level of merchant power plants.

It is unclear what issue or issues this question is really attempting to address. Is the issue intended to discuss (a) a standard that would be applicable to merchant plant production and sales in the cost-effectiveness analysis performed in the course of a need determination, or (b) a standard for cost-

effectiveness for utility purchases from merchant plants and other sources of supply?

If the question is attempting to address a standard that would be applied to merchant plant production and sales, this is probably an inappropriate question. As long as merchant plants lack market power (which characteristic is a prerequisite for a merchant to obtain market-based-rate authority), such merchants will by definition sell at market prices. Assuming (reasonably) that the bulk power markets function properly, this will be a competitive result and therefore efficient.

If the question is attempting to address a standard for cost-effectiveness of utility purchases, the standard should be that retail-serving utilities should, in serving the interests of their ratepayers, procure the most cost-effective power supplies for those ratepayers. Wholesale market prices for purchased power can and should be considered as a benchmark against which power costs can be evaluated for reasonableness and prudence.

FPC III-10 What impact would merchants have on the dispatch of existing generation in the State?

Merchant plants would be expected to enhance the efficiency of dispatch of the Florida's generation resources. (Most plants of similar technology and fuel type will have similar dispatch costs, and accordingly, should dispatch efficiently regardless whether they are merchant or retail-serving-utility plants.)

FPC III-13 What impact would merchants have on retail ratepayers?

Merchant plants and capacity will provide substantial benefits to retail ratepayers.

FPC III-14 What impact would merchant plants have on the current level of economy interchange sales of existing investor-owned utilities and associated benefits that currently accrue to Florida's retail ratepayers?

Merchants would increase total benefits to Florida's retail ratepayers and

reduce the total cost of electricity generation in Florida.

FPL 16* If a Merchant displaces an inter-utility sale, are the customers in Florida benefitting equally?

Depends on many factors. It would be improper to consider a single sale in isolation, in any event.

Category 11

Staff 7a Use of allowable ambient air pollution increments by merchant power plants.

There should be no priority given to retail-utility-built plants in environmental evaluations. Merchant plants will use whatever infrastructure they use for public purposes -- their electricity can only go to serve end-use customers through those customers' retail-serving utilities, and under every realistic scenario, the vast majority, if not all, of merchant power generated in Florida will be sold to Florida retail-serving utilities for distribution to Florida end-use customers.

Staff 7b Use of available power plant sites and other finite resources.

See response to # Staff 7a above.

FPC III-15 What impact would merchant plants have on the environment of the State?

For the foreseeable future, new gas-fired combined cycle merchant capacity will significantly benefit Florida's environment without capital, investment, and operating risk being imposed on ratepayers in any way.

FPC III-23 If merchant plants are built and are rendered unprofitable by technology advances or market saturation, what impact would this have on the environment?

None. If they are rendered unprofitable, they will shut down.

FPL 18* Will the use of limited resources and infrastructure in Florida by Merchants affect investor-owned public utilities with an obligation to serve, ability to use that infrastructure for public purpose? (gas transportation, transmission line capacity, air, water, land, etc.)

Merchant plants will not adversely affect the ability of Florida's incumbent retail-serving utilities to use infrastructure for a public purpose. Merchant plants also use whatever infrastructure they use for public purposes – their electricity can only go to serve end-use customers through their retail-serving utilities, and under every realistic scenario, the vast majority (if not all) of merchant power generated in Florida will in fact be sold to incumbent Florida retail-serving utilities for distribution to Florida end-use customers.

Category 12

Staff 5a Job creation/enhancement.

Staff 5b Increase in state and local tax base.

The construction and operation of merchant power plants, like the New Smyrna Beach Power Project, in Florida should be expected to reduce wholesale -- and thereby retail -- electricity prices. This will in turn make Florida more attractive to the location of new commercial and industrial facilities, which directly promotes economic development and job creation and enhancement.

New merchant power plants will also be expected to be in the property tax bases of the counties, municipalities, school districts, and other taxing

jurisdictions in which they are located. To the extent that merchant capacity is added to Florida's bulk power supply system above the minimum amount that would otherwise be built by incumbent utilities, it will add to the ad valorem tax base.

Category 13

Staff 8 Impact, if any, of merchant plants on conservation goals and plans.

FPC III-19 What impact would merchants have on DSM programs and the DSM goals process in Florida?

Generally and inherently, no impact. Consistent with past Commission practice, fundamental economics, and common sense, conservation goals should be based on the maximum amount of reasonably achievable, cost-effective conservation and demand-side management available.

New generation costs are, more or less, determined by markets, without regard to whether a given power plant is being developed as a merchant power plant or as a rate-based, utility-built plant. The fact that wholesale competition and competition in the generation technology sector have resulted in increased generation efficiencies and in decreased generation costs, thereby rendering less DSM/conservation cost-effective, should not be confused with the proposition that merchant plants would cause less DSM or conservation to be cost-effective.

FPL 21 Will Merchant Plants frustrate DSM/Conservation programs goals of improved efficiency and/or power plant avoidance by either building additional capacity or lowering costs that must be considered in utilities cost-effectiveness calculations?

No. Merchant plants (at a minimum, new combined cycle plants) will improve the overall efficiency of electricity and natural gas production and use in Florida, including reduced use of less efficient, more pollution-intensive power plants.

FPL 22* Should utility conservation cost-effectiveness tests be performed anticipating lower marginal costs in Florida due to Merchants? Will this result in same or less conservation measures by utilities?

Yes, utility conservation cost-effectiveness analyses should be based on the most current and accurate information available. It is probable that lower marginal power supply costs, whether supplied by merchant plants or by retail-serving utilities' plants, will result in the same or less conservation measures being cost-effective.

Category 14

Staff 13 Fuel diversity - what is it and is it needed?

The concept of fuel diversity related to the degree to which a utility, or a market, or a planning region, or some other entity or geographic area, relies on various fuel sources. If the entity or area relies predominantly on a single fuel source, it would be said to have relatively little fuel diversity. If the entity or area relies on several fuel sources in reasonable proportions, then it would be said to have great fuel diversity. Fuel diversity is desirable, generally speaking and other things being equal, because it limits the entity's or area's exposure to fuel supply disruptions.

To the extent that this issue is intended to capture the issue whether a particular merchant plant should have backup fuel, Duke believes that this is not an appropriate issue for these workshops. Backup fuel is an issue that applies to any power plant, whether merchant or retail-utility-built and rate-based.

FPC III-17 What impact would merchants have on the fuel supply system in the State?

See above comments re: infrastructure. Generally, merchant combined cycle capacity will utilize the existing fuel supply system more efficiently, making more capacity available for use by power plants and other gas consumers. (A

new combined cycle merchant plant uses approximately 1/3 less gas, and 1/3 less gas transportation capacity, than existing gas-fired steam units in Florida.

BEFORE THE PUBLIC SERVICE COMMISSION

Merchant Plant Workshop	)	May 7, 1999

ENRON CORP. PRELIMINARY COMMENTS FOR MERCHANT PLANT WORKSHOP

Enron is one of the world's leading integrated electricity and natural gas companies. The company produces electricity and natural gas, develops, constructs, and operates energy facilities worldwide, and delivers physical energy commodities and risk management and financial services to customers around the world.

Enron has developed an operations group to fill its engineering and construction needs of building, operating, and maintaining Enron's and others' facilities. Applying the experiences gained through years of operating pipelines, compressor stations, processing and storage facilities, power plants, and oil and gas production, Enron has established itself as a premier turnkey contractor by offering project services to third party clients on flexible contractual terms, including lump-sum execution of world-scale projects.

Enron is engaged in the development of merchant plants throughout the world and currently has projects in Mississippi and Tennessee for the purpose of meeting the growing demand in the southeast region for electric capacity in the wholesale market. We believe merchant plants provide a cost-effective solution to regions where the load growth is exceeding the utility power plant capacity of the region. These merchant plants are not only efficient in their operations, they also generally operate with lower emissions output.

Enron appreciates the opportunity to participate in the Commission's workshop and offers these comments on a few key issues.

Will merchant plants improve electric reliability in Peninsular Florida?

Yes. Peninsular Florida load growth is increasing between 2.5% and 3.5% annually. The ratio of electrical generation to load is declining and the peninsula is severely limited in the ability to import energy from its only external interconnection. Absent the immediate installation of new capacity in peninsular Florida, consumers face potential brownouts. Merchant plants can provide a sufficient source of energy to Florida's wholesale market and reverse the decline in the ratio of load to capacity, thus reducing the probability of brownouts and improving reliability.

What will be the impact of merchant plants on the ultimate cost to consumers?

Merchant plants will, by virtue of new technology, produce energy at a lower cost than many of the existing plants currently in operation. Energy from merchant plants will be sold to load-serving utilities at wholesale with the potential of displacing more costly energy produced on less efficient and environmentally dirtier generators. This has the potential to lower energy costs to consumers as well as provide for cleaner air.

Should the Commission limit the number of merchant plants to be installed in Florida?

No more than we should limit the number of banks or McDonalds. Developers will analyze the energy growth potential, keeping in mind the need for peaking units versus base load units; the cost to produce energy in Florida; the cost to transmit energy to various wholesale markets; and all other market factors necessary to make a decision to spend tens or even hundreds of millions of dollars. The Commission should keep in mind that the sole risk for merchant plant developers rests with the investor not the ratepayer. If too many developers jump in, only the most efficient will survive, having the effect of lowering the cost to consumers through a much more liquid market. When there is a proliferation of McDonalds we see two-for-one type specials and other promotions favorable to the consumer. That economic principle applies in the unregulated wholesale market, as well, but only if we allow competition by merchant plant developers.

Should the Commission be concerned that merchant plant operators will sell the energy produced in Florida to out of state markets?

Traditional Florida utilities sell to out of state markets on a frequent basis. However, given the obligation to serve, traditional utilities contend that only energy excess to meeting load in the state is sold to the north. One would expect that if merchant developers, willing to invest millions of dollars into the economy of Florida, desired to sell to northern markets, they would simply site their units in a location in closer proximity to the potential load. Developers are interested in Florida because of the deficiency of adequate generation and the high rate of load growth and not because of the potential to sell out of state.

Will merchant plants improve the reserve margin in the peninsula?

Yes. Regardless of what the reserve margin percentage should be, 15% or some higher number, additional generating capacity will improve the quantity of reserves in Florida.

Will merchants plants idle utility generation to the detriment of the stockholder or the ratepayer?

No. Utility generation should be idled by the development of merchant plants only to the extent it makes economic sense or is required by law. In the late seventies and early eighties when oil prices went out of sight, several Florida utilities purchased unit power from the Southern Companies - at one point, collectively in excess of 3000 MW. Oil fired generating units were idled and "coal by wire" was embraced by all, especially the consumer reading the electric bill. Many of the inefficient existing utility generators are near or at a fully depreciated book value, meaning the shareholder has fully realized their rate of return on their investment. Because Florida needs new capacity, there is no reason to believe addition of merchant generation will work to the detriment of either ratepayers or shareholders.

Will the merchant plants be required to meet the same standards of interconnection and operation as traditional utilities?

Yes. Interconnection requirements are elements of Interconnection Agreements. Currently efforts of the North American Electric Reliability Council provide for standards for planning and operations for all segments of the electric industry. The developers of merchant plants have been active in the development of these standards along with utilities and fully endorse the reliability concepts contained therein.

Enron thanks the Commission for the opportunity to submit these comments and to participate in this workshop. Enron knows the wholesale electric market in Florida will benefit from the injection of merchant plant capacity. In addition, the state will enjoy economic benefits to the tax base and ratepayers. We look forward to further participation in this proceeding.

RICHARD A. ZAMBO, P.A.
ATTORNEYS AND COUNSELLORS
598 S.W. HIDDEN RIVER AVENUE
PALM CITY, FLORIDA 34990
Telephone (561) 220-9163
FAX (561) 220-9402

REGISTERED PROFESSIONAL ENGINEER
REGISTERED PATENT ATTORNEY

COGENERATION & ALTERNATIVE ENERGY
ENERGY REGULATORY LAW

VIA FEDERAL EXPRESS
May 4, 1999

Ms. Blanc Bayó, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Undocketed Merchant Plant Study Workshops

Dear Ms. Bayó,

This firm represents the Florida Industrial Cogeneration Association (FICA). Because it is uncertain at this juncture whether or not we will be able to participate in the Merchant Plant Study "workshops", this letter will provide comments briefly describing FICA's concerns and interests as they pertain to the subject of merchant plants. **FICA's primary interest in this proceeding is to preserve the right of its members to self-generate electricity - by means of QFs or otherwise.**

FICA's members operate qualifying cogeneration and/or qualifying small power production facilities ("Qualifying Facilities" or "QFs" - as those terms are defined by rules of this Commission and the Federal Energy Regulatory Commission), which generate electricity in conjunction with industrial operations at various locations in Florida. FICA members consume such electricity for their own needs; sell surplus electricity to Florida electric utilities; and, purchase standby and supplemental electricity from their respective electric utilities. The size of FICA's members individual generating units range from about 15,000 kW to 110,000 kW, with some members operating multiple units. FICA members have considered, are considering, or may consider the installation of even larger QFs or other form of "non-utility" self generation facilities to serve their own needs.

FICA's interest in this proceeding arises from the fact that the term "merchant plant" has only recently been applied to electric generating facilities, and its definition is less than precise. Based on FICA's observations of recent proceedings before the Commission, the defining characteristics of a "merchant plant" appear to be: (i) a relatively large electric generating facility; (ii) which is not owned by a Florida retail electric utility; and (iii), the electrical output of which is not contractually committed to any particular Florida retail electric utility. Some FICA member's QF facilities could be said to exhibit such

characteristics and thereby be construed to fit within this broad and vague definition of merchant plant. Accordingly, FICA is concerned that its members right to self-generate may be eroded or infringed upon by an overly broad interpretation of merchant plant. FICA seeks assurance that any constraints which the Commission or the electric utilities may attempt to impose upon the merchant plant industry do not inadvertently impact upon FICA's members existing or future electric generating facilities.

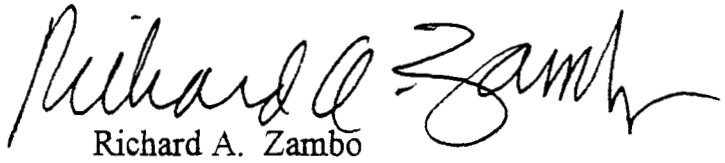
FICA simply seeks to preserve its members ability to implement, at their discretion, economic alternatives (such as self-generation) in lieu of purchasing electricity from the electric utility(ies). If an acceptable definition of "merchant plant" can be developed, which clearly distinguishes between electric generating facilities operated or contemplated by FICA's members for self-generation in conjunction with associated industrial operations, and the stand-alone merchant power plants such as the proposed Duke-New Smyrna facility, FICA would have no further interest in this matter.

It would be relatively easy to formulate a definition of "merchant plant" which is sufficiently specific to avoid inadvertently encompassing facilities of the type operated or contemplated by FICA's members, thereby shielding FICA's members from any constraints or limitations which may be imposed by the Commission or the utilities on merchant plants. FICA is agreeable to working with Staff in an effort to develop an acceptable definition.

In contrast to the "first impression" issues raised in the Duke/New Smyrna case - which we understand directly precipitated this merchant plant proceeding - the law is mature and well settled regarding the rights of electricity consumers, such as FICA's members, to own or operate QF's for self-generation. In fact, Florida law and Federal law affirmatively encourage the development of QFs. Moreover, attempts to deny an electrical consumer the right to choose to self-generate as an alternative to purchasing from a utility would raise serious constitutional issues.

We appreciate the opportunity to submit these written comments for your consideration. If you require anything further, or would like to discuss the issues presented here, please do not hesitate to call.

Sincerely



RAZ/sn

Richard A. Zambo
Florida Bar No. 312525

Dynegy Marketing and Trade
1000 Louisiana Street, Suite 5800
Houston, Texas 77002
Phone 713.507.6400
www.dynegy.com

May 7, 1999

DYNEGY

Mr. Joseph D. Jenkins
Director, Division of Electric and Gas
Florida Public Service Commission
2540 Shumard Oak Boulevard
Gerald Gunter Building
Tallahassee, FL 32399-0850

In Re: Merchant Plant Study
Undocketed

Dear Mr. Jenkins:

Dynegy Marketing and Trade is very interested in the issues related to merchant electric generation plants that you and the Commission will be addressing in your workshops. As the successor to Destec Energy, Dynegy is a leading developer and operator of independent power plants (31 plants, 6,800 gross MW). Dynegy is one of North America's leading marketers of energy and energy services, including natural gas, wholesale power, and natural gas liquids. Dynegy has developed significant insights into competitive markets and believes that its experience will help elevate the quality of the Commission's inquiry. Dynegy is a leading advocate of competition and free markets and looks forward to the opportunity to assist the Commission in identifying and eliminating artificial barriers to competition and creating a proverbial level playing field for independent power producers.

Dynegy is very active in the SERC region, with operating plants in Georgia and Virginia, as well as plants under development in Georgia, North Carolina, and Kentucky. Dynegy is also seriously considering other sites in the southeast US, including Florida. Needless to say, the outcome of these workshops and related proceedings will have a huge impact on whether developers such as Dynegy choose to pursue projects in your state.

"You can't have competition without competitors"

This is an old saying but it rings truer today than ever before. Competitors are unlikely to enter markets that do not provide sufficient regulatory stability and certainty necessary to justify investments of several

hundreds of millions of at-risk dollars. Because competition will ultimately protect consumers better than even the best regulations, it is absolutely essential that the Commission do its part in helping to make Florida an attractive place to do business.

A review of initial comments and issues submitted by various parties clearly reveals that many are approaching merchant plant issues from a traditional regulatory perspective. The better approach is to view the issues from the perspective of a transition away from traditional command and control regulation and closed markets, to free and open markets where decisions are based on economic forces. The comments and issues offered up by several parties reflect a fundamental distrust of competition, as well as a lack of understanding of how competitive markets actually operate. Dynegy submits that the Commission will have an extremely difficult time developing appropriate policies if it and the parties continue to approach the issues from a traditional regulatory perspective.

Dynegy recognizes that statutory and legal precedent may place limits on the Commission's current authority to appropriately address some merchant plant issues. Such limitations however, do not have to limit the Commission's intellectual and attitudinal approach to policy development. Dynegy encourages the Commission, Staff and all parties to approach these issues from the perspective of transitioning from a regime where prices are set by regulation to one where prices are established by competition. Competition is coming. That is not an issue. The real issue is whether the Commission will protect Florida's electricity consumers by leading the industry toward competition.

Attached to this letter is a set of "competitive principles" that Dynegy encourages the Commission to adopt as part of its policy regarding merchant power plants. Dynegy looks forward to working with the Commission and the other participants in what is obviously an important proceeding to all electricity consumers in the State of Florida. Please contact me (713-507-6785) or Ben Trammell (713-767-5185) if you have any questions about our comments. We look forward to participating in the May 13th workshop.

Cordially,

David L. Cruthirds
Sr. Director and
Regulatory Counsel

Encl.

Dynegy Proposal
May 7, 1999
Florida Public Service Commission
Guiding Principles for
Merchant Power Plants

Dynegy supports competition in wholesale power markets and believes that merchant power plants developed by independent power producers provide substantial net benefits to consumers of electricity in the State of Florida because:

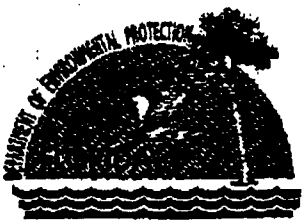
- Independent power producers will develop new generation capacity when and where needed, and in sufficient quantities to meet demand.
- Prices for energy and capacity will be lower because new market entrants must compete for the right to be dispatched and market share.
- Developers, rather that captive ratepayers, will bear the risk for investments in new generation plants.
- Competitive suppliers will not have "stranded costs", nor will they recover uneconomic investments from captive customers.
- Merchant plants will increase wholesale competition in Florida and will dilute the vertical and horizontal monopoly market power of incumbent utilities.
- Increased wholesale competition will result in more robust retail competition when retail competition is introduced.

Statement of Competitive Principles

Dynegy believes that the following principles will promote the development of merchant generation plants by independent power producers and are in the best interests of the State of Florida and its electricity consumers:

- Existing regulatory barriers to the development of independent merchant generation capacity should be identified and eliminated.
- The Florida PSC should assist the Legislature in identifying and removing statutory and legal impediments to the development of independent merchant generation capacity.
- Generation ownership and control must be separate and apart from ownership/control of the transmission and retail distribution functions.
- While incumbent electric utilities should not be strictly prohibited from constructing additional generation, the Florida PSC should adopt a rebuttable presumption that all new generation capacity should be built by independent developers in order to accelerate the transition to competition and to result in the maximum amount of reliability.

- Electricity end-users will derive the maximum benefits when all generation, not just new entrants, must compete on price to earn dispatch and market share, i.e. - an open wholesale generation market.
- Competitive generation and power marketers must have open and non-discriminatory access to electric transmission services on a basis comparable to that of the utilities, consistent with federal law.
- Transmission interconnections for merchant plants must be provided on a non-discriminatory basis, comparable to that provided to the transmission owner's own generation assets. This includes system impact studies, facility feasibility studies, transmission system upgrade studies, and all related evaluations. Timing for studies and construction of the necessary facilities must also be comparable.
- All interstate transmission service must be transparently scheduled on OASIS.
- Incumbent generation must not constrain the efficient working of the market by receiving an artificial and unfair priority on transmission service (network service vs. firm point-to-point vs. capacity benefit margins).
- If allowed to act, market forces will naturally limit the amount of merchant capacity. Excess capacity will result in supply exceeding demand, which will result in low prices, inherently bringing benefits directly to the electric end-users.
- If allowed to act, efficient, competitive markets will send the necessary price signals to developers that new supply is needed to meet demand. Developers will not risk the downside of low prices due to over-supply unless they also have the potential for the benefit of higher prices resulting from short supplies.
- Allocation of scarce supplies based on price will result in efficient allocations and will tend to allocate those supplies to those who value them the most.
- Temporary price spikes must not be misinterpreted nor lead to inappropriate regulatory responses. High power prices of short duration may be of a lower total cost to consumers than would be the addition of an additional peaking generation facility.
- The market will ensure availability of supply; the proper role of continuing PSC regulation is to ensure fair play and reliability of regulated distribution services.
- Additional interstate natural gas pipeline competition will provide numerous benefits to the State of Florida. Significant new natural gas supplies will be needed for new, efficient, clean-burning merchant generation plants. Additional interstate pipeline competition will result in "gas on gas" competition which will result in lower prices and better overall service. Additional interstate pipeline competition will significantly improve the reliability of natural gas service in Florida, which will in turn significantly improve the reliability of the electric system by providing alternative sources of gas in the event of natural disasters or pipeline emergencies.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

TO: Joseph Jenkins, Director, PSC Division of Electric and Gas

FROM: Hamilton S. Oven, Jr., Administrator, Siting Coordination Office HSO

DATE: May 4, 1999

SUBJECT: Merchant Power Plant Study - Environmental Issues

This memorandum is in response to the Public Service Commission staff's request for comments on the issues raised by the various parties to the Merchant Power Plant Study Workshop.

Overview

Merchant Power Plants, from the standpoint of environmental regulation, will be subject to the criteria of any other equivalent power plant. They will have to comply with the non-procedural standards of all the jurisdictional agencies. Dependent upon type and size, they may be required to be reviewed under the Electrical Power Plant Siting Act. If so, they would then be subject to a Need Determination view by the Public Service Commission. However, even if the PSC found that a Merchant Plant (or a non-merchant plant) was needed, the Governor and Cabinet sitting as the Siting Board may determine that the facility should not be built, for environmental reasons.

Commission Staff's Question 7

Impact, if any, of merchant plants on the environment. – The design of the plants would in part dictate their impact. However, the existing environmental regulations, and conditions of certification, where applicable, would limit those impacts to allowable amounts.

a. **Use of allowable ambient air increments by merchant power plants.** – Increments are allocated on a "first come, first serve" basis. Thus, a merchant could be awarded increment which might otherwise be utilized by a "non-merchant" plant.

b. **Use of available power plant sites and other finite resources** – The state has no provision for site banking or resource banking for power plants. These sites and resouces would also be approved or disapproved based on their regulatory merits, on a "first come, first served basis".

Florida Power Corp. III-15

What impact would merchant power plants have on the environment of the State? -- Merchant power plants would have the same impacts as equivalent non-merchant plants, and would be approved or disapproved accordingly.

Florida Power & Light 18

Will the use of limited resources and infrastructure in Florida by merchants affect investor-owned public utilities with an obligation to serve, ability to use that infrastructure for public purpose? (gas transportation, transmission line capacity, air, water, land, etc.) -- Use of infrastructiure by a Merchant will affect the IOU's ability to use infrastructure depending on whether a Merchant must build adequate infrastructure to offset that which it "consumes". This raises the legal question of how would such a requirement be imposed on a facility, to assure that the non-merchant utility is not unduly deprived of infrastructure resources which it originally planned and paid for. If a merchant is licensed under the Electrical Power Plant Siting Act, as with non-merchants, mitigation of impacts can be and have been mandated by the Governor and Cabinet sitting as the Siting Board. Typically in the past, this has been for items such as transportation impacts, e.g., installation of upgraded roads and stoplights. For merchants, this could be the construction of "directly associated facilities" such as additional transmission lines to cover the load on the carrying-capacity of the state grid. Such a requirement would have to be proposed through the agency reports (e.g., the Public Service Commission's) and the draft Conditions of Certification in order for them to be considered by the Administrative Law Judge and the Siting Board. If the affected non-merchant utilities did not feel that the proposed conditions were adequate, they could petition to become a party and advocate more stringent requirements.

HO/ks

THE CORPORATION FOR FUTURE RESOURCES

fax

To: **Joe Jenkins**
Company: **Florida Public Service Commission**
Fax Number: **413-6627**
Business Phone: **413-6626**

From: **Dick Glick**
Company: **Corporation for Future Resources**
Fax Number: **942-1967**
Business Phone: **942-2022**

Pages: **14**
Date/Time: **10:10 am - 05/06/99**
Subject: **PSC Merchant Power Workshop**

{Note}

Hello Joe --

Attached is our annoteated contribution for the inclusion in the merchant power to be conducted by the PSC on May 13. The biomass proposed action has been fashioned after Minnesota legislation.

Best, Dick

1909 Chowkeebin Court Tallahassee FL 32301 P: (850) 942-2022 Fax: (850) 942-1967
dglickd@pipeline.com

Issue 3 – Merchant Power Producer Qualification

CFR's Position – Merchant power facilities should be fueled with at least 10 percent of energy derived from renewable resources. A specific recommendation for Commission actions is provide, with other related items, in Attachment A.

This recommendation is based on technological advances that include:

1. **Anaerobic fermentation methane rich gas – Attachment B**
   a) Florida application
      (1) Based on the use of a high yield giant, perennial, legume, leucaena, as the principal feedstock – agri-fuel
      (2) Florida advantages, sun and rain, of feedstock production
      (3) High yields of methane
         (a) Currently developing up to 25,000 acres in Polk County
         (b) At least 4 million acres available for agri-fuel production
            (i) Methane = natural gas equivalent of 1.3 million MCF per day (based on 1000 BTU/cubic-foot)
            (ii) High efficiency, combined cycle equivalent of 7800 MW of electric generation capacity (based on heat rate of 7000 BTU/KWH
            (iii) Methane purified and pressurized and gated into natural gas pipeline(s)
            (iv) No need for any special power equipment as the gas is a one-to-one replacement for pipeline natural
      (4) Co-product, very valuable organic fertilizer-crop cover – fertilization without the need for leachable mineral fertilizers and soil biocides.
      (5) Provides three valuable products leading to project economic feasibility – economic viability not based on energy alone.
      (6) Additional feedstocks also include Florida exotics such as maleleuca, Brazilian Pepper, Chinese tallow as well as freeze damaged plants, hurricane damaged biomass, etc.
2. **Battelle-FERCO Pyrolysis – Attachment C**
   a) A very efficient, patented technology that converts biomass into a medium BTU gas that is then, in situ, use for power production by direct introduced into a boiler or into a combined cycle, gas turbine-steam turbine system
   b) Technology is virtually biomass type independent allowing for applications involving a variety of single and mixed feedstock.
3. **MCXEEC Fiber Fuels – Attachment D**
   a) The patented technology converts a wood and wood products into a defined sized and dried fuel
   b) The fuel can be dual fired with coal in certain existing coal fired power system
      (1) Without diminishing the systems efficiency, but
      (2) Improving air quality and reduce pollution control requirements and costs
4. **EnerTech-Mitsubishi Technology, through MCXEEX – Attachment E**
   a) A patented technology that converts any biomass into a coal slurry
   b) Slurry can be directly and efficiently dual fired with coal in most coal fired power systems

Issue 5 – Economic impact effects of the use of renewable resources

Establish Florida energy industrial base

a) Gas use
   (1) Most efficient hydrocarbon for energy production
   (2) Power production without the need for special power generation equipment
   (3) Direct use for heating-cooling, hot water, cooking, etc.
      (a) More efficient energy use than electricity
      (b) Establishment and/or enlargement of gas distribution, appliance and servicing capacities
      (c) Competing control influence on pricing if only single energy source availability
b) Provide Florida with a degree of energy independence

2. Productively preservation of 'green spaces'
   a) Increase farm incomes and stability – energy crops considered are Florida crops
   b) Provide for an organic fertilizer industry with income generating activity from
      (1) Production of value added agricultural products such as organic citrus, organic sugar, etc.
      (2) Related organic fertilizer economic developments
   c) Increase tax base with reduction in service base, i.e., agricultural lands use far less in tax services than developed areas
   d) Assist in defining the extent of development

Issue 7 – Environmental benefits from the use of renewable resources

1. No carbon based fuel is more environmentally acceptable than is methane
   a) Energy use of biomass resources provides a net reduction in atmospheric loading effects of carbon dioxide
   b) Pipeline distributed fuel of fuel minimizes energy consumption and corresponding pollution in delivery of fuel
   c) Minimum loss from pipeline of gas due to shortened gas delivery distances
   d) Improved energy efficiency – (Consider what air quality in California would be like if California did not use natural gas as a very important general energy source!)
2. Agri-energy development results in:
   a) Improved air quality
   b) Increased air moisture content –
   c) Generally lower temperatures in active agricultural regions – (The Palm Springs effect – temperature is 4 degrees lower than the average before vegetative plantings)
   d) Soil stability and erosion resistance
   e) Substantial reductions in ground water contamination and runoff
   f) Generation and stability in bio-related development
   g) Dramatically reduction in agricultural decomposition resulting in the release of methane into the atmosphere

Attachment A – Recommendation for Commission Action and Related Items

Biomass Power Component — Merchant Power

1. The Public Service Commission shall establish rules such that urban and agricultural biomass residues, farm grown biomass and other biomass as defined in paragraph 3 below are to be used to generate electric power, under a "closed loop system" as defined in paragraph 2 below within this state for direct use in the state; or for wholesale production of electric power within or without this state.

2. For purposes of this section, the term "closed-loop system" shall mean any method of utilizing biomass, as defined below, to produce gases, liquids or solids from organic materials that are captured in the process and not emitted, discharged or released into the atmosphere or the environment, except under controlled measures, and specifically includes anaerobic fermentation facilities located within this state and any other facilities that produce electric power.

3. For purposes of this section, the term "biomass" shall mean any organic, non-fossil derived, matter containing cellulose and other organic matter, including but not limited to fowl, fish and other animal residues, agricultural residues, urban, noxious or exotic plant residues and farm-grown or produced biomass as defined.

    1. "Fowl, fish and animal residues" shall mean and include the manure, processed skeletal remains, including offal and renderings, of any fowl, fish, and ratite, or other animal or aqua cultural product within or without this state.

    2. "Agricultural residues" shall mean and include any and all manner of organic matter from agricultural endeavors, including processing, such as, by example only, citrus pulp and oils, field roughage, clearing or pruning residues, etc., of row crops, citrus production, and other agricultural products.

    3. "Urban, noxious or exotic plant residues" shall mean and include tree, lawn and other trimmings, and any plant designated as noxious or exotic under any eradication program or mandate or executive order of this state by the Governor, the Florida Department of Agriculture & Consumer Services, Department of Environmental Protection and Natural Resources, Department Of Transportation, Department of Community Affairs, Department of Energy or any other state, local or federal agency, and shall specifically include melaleuca, Brazilian pepper, Australian pine, hydrilla, hyacinth or other noxious aquatic plants as from time to time designated by the Florida Fish & Game/Marine Fisheries Commissions.

    4. "Farm grown or produced biomass" shall mean any biomass which is intentionally cultivated, harvested and prepared for use, in whole or in part, for any of the energy related sources contemplated in this section with a design to minimize the impact of the depletion of forests and woodlands and shall specifically include any nursery agricultural byproducts within this state and, leucaena, kenaf, ramie, sorghum, sugarcane, bagasse, alfalfa, jute, crotalaria, and such other plants, not enumerated herein, defined as bast, grasses and leguminous species.

4. For purposes of this section, a "qualifying project" shall mean any project within this state that utilizes biomass that:

   A. Uses biomass as a feedstock for an anaerobic fermentation facility and use the methane rich gas produced as a fuel for the generation of electricity or power; or,

   B. Uses biomass as a feedstock in a fired electric generation system.

5. Fuel exemption. Over the duration of the contract of a biomass power facility selected to satisfy the mandate in paragraphs 1 and 7, fuel sources that are not biomass may be used to satisfy the 10 percent of the fuel requirements of a biomass power facility selected to satisfy the biomass power mandate in paragraphs 1 and 6. A biomass power facility selected to satisfy the mandate in paragraphs 1 and 6 also may use fuel sources that are not biomass during any period when biomass fuel sources are not reasonably available to the facility due to any circumstances constituting an act of God. For purposes of this paragraph, "act of God" means any natural disaster or other natural phenomenon of an exceptional, inevitable, or irresistible character, including, but not limited to, flood, fire, drought, earthquake, and crop failure resulting from climatic conditions, infestation, or disease.

6. Mandate. The Florida Public Service Commission, shall establish rules by which all new electric power capacity built in this state after the effective date hereof shall require at least 10% of the energy source of new electric power generation capacity be from renewable, biomass based, electric power generation as defined herein.

Current Merchant Power Activities –

Compiled by Stephen H. Watts, II McGuire, Woods, Battle & Boothe LLP, Last updated: March 22, 1999

As the U.S. electric power industry moves towards restructuring, the author and many other observers agree that "merchant" power generation capacity—meaning capacity that has been either acquired or developed without long-term offtake commitments—will be the norm if a workably competitive marketplace is achieved. In the course of speaking on this subject around the country, the author has collected from reported sources a base of information on the progress of merchant power activity that may be of interest to power industry participants and which is presented here. The information on international merchant projects is intended to serve as examples only for comparison to U.S. experience. The Merchant Power Scoreboard will be updated and supplemented with future developments. For more information see our http://www.mwbb.com/services/energy-mp.htm

Merchant Experience in the United States

- Currently Operational - 13,349 MW
- Under Construction - 6,558 MW
- Under Development -8,178-8,328 MW
- Plans Reported - 55,429-57,594 MW
- Terminated - 240-750 MW
- Disaggregation - 63,865 MW

Recent renewable power related state actions:

Connecticut – http://www.retailenergy.com/statelin/9901olsn.htm
Delaware – http://www.retailenergy.com/statelin/9709olsn.htm
Maine – http://www.retailenergy.com/statelin/9706olsn.htm
Massachusetts – http://www.retailenergy.com/statelin/9711olsn.htm
Minnesota – http://www.revisor.leg.state.mn.us/slaws/1997/c176.html
Nevada – http://www.retailenergy.com/statelin/9708olsn.htm
New Jersey – http://www.retailenergy.com/statelin/9902olsn.htm
California – http://www.ert.net/html/body_california_faq.html

Electric Light & Power,
February 1999, p1

Retailers, government adopt green power

So-called "green" energy sources are gaining favor among companies seeking to offer new choices and added value to customers. Some recent examples include United Airlines, BJ's Wholesale Club, New England Electric System and UtiliCorp United. Additionally, the federal government seems likely to become a major green power customer.

The Clinton Administration is drafting an executive order mandating federal government agencies to purchase 5 percent of their electricity from renewable sources, paying a premium of up to 20 percent. The order would also restate the goal of the Energy Policy Act of 1992 to reduce federal government energy use by 20 percent by the year 2000, and 30 percent by 2005.

In the private sector, BJ's Wholesale Club of Natick, Mass., is using photovoltaic (PV) modules for a generator planned to serve the Massachusetts market for green power (see photo). BJ's, which operates 93 food and general merchandise warehouse clubs in 13 states on the Eastern Seaboard, recently installed 60 PV panels at its North Dartmouth, Mass., location. The facility, Sun Power Station 1, is being called the first solar electricity plant purpose-built to meet green power demands in a deregulated market.

The project is a joint venture of BJ's, Sun Power Electric of Boston — a not-for-profit solar energy service provider — and New England Electric System (NEES) subsidiary AllEnergy Marketing Co.

The North Dartmouth station is expected to eventually have 164 PV panels, producing 60,000 kWh a year to meet the needs of 10 average homes for 20 years, according to BJ's. AllEnergy will buy the output and market it under its green power name, "Re-Gen."

The U.S. Department of Energy's Utility Photovoltaic Group TEAM-UP program partially funded the project, which consists of PV panels from ASE Americas in Billerica, Mass., and Evergreen Solar in Waltham.

Further west, Colorado's first wind farm began generating electricity for Public Service Company of Colorado's (PSCo) Windsource program. Residential customers can buy wind energy for their homes in 100 kWh blocks of power on a monthly basis from Denver-based PSCo and Holy Cross Energy of Glenwood Springs, Colo. Customers pay a $2.50 premium per 100 kWh over existing residential rates.

"We know that a significant number of our customers want renewable energy sources developed within Colorado," said Andy Sulkko, PSCo's renewable energy product manager. About 9,000 PSCo customers and 700 Holy Cross customers have signed up for the Windsource program.

The 5 MW Phase I of the Ponnequin wind facility, eventually to be comprised of 21 NEG Micon 750 MW turbines, began operating in December. The project will generate 15.7 MW of power.

UtiliCorp United also plans to serve green power customers in Colorado. The company launched a plan Nov. 12 to offer a green power option for 369,000 electric customers in Colorado, Missouri, Kansas and West Virginia. Customers who sign up on an annual basis for 100 kWh blocks of power are to be offered the green power option for a premium over traditional sources.

As part of the program, UtiliCorp is investing $300,000 for a 16 percent interest in a joint windpower project at the Jeffrey Energy Center in Kansas, near Topeka. Western Resources owns the remainder of the $2.3 million project, which is expected to begin construction in early 1999, and enter service a few months later.

"This project is an important move for UtiliCorp in providing customers with more choice in the way they purchase energy," said Jim Miller, senior vice president, energy delivery.

In California, Green Mountain Energy teamed up with Prudential California Realty to provide homebuyers with information about deregulation, electricity choice, and opportunities to buy electricity from Green Mountain Energy. Prudential operates some 94 Offices in Northern California, handling nearly $3.9 billion in real estate sales in 1998.

Green Mountain also partnered with United Airlines to create a new frequent-flier program. Through the end of January 1999, United Airlines Mileage Plus members in California were offered the opportunity to earn 5,000 bonus miles for choosing Green Mountain as their electricity provider.

Green Mountain Energy's Green-e certified products include electricity generated from sources such as large-scale and small-scale hydropower, biomass, geothermal and windpower.

Green power initiatives seem to be paying off, at least in California. Green power has commanded a significant premium in the state, according to Automated Power Exchange (APX) of Cupertino. During the month of October, sellers in the APX Green Power Market received an hourly average market premium of $2.83 per MWh for on-peak power and $7.17/MWh off-peak, compared to the hourly average California PX price for system power. The volume-weighted monthly average hourly price for on-peak power in the APX Green Power Market was $32.54/MWh, and $28.47 for off-peak power.

ATTACHMENT B - BIOMASS ANAEROBIC FERMENTATION TECHNOLOGY

Duke Engineering & Services (DE&S) has teamed with the Corporation for Future Resources (CFR) and MCX Environmental Energy Corp to provide energy conversion systems which utilize a proprietary anaerobic fermentation process for generating methane gas and other valuable byproducts. The team can provide full scope Engineer-Procure-Construct projects, as well as operations and maintenance training and management programs for energy conversion facilities.

The team's anaerobic fermentation process has been recognized by the US Department of Energy as a commercially viable renewable fuels technology. The process provides a methane rich gas from a variety of plant materials. These plant materials, or feedstocks, can be supplied from dedicated agri-forests, crops specifically planted for their rapid growth and fermentation qualities, or from recovery of existing local crop residues. The methane rich gas may be used to produce electricity or used directly for process steam, drying, melting, etc. The methane and carbon dioxide may be separated, if economically feasible, with the former a high BTU fuel, and the carbon dioxide for beverage and other uses. A valuable organic soil amendment, nitrogen rich anaerobic compost, fertizer-cover is the co-product of the anaerobic fermentation process.

The team utilizes a proprietary process model to develop detailed project plans for each client. This model integrates all project variables, such as feedstock type and availability, proximity of suppliers and customers, desired outputs and end products, etc. which results in the optimum turnkey projects.

ATTACHMENT C - BATTELLE-FERCO PYROLYZER

Pyrolysis using char as thermal source, the biogas with between 350 and 550 BTU/scf - - this is a low pressure but high temperature process. The Vermont Gasifier Project –

Project Summary –
The Vermont Project has been undertaken to demonstrate the integration of the Battelle Columbus Laboratory (Battelle) "indirect" gasifier with a high-efficiency gas turbine. The demonstration and validation of this gasification/gas turbine system are being undertaken at the existing 50 megawatt (MW) wood-fired McNeil Power Generating Station in Burlington, Vermont, thereby significantly reducing the time scale for deployment and the necessary capital investment for DOE and the Vermont project partnership.

The development and commercialization of this "indirect" gasifier technology is important because:
(1) It does not require a hot-gas cleanup system for gas turbine operation, thus removing this technical hurdle from the commercialization path.
(2) It produces a higher Btu gas stream than other gasification systems, thus allowing the use of existing unmodified industrial gas turbines.

Demonstration of this U.S. technology at a utility power station will significantly lower the perceived risk among domestic and international power project developers. It will also provide significant market opportunities for advanced-cycle, high-efficiency biomass power generation systems for application in domestic and international markets. Successful demonstration will provide substantial market pull for U.S. biomass gasification technologies, and provide a significant market edge over competing foreign technologies.

Project Status (1997)

Construction is under way on a 200-tons-per-day "indirect" gasifier that will eventually be coupled with a 15-MW gas turbine to complement the existing 50-MW output of the McNeil Station. Zum Nepco, an engineering company experienced in the design and construction of biomass-fired power plants, completed the detailed engineering design and began construction of the gasifier in March 1996; the permitting process was completed ahead of schedule in May 1996. In late 1997, initial operation and performance testing of the gasifier will begin. The addition of the 15-MW gas turbine is forecast for FY1998.

Partners and Cost Share

The principal industrial partner, Future Energy Resources Company, of Atlanta, Georgia, is cost sharing 50% of the overall project costs with DOE. Other project participants include the co-owners of the McNeil generating station located in Burlington, Vermont, which is operated by the Burlington Electric Department; Battelle; and Zum Nepco of Portland, Maine. The Vermont Project is a scale-up of an indirect gasifier concept developed by Battelle, which is based in Columbus, Ohio.

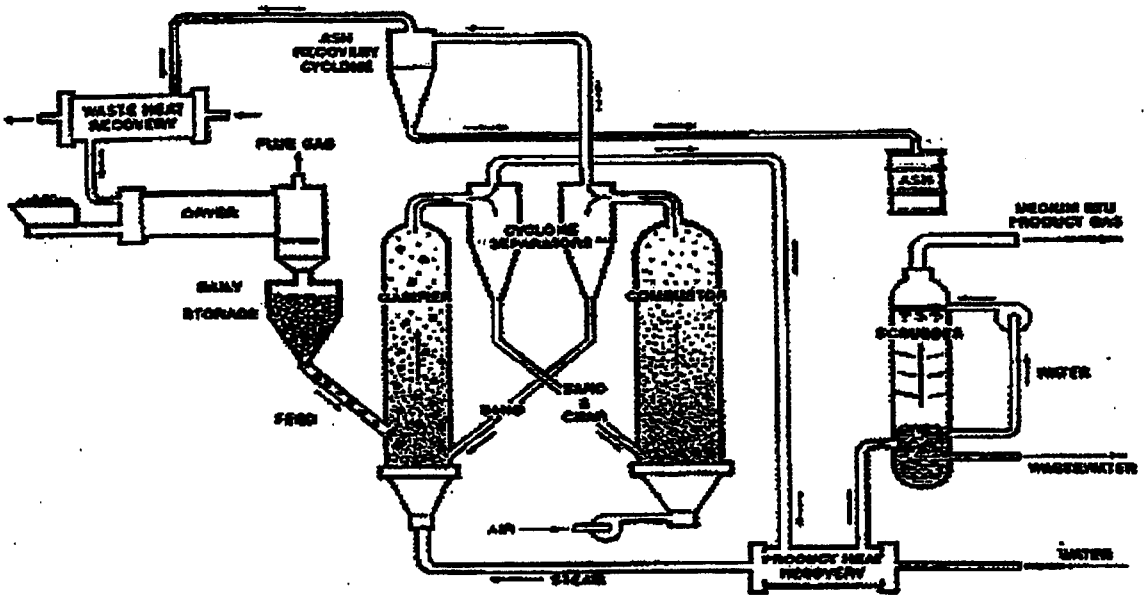


FIGURE 1. BATTELLE'S BIOMASS GASIFICATION SYSTEM

As of March 1999, the Battelle-FERCO tests have met all project objectives except direct connection to a gas turbine. Such connections, using a gas of the same composition as that generated, have been shown to perform according to various manufactures' specifications for combined cycle cogeneration systems.

ATTACHMENT D - MCX/FIBER FUELS PROCESS

Policy in Action Environmental Burning Biomass Review Southern Company President's Message, 25 Feb 1998

Waste wood currently going into landfills or left in mountain-high piles to rot could become a cleaner source of electricity. [Savannah Electric's Plant Kraft]

Much of the basic research already is done. Savannah Electric, a Southern Company subsidiary, and Fiber Fuel International, a consulting firm and potential fuel seller, have successfully mixed and burned pulverized wood and coal at Savannah Electric's Plant Kraft. The challenge now is to begin processing scrap wood for burning on a large scale, so the wood-coal mixture can burn continuously when electricity is in high demand. Fiber Fuel is constructing a wood-processing yard to dry an abundance of waste wood available in the Savannah area and pulverize it into a powdery coal substitute. If the fuel proves cost-effective, it could be burned regularly at Plant Kraft.

The use of wood has several advantages. First, there's less pollution - wood when burned releases far less sulfur dioxide and nitrogen oxide than coal. Second, the need to put the scrap wood into landfills is eliminated. The Southern Company will be able to dispose of its own waste wood. Burning wood is also "CO2 neutral" - that is, burning the wood releases no more carbon dioxide than if the wood were left to rot.

The Southern Company already burns biomass at other plants, too. Most notable: its Mobile Energy Services plant in Mobile, Ala., where waste wood from a paper processing facility is used to generate steam and electricity that then is sold back to the paper maker.

US5609113: Particulate waste wood fuel, method for making particulate waste wood fuel, and a method for producing energy with particulate waste wood fuel. Galipeault; Claude J. , Savannah, GA, Staab; Lawrence E. , Savannah, GA, Fiber Fuel International, Inc., Savannah, GA

Abstract: A particulate waste wood fuel comprising wood particles comprising less than 20% water by weight and having a particle size distribution suitable for combustion of the particulate wood fuel in a particulate fossil fuel suspension furnace. A method for making the particulate wood fuel includes shredding of waste wood and drying the shredded waste wood to obtain the desired particle size distribution and water content. A method for producing energy comprises injecting the particulate wood fuel into the combustion chamber of a particulate fuel suspension furnace separately from a particulate fossil fuel which is also injected into the combustion chamber. The particulate fossil fuel and particulate wood fuel are combusted in the combustion chamber in a gas flow through the combustion chamber to form a flame in the gas flow. The wood particles are substantially completely combusted within the combustion chamber while suspended in the gas flow and are not combusted at the furnace wall. The method of producing energy is particularly suited for tangentially-fired pulverized coal suspension furnaces such as are contained in some utility boilers.

ATTACHMENT E - ENERTECH-MITSUBISHI PROCESS – SLURRY CARBONIZATION

Combustion Characterization of Carbonized Refuse-Derived Fuel

Background

As public concern grows and governmental regulations become increasingly strict, numerous municipalities and industries face exorbitant costs for solid waste disposal. According to the U.S. Environmental Protection Agency, the national cost of waste disposal is more than $30 billion per year. Established landfills are reaching capacity at an alarming rate, and owners are escalating the "tipping fees" they charge to accept municipal solid waste. It is critical that out-of-date, expensive waste disposal methods be replaced by more efficient and cost-effective technologies. That is the primary goal of this project. By converting up to 70% of the solid waste that arrives at the landfill to a pumpable slurry fuel, the amount of solid waste requiring disposal can be reduced, and a competitive fuel source can be produced.

Objectives

The main objective of the test program was to establish the effectiveness of the EERC-EnerTech carbonization process to produce a liquid fuel with desirable combustion properties. Specific objectives included the following:

- Quantify flue gas concentrations of SO2, NOx, and hazardous air pollutants
- Evaluate the fuel's fouling and slagging characteristics
- Evaluate particulate collection properties by electrostatic precipitation
- Characterize the fly ash leaching potential for disposal and reuse

Results

A refuse-derived fuel (RDF) obtained locally was converted by the EERC-EnerTech carbonization process to a pumpable slurry fuel for use in a pilot-scale combustion test in the combustion test facility located in the EERC combustion pilot plant. The fuel was fired at a rate sufficient to maintain a furnace exit gas temperature of 2000°F at an excess air rate near 25%. Results indicated excellent combustion efficiency, as more than 99.5% of the carbon was converted to CO°2 and water. The fuel exhibited a very low ash-fouling potential, and fly ash resistivity measurements indicated that adequate collection could be achieved using an electrostatic precipitator. The fly ash was also tested to determine the degree to which toxic trace elements would be leached from the fly ash in a disposal or reuse scenario. Analyses indicated that these toxic trace elements would not be leached from the fly ash above current standards.

Future work will focus on producing carbonized slurry with a greater energy density, optimizing other slurry properties. Combustion testing will determine the effects of varying processing parameters on the fuel's fouling potential and on fly ash properties. In addition, blends of the carbonized RDF with North Dakota lignite will be investigated. It is the goal of future work to perform the engineering and economic analyses required to establish a commercial-scale demonstration project at the Grand Forks municipal landfill.

EnerTech Environmental Inc., a developer of waste disposal and energy technologies, has signed an agreement with Mitsubishi Corp. and four other Japanese companies to develop and market commercial installations of EnerTech's municipal solid waste disposal process in several Asian countries.

With support from the Japanese Ministry of Trade & Industry, the consortium of companies agreed to build a 20-ton-per-day demonstration plant in Ube City, Japan. Atlanta-based EnerTech will license its patented "SlurryCarb" process, provide engineering support and furnish equipment.

The SlurryCarb process converts garbage into a liquid fuel that is cleaner to combust than coal. EnerTech and Mitsubishi intend to market the process in the United States and are seeking a demonstration site here.

From: "gerard kordecki" <kordecki@worldnet.att.net>
To: <fpsc-mpsfrcc.com>

Subject: LIMITED OBSERVATIONS AND COMMENTS ON MERCHANT PLANT ISSUES

Category 1

It was obvious from the discussions at the staff workshop on May 3rd that the various parties were not in agreement on the meaning of "merchant plant". Without a working definition for merchant plant, little progress can be expected on the 13th.

The following questions, when answered, may begin to help define merchant plant sales and the scope of the work effort.

1. Can a merchant plant make firm sales (sales-for-resale}?

2. Is there any particular length of firm sale (one year, ten years, life of the plant etc.} which differentiates a firm merchant sale from a load serving sale-for-resale?

3. If a firm merchant sale is counted as a resource by a load serving utility, will this sale no longer be classified as a merchant sale?

4. Are generating plants which do not require FPSC certification be addressed under any merchant plant activities?

a. Combustion or gas turbines

b. Steam units under 75 mw

c. Existing generating units which change ownership and/or for which contracts end and whose outputs may not be fully sub-scribed for firm sale-for-resale

d. Cogenerators who may make sales which are not covered under QF contracts or as-available output required purchases

Category 4

Reserve margins should be required to be calculated ONLY by load serving utilities. If a merchant plant makes a firm sale and the purchasing utility "counts" the purchase as part of its resources in the calculation of its reserve margin, then merchant plant output does effect reserve margins of the load serving utility.

The level and firmness of the resources which serve native loads (retail and requirements sales) of the geographically franchised utilities, can not be shifted to merchant plants. The service responsibility belongs to the load serving entity. The element of state reliability improvement with merchant plants seems ripe for the FPSC to establish operating standards or rules. For instance, under a state wide power emergency all potential output from merchant plants which is not devoted to firm sales for resale should be required to be made available to the state grid.

Category 5

The issues stated under 5 seem to ask whether the FPSC should determine the level of merchant plant capacity or have caps etc. Of course as mentioned earlier, there are a number of instances in which "merchant need" may fall outside the need review. If generating plants are to be included in the rate base of a load serving utility, then the Commission should determine the need (at least for the IOU'S) but if retail customers bear no financial risk for a plant, it would seem that caps would not be necessary.

Category 6

The requirements and obligations of franchised load serving utilities should not change with the introduction of merchant plants.

Category 7

Market power issues arise only in open competitive markets. At this time load serving utilities are regulated and are not competitive except in their wholesale sales activities which are FERC jurisdictional for investor owned utilities.

Category 11

Merchant plants must meet the same environmental rules and regulations as any other new generating plants. To the extent that a merchant plant "replaces" some energy output from an existing plant, the pollution outputs are replaced. The FPSC has determined that environmental output and its associated control costs are a function of energy output not capacity or demand since the loads themselves (energy use) does not change with a change in generating resources.

Category 13

In the analyses of conservation and load management cost effectiveness, the introduction of potential merchant plant purchases is just another variable. Firm purchases from a merchant facility would be treated the same as firm purchases are treated in the analysis today. The same would be true for non-firm purchases. The load serving utilities are the only entities who can evaluate avoided costs of construction and purchases.