

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

NOTICE OF STAFF WORKSHOP

TO

ALL INVESTOR-OWNED ELECTRIC UTILITIES

ALL ELECTRIC COOPERATIVES

ALL MUNICIPALLY-OWNED ELECTRIC UTILITIES

AND

ALL OTHER INTERESTED PERSONS

RE: UNDOCKETED

WORKSHOP ON FLORIDA RENEWABLE

TECHNOLOGIES ASSESSMENT

ISSUED: June 5, 2002

NOTICE is hereby given, pursuant to Rule 25-22.001, Florida Administrative Code, that the Staff of the Florida Public Service Commission will conduct a workshop, in the above-referenced matter, to which all persons are invited, at the following time and place:

10:00 a.m. to 5:00 p.m., Tuesday, July 2, 2002
Room 152, Betty Easley Conference Center
4075 Esplanade Way
Tallahassee, Florida

PURPOSE

To develop accurate, reliable estimates of the cost and commercial status of various electric generating technologies that can be constructed in Florida, and in which renewable fuels can be used. In addition, comments will be sought on strategies to increase the use of renewable resources. The focus of the workshop will be indigenous renewable resources due to the limitation of Florida's electric grid to import substantial electric energy from out-of-state. One or more of the Commissioners of the Florida Public Service Commission may attend and participate in the workshop.

DOCUMENT NUMBER-DATE

05872 JUN-58

FPSC-COMMISSION CLERK

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In order to facilitate discussion at the workshop, the Staff of the Florida Public Service Commission has developed a questionnaire for all interested parties to complete. The questionnaire is contained in Attachment A to this Notice of Staff Workshop. We are asking workshop participants to complete and return the questionnaire to the Public Service Commission by June 25.

While the questionnaire is primarily designed to gather information on large scale, grid integrated technologies, this should not preclude participants who have information on micro-scale or prototype technologies from completing the questionnaire. An example of such technologies would be customer owned photovoltaic systems. Completed data questionnaires should be sent to:

Judy Harlow
Florida Public Service Commission
2540 Shumard Oak Blvd
Tallahassee, Florida 32399-0850
(850)413-6842 PHONE
(850)413-6843 FAX

Staff will make copies of completed questionnaires available to workshop participants. If workshop participants cannot provide this information prior to the workshop, please bring 50 copies to be distributed at the workshop. Questions about the workshop or questionnaire should be directed to Ms. Harlow at the above number.

All interested persons may submit comments for consideration in the workshop. If you wish to comment, but cannot attend the workshop, please file your comments with the Division of the Commission Clerk and Administrative Services, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, on or before June 25, 2002, specifically referencing "Undocketed Workshop on Florida Renewable Technologies Assessment."

A copy of the agenda for this workshop may be obtained by writing to the Director, Division of the Commission Clerk and Administrative Services, at the same address as that listed above.

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Any person requiring some accommodation at this workshop because of a physical impairment should call the Division of the Commission Clerk and Administrative Services at (850) 413-6770 at least 48 hours prior to the workshop. Any person who is hearing or speech impaired, please contact the Florida Public Service Commission 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 5th day of June, 2002.

BLANCA S. BAYÓ, Director
Division of the Commission Clerk
and Administrative Services

By: Kay Flynn
Kay Flynn, Chief
Bureau of Records and Hearing
Services

(S E A L)

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FLORIDA RENEWABLE TECHNOLOGIES ASSESSMENT

The purpose of this survey is to develop accurate, reliable estimates of the cost, operational characteristics, environmental impacts, and commercial status of various renewable technologies which are currently deployed, and may potentially be deployed within Florida. The questionnaire was designed with large scale, grid integrated technologies in mind; however, this should not preclude participants who have information on micro-scale technologies from completing the questionnaire. Please complete one questionnaire for each existing renewable generating facility within Florida, and each potential renewable technology with applicability to the Florida electricity market. Please return completed questionnaires as indicated on page 5.

I. Generating Unit Characteristics

___ Existing unit is located at _____
___ Unit is a potential installation.

Unit Manufacturer _____

Unit type or designation _____

This unit generally falls into the following category of technology:

___ Photovoltaic	___ Wind
___ Oceanic Power	___ Geothermal
___ Municipal Solid Waste	___ Concentrated solar / steam
___ Biopower (Fuel: _____)	
___ Other [explain: _____]	

Gross capacity of typical sized unit: _____ mW

Net summer continuous rating: _____ mW

Net winter continuous rating: _____ mW

Please identify key components of this unit: (such as the power block, generator, control room; and all associated facilities such as fuel handling and storage, waste disposal, cooling ponds, lateral pipelines, etc.) _____

II. Operating / Performance Characteristics of Typically Sized Unit:

Can this unit be subject to control area utility operator dispatch? _____ Yes _____ No

What is this units peak availability factor? _____ %

What annual capacity factor is expected for this unit? _____ %

What is the expected energy production for this unit? _____ mWh / year

What is the heat rate under full load conditions for the unit? _____ Btu / kWh

Typical water requirement for this unit is _____ gallons per day at full load.

What is the annual planned outage rate for the unit? _____ days / year; _____ %

What is the expected annual forced outage rate for the unit? _____ days / year; _____ %

What EAF (Equivalent Availability Factor) can be guaranteed? _____ %

III. Unit Costs (for new units in 2002 dollars)

Total cost per installed mW: \$ _____ / mW (including accrued interest during construction, land acquisition, insurance, directly associated facilities, directly assignable interconnection costs, etc.; do not include transmission costs.)

Actual or typical total installed cost per mW for associated facilities: \$ _____ / mW.
(This is the sum of all associated facilities not directly related to the power block, generator, fuel handling systems and controls. It is a component of the total installed cost per mW identified previously.)

Error bound on installed cost per mW: +/- _____ %

Fixed O & M cost: _____ \$ / mW

Variable O & M cost: _____ \$ / mWh

Fuel costs: _____ \$/MMBTU (all inclusive including transportation, storage, etc.)

IV. Developmental Status

The design and manufacture status of this unit is best described as follows:
Please select one of the three categories, and complete the information
requested for that category.)

- _____ 1. Mature technology (This technology is commercially available, and is mass produced. There are multiple manufacturers of key components. A&E firms have experience constructing such units.)
- a. Similar units installed in Florida provide capacity of _____ mW.
 - b. Similar units installed in the United States provide capacity of _____ mW.
- _____ 2. Immature technology (Technology deployment is still on a demonstration basis, and little standardization of components has occurred. Utility scale units have been constructed but are demonstration projects.)
- a. Number of units installed in United States: _____
 - b. Total of capacity ratings for units installed in United States: _____ mW
 - c. Anticipated date that commercial deployment will occur. _____
- _____ 3. Conceptual design stage (No utility scale units of this type have been constructed; model size prototypes may or may not have been built. Cost estimates on utility scale deployment can not be guaranteed by manufacturers or A&E firms.)

V. Installation Requirements

This unit requires _____ acres for a typical installation.

Please describe any associated facilities required for operation and interconnection of this unit. For each facility, please give approximate land use requirements.

Please estimate the construction time requirement from the time at which all permits are granted through the initial in-service day for the unit.

What was the construction time for the most recent installation of a generating unit/facility of similar type and size?

VI. Environmental Matters

What waste by-products will result from operating this unit? Please list them, along with the information requested below:

Waste product	Volume	Cost for Disposal Included - see note		
1. _____	_____/mWh	\$ _____	Y	N
2. _____	_____/mWh	\$ _____	Y	N
3. _____	_____/mWh	\$ _____	Y	N
4. _____	_____/mWh	\$ _____	Y	N
5. _____	_____/mWh	\$ _____	Y	N
6. _____	_____/mWh	\$ _____	Y	N

Note: For disposal cost, please circle "Y" if the cost is included in variable O & M; please circle "N" if the cost is not included in variable O & M.

Please provide the emission profile for this unit, using the following table, if such information is available.

Regulated Pollutant	Uncontrolled Emission rate at full load (lb/mW-hr)	Controlled Emission rate at full load (lb/mW-hr)	Recommended pollution control Equipment (PCE)*	Suggested PCE provider (s); list contacts if known.
Sulfur dioxide				
SAM/TRS				
Nitrogen oxides				
Particulate Matter				
Carbon Monoxide				

VOC/Ozone				
NMOC				
Lead				
Fluorides				
Mercury				
Dioxins / Furans				
MWC Organics				
MWC Metals				
MWC Acid Gas				
HAPS (Itemize)				

* Note: Recommended PCE should be sized to achieve the listed "Controlled emission rate at full load."

The following supportive information is desired, to the extent it may be available. Please use additional sheets as necessary.

1. Please identify and describe: all proposed fuels; sources of fuels; methods of handling, storage, and transfer of fuels; moisture content of fuels; contaminants in fuels (sulfur, chlorine, metals, etc.).
2. Please describe the storage, handling and utilization of any hazardous or explosive materials used in the operation or control of this unit.
3. Please list the permits required for installation of this unit. Indicate whether project is expected to be subject to any Florida's Siting Programs, and if so please explain.
4. Please indicate all items that may be subject to local zoning ordinances (e.g. noise, equipment height, aesthetics, etc.) and explain.
5. Please indicate whether there are potential impacts of ecology such as plant and wildlife, and if so describe.

6. Will facility be a “zero-discharge” for purposes of wastewater? If not, please describe all anticipated discharges.
7. Will there be thermal discharges to water bodies? If so, please describe all anticipated discharges.
8. Will hazardous wastes be generated from this facility? If so, please describe all anticipated hazardous waste streams.

Please submit completed forms to: Judy Harlow, Economic Analyst
Division of Economic Regulation
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850
FAX: (850) 413-6843

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The Florida Public Service Commission announces a public meeting or workshop in the following undocketed matter to which all interested persons and parties are invited.

DOCKET NO.: Undocketed Workshop on Florida Renewable Technologies Assessment

DATE AND TIME: Tuesday, July 2, 2002, 10:00 A.M. - 5:00 P.M.

PLACE: Florida Public Service Commission
Room 152, Betty Easley Conference Center
4075 Esplanade Way
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PURPOSE: To develop accurate, reliable estimates of the cost and commercial status of various electric generating technologies that can be constructed in Florida, and in which renewable fuels can be used. In addition, comments will be sought on strategies to increase the use of renewable resources. In order to facilitate discussion and to provide comparable data on the characteristics of renewable resources, staff composed a data questionnaire that we are asking workshop participants to complete and return to the FPSC by June 25. The questionnaire

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can be obtained from:

Division of Commission Clerk and
Administrative Services
2540 Shumard Oak Blvd.
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A copy of the agenda for this meeting may be obtained by writing to the Division of the Commission Clerk and Administrative Services, at the address listed above. Any person requiring some accommodation at this meeting because of a physical impairment should call the Division of the Commission Clerk and Administrative Services at (850) 413-6770 at least 48 hours prior to the meeting. Any person who is speech impaired, please contact the Florida Public Service Commission using the Florida Relay Service, which can be reached at 1-800-955-8771 (TDD). One or more of the Commissioners of the Florida Public Service Commission may attend and participate in this workshop.