

ORIGINAL

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF MICHAEL P. TARAN

ON BEHALF OF

FLORIDA MUNICIPAL POWER AGENCY

DOCKET NO. 050256-EM

APRIL 13, 2005

Q. Please state your name and business address.

A. My name is Michael P. Taran. My business mailing address is 8553
Commodity Circle, Orlando, Florida, 32819.

Q. By whom are you employed and in what capacity?

A. I am employed by Florida Municipal Power Agency (FMPA) as an Energy Risk
Manager.

Q. Please describe your responsibilities in that position.

A. As an Energy Risk Manager for FMPA, I am responsible for the identification,
development, and implementation of hedging strategies with a focus on natural
gas to lead to goals of low cost energy and stable rates. This includes the
execution of the strategies through exchange based trading and over-the-counter
products. My responsibilities also include procuring and managing FMPA's
natural gas transportation.

DOCUMENT NUMBER DATE

03609 APR 13 05

FPSC-COMMISSION CLERK

1 **Q. Please state your educational background and professional experience.**

2 A. I received a Bachelor's degree in Economics in 1979 from Boston University,
3 Boston, Massachusetts. I also received a Master of Business Administration
4 degree in 1986 from University of Houston, Houston, Texas. Before I joined
5 FMPA, I worked for MidAmerican Energy Holdings Company as Director,
6 Power Marketing where I was responsible for electric and natural gas market
7 forecasts utilized in the pro forma analysis of all "greenfield" development
8 opportunities and potential asset acquisitions. I have over twenty years of
9 experience in the exchange, purchase and trade of natural gas.

10

11 **Q. What is the purpose of your testimony in this proceeding?**

12 A. The purpose of my testimony is to summarize FMPA's existing and future
13 availability of natural gas, and to demonstrate that the Treasure Coast Energy
14 Center (TCEC) Unit 1 will have adequate natural gas supplies available.

15

16 **Q. Are you sponsoring any exhibits as part of your pre-filed testimony?**

17 A. Yes. I am sponsoring Exhibit No. __ (MPT-1), entitled "Annual Energy
18 Outlook 2004 Natural Gas Supply Projections." This exhibit was prepared
19 under my direction with the data coming from the Department of Energy (DOE)
20 Energy Information Administration (EIA) and is attached to and included in my
21 prefiled testimony.

22

1 **Q. Are you sponsoring any sections of the TCEC Unit 1 Need for Power**
2 **Application, Exhibit No. ____ (FMPA-1)?**

3 A. Yes. I am sponsoring Section 5.3 of the Need for Power Application, which was
4 prepared by me or under my direct supervision.

5

6 **Q. Please summarize your testimony.**

7 A. Natural gas is the primary fuel planned for the TCEC Unit 1, with ultra low
8 sulfur diesel fuel oil as the back up fuel. Based on current and projected levels
9 of long-term natural gas supplies in the United States, natural gas is a readily
10 available and economic fuel source for TCEC Unit 1. FMPA will contract for
11 natural gas transportation service with Florida Gas Transmission (FGT), which
12 has indicated that adequate pressure and volumes of natural gas can be provided
13 to TCEC Unit 1. The new unit also potentially could have access to natural gas
14 from the Gulfstream pipeline system if future proposed expansions are
15 implemented, and to liquified natural gas (LNG) from the Bahamas if one or
16 more proposed LNG projects are placed into service. In addition, onsite fuel oil
17 storage will be adequate for approximately 3 days of continuous operation.
18 Thus, FMPA is confident that fuel supply and transportation to TCEC Unit 1
19 will be sufficient and reliable.

20

21 **Q. Please describe the fuel to be used by TCEC Unit 1.**

22 A. TCEC Unit 1 will be fueled with natural gas as the primary fuel and ultra low
23 sulfur diesel fuel oil as the backup fuel.

24

1 **Q. How will natural gas be transported to TCEC Unit 1?**

2 A. FMPA will contract with FGT for firm natural gas transportation to TCEC
3 Unit 1. FGT has indicated that adequate pressure and volumes of natural gas
4 can be provided to TCEC Unit 1.

5
6 **Q. Please summarize the current supply of natural gas as it pertains to the
7 TCEC Unit 1.**

8 A. In its Annual Energy Outlook from 2004, the Department of Energy's
9 Information Administration summarized the expected natural gas supply sources
10 until the year 2025. These projections are presented in Exhibit No. __ (MPT-1),
11 entitled "Annual Energy Outlook 2004 Natural Gas Supply Projections."
12 Overall the lower 48 state reserves are projected to increase to 204 trillion cubic
13 feet (tcf) in 2013, remain relatively stable through 2018, and then gradually
14 decline to 194 tcf in 2025 while annual demand is expected to increase from
15 about 22.78 tcf in 2002 to 31.41 tcf by 2025. With natural gas reserves of this
16 quantity, the TCEC Unit 1 project is expected to have adequate natural gas
17 supplies available.

18
19 **Q. Are there any natural gas pipelines near the proposed location of TCEC
20 Unit 1?**

21 A. Yes. FGT's has a pipeline system near the TCEC Unit 1 site. FGT is an open
22 access interstate pipeline company transporting natural gas for third parties
23 through its 5,000 mile pipeline system extending from South Texas to Miami,
24 Florida.

1

2 **Q. Please describe the FGT's structure and capacity.**

3 A. FGT is jointly owned by CrossCountry Energy, LLC and El Paso Energy

4 Corporation. Operation is controlled by CrossCountry Energy (CCE).

5 CrossCountry Energy is a joint venture of Southern Union Company and GE

6 Commercial Finance's Energy Financial Services. FGT serves electric utilities,

7 independent power producers, cogeneration facilities, municipal generators and

8 local distribution companies. They have over 240 delivery points and delivery

9 connections to over 50 natural gas fired electric generation plants. The FGT

10 pipeline has access to many natural gas supply regions including Texas and

11 Louisiana Gulf Areas (Gulf of Mexico), Black Warrior Basin (Mississippi and

12 Alabama), Louisiana – Mississippi – Alabama Salt Basin, and Mobile Bay.

13 FGT reports a total receipt capacity of 3.0 billion cubic feet per day, and

14 currently reports a mainline delivery of 2.1 billion cubic feet per day. Section

15 5.3.2 of the TCEC Unit 1 Need for Power Application, Exhibit No. __

16 (FMPA-1), presents FGT's structure and capacity in more detail.

17

18 **Q. Please describe FGT's pipeline system in the State.**

19 A. The FGT multiple pipeline system corridor enters the Florida Panhandle in

20 northern Escambia County and runs easterly to a point in southwestern Clay

21 County, where the pipeline corridor turns southerly to pass west of the Orlando

22 area. The mainline corridor then turns to the southeast to a point in southern

23 Brevard County, where it turns south generally paralleling Interstate

24 Highway 95 to the Miami area. A major lateral line (the St. Petersburg Lateral)

1 extends from a junction point in southern Orange County westerly to terminate
2 in the Tampa, St. Petersburg, Sarasota area. A major loop corridor (the West
3 Leg Pipeline) branches from the mainline corridor in southeastern Suwannee
4 County to run southward through western Peninsular Florida to connect to the
5 St. Petersburg Lateral system in northeastern Hillsborough County. Each of the
6 above major corridors includes stretches of multiple pipelines (loops) to provide
7 flow redundancy and transport capability. Numerous lateral pipelines extend
8 from the major corridors to serve major local distribution systems and
9 industrial/utility customers.

10
11 **Q. Please describe the logistics of Florida Gas Transmission’s ability to supply**
12 **the TCEC Unit 1 with natural gas.**

13 A. Natural gas transportation service is available from an existing FGT pipeline.
14 An approximately 3,700 foot lateral will be constructed from FGT’s pipeline to
15 the proposed meter station on the TCEC site.

16
17 Initial studies indicate that the existing pipeline has adequate supply volume and
18 pressure, as it is downstream of an existing FGT compressor station. Therefore,
19 gas compressors should not be required for the project. Carbon steel pipe with
20 cathodic protection will be installed underground for the new lateral. A new
21 meter run along with natural gas conditioning equipment will be installed for the
22 project. The natural gas conditioning equipment will include a fuel gas
23 scrubber, two coalescing gas filters, and a fuel gas heater.

24

1 **Q. Are there any alternative natural gas supply pipelines that the TCEC Unit 1**
2 **could potentially access?**

3 A. Yes. The TCEC Unit 1 could potentially have access to the Gulfstream pipeline
4 system if future proposed system expansions by Gulfstream Natural Gas
5 System, LLC are implemented.

6
7 **Q. Please describe the structure and capacity of the Gulfstream pipeline.**

8 A. The pipeline originates from the Mobile Bay region in East Louisiana and
9 Mississippi, and crosses the Gulf of Mexico to a landfall in Manatee County
10 (south Tampa Bay). The pipeline supplies Florida with 1.1 billion cubic feet of
11 gas per day, serving existing and prospective electric generation and industrial
12 projects in southern Florida. The pipeline has been in service since May 2002.

13
14 **Q. How could the TCEC Unit 1 potentially gain access to the Gulfstream**
15 **pipeline?**

16 A. Gulfstream is currently constructing a 110 mile 30-inch natural gas pipeline
17 expansion project that began service during the spring of 2005. The expansion
18 provides new transportation service to Polk, Hardee, Highlands, Okeechobee,
19 and Martin counties. A future proposed lateral expansion would tap off this new
20 110 mile pipeline to provide service to the Port St. Lucie area, which would
21 potentially allow for Gulfstream to provide transportation service to the TCEC
22 Unit 1 project.

23

- 1 **Q. Is the use of Liquefied Natural Gas (LNG) a future possibility for the**
2 **TCEC Unit 1?**
- 3 A. Yes. If it becomes available, LNG from the Bahamas based LNG facilities
4 likely would become a supply source for the TCEC Unit 1. Current market
5 economics indicate that LNG can be a viable supply alternative for the overall
6 natural gas market in the State. Three LNG projects have been proposed to
7 deliver LNG from the Bahamas to Florida via underwater pipelines. Each
8 project would be capable of delivering more than 800 million cubic feet (MMcf)
9 of natural gas per day to the State. According to the Bahamian Minister of
10 Trade and Industry one project could be developed initially, followed by another
11 LNG project in approximately five years. Section 5.3.5 of the TCEC Unit 1
12 Need for Power Application, Exhibit No. __ (FMPPA-1), describes these LNG
13 projects in more detail.
- 14
- 15 **Q. Will the availability of natural gas and natural gas transportation provide**
16 **for adequate electricity at a reasonable cost for TCEC Unit 1?**
- 17 A. Yes. Adequate natural gas appears to be available for TCEC Unit 1 and should
18 be available at a reasonable price. The natural gas transportation system is
19 adequate to supply TCEC Unit 1. The cost of natural gas transportation to
20 TCEC Unit 1 will be reasonable.
- 21

1 **Q. Will the fuel supply and transportation to TCEC Unit 1 promote electric**
2 **system reliability and integrity?**

3 A. Yes. The natural gas supply and transportation system to TCEC Unit 1 will be
4 very reliable. In addition, TCEC Unit 1 will be capable of burning ultra low
5 sulfur diesel fuel oil. A fuel oil storage tank holding approximately 1 million
6 gallons will be installed with TCEC Unit 1. Onsite fuel oil storage will be
7 adequate for approximately 3 days of continuous operation and will have
8 provisions for fuel oil delivery by truck.

9

10 **Q. Does this conclude your prefiled testimony?**

11 A. Yes.

Annual Energy Outlook 2004 Natural Gas Supply Projections		
Annual Supply Sources (TCF)		
Supply Source	2002	2025
Onshore - Associated dissolved gas	1.60	1.17
Onshore - Non-associated gas	6.23	5.93
Onshore - Unconventional	5.93	9.17
Offshore	4.86	5.03
Alaska	0.43	2.71
Canada	3.59	2.56
Mexico	-0.26	-0.12
LNG Imports	0.17	4.80
Other	0.24	0.19
Total Supply Sources	22.78	31.41