

BEFORE THE PUBLIC SERVICE COMMISSION

In Re: Petition for Approval of Gulf Power Company's Storm Hardening Plan Pursuant to Rule 25-6.0342, F.A.C.) DOCKET NO. 070299-EI) FILED: SEPTEMBER 7, 2007)

NOTICE OF FILING OF TESTIMONY OF R.L. WILLOUGHBY AND PETER J. RANT ON BEHALF OF THE CITY OF PANAMA CITY BEACH, FLORIDA AND THE PANAMA CITY BEACH COMMUNITY REDEVELOPMENT AGENCY

RECEIVED FPSC 07 SEP - 7 PM 4:13 COMMISSION CLERK

The City of Panama City Beach, Florida and the Panama City Beach Community Redevelopment Agency hereby give notice of the filing of an original and fifteen copies of the testimony of R.L. Willoughby and Peter J. Rant on this 7th day of September, 2007.

[Handwritten signature]

Robert Scheffel Wright Florida Bar No. 966721 John T. LaVia, III Florida Bar No. 853666 Young van Assenderp, P.A. 225 South Adams Street, Suite 200 Tallahassee, Florida 32301 (850) 222-7206 Telephone (850) 561-6834 Facsimile

Attorneys for the City of Panama City Beach, Florida, and the Panama City Beach Community Redevelopment Agency

- CMP 2 COM 5 CTR 1 ECR 2 GCL 2 OPC RCA SCR SGA SEC OTH

DOCUMENT NUMBER-DATE 08146 SEP-7 08 FPSC-COMMISSION CLERK

DOCUMENT NUMBER-DATE 08145 SEP-7 08 FPSC-COMMISSION CLERK

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail(*) and U.S. Mail or hand delivery(**) on this 7th day of September, 2007, on the following:

Lorena Holley, Esquire**
Keino Young, Esquire
Adam Teitzman, Esquire
Rick Mann, Esquire
Florida Public Service Commission
Division of Legal Services
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399

Russell Badders, Esquire*
Jeffrey A. Stone, Esquire
Beggs & Lane Law Firm
P.O. Box 12950
Pensacola, Florida 32591

Susan D. Ritenour*
Gulf Power Company
One Energy Plaza
Pensacola, Florida 32520-0780

Akerman Law Firm
Beth Keating
106 East College Avenue
Suite 1200
Tallahassee, FL 32301

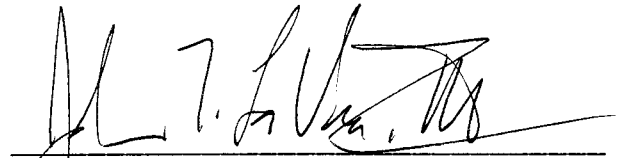
Harrison Law Firm*
Douglas J. Sale
Post Office Drawer 1579
Panama City, FL 32402-1579

City of Panama City Beach and*
PCB Comm. Redevelop. Agency
Richard Jackson
110 South Arnold Road
Panama City Beach, FL 32413

Davis Law Firm
Maria T. Browne
1919 Pennsylvania Ave., NW
Suite 200
Washington, DC 20006

Embarq Florida, Inc.
Susan S. Masterton
Mailstop: FLTLHO0102
1313 Blair Stone Rd.
Tallahassee, FL 32301

Florida Cable Telecommunications
Association, Inc.
246 E. 6th Avenue, Suite 100
Tallahassee, FL 32303



Attorney

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

GULF POWER COMPANY'S STORM HARDENING PLAN,
PSC DOCKET NO. 070299-EI

COMMISSION
CLERK

07 SEP -7 PM 3:27

RECEIVED FPSC

DIRECT TESTIMONY OF R.L. WILLOUGHBY

ON BEHALF OF

THE CITY OF PANAMA CITY BEACH, FLORIDA,

AND

THE PANAMA CITY BEACH COMMUNITY
REDEVELOPMENT AGENCY

SEPTEMBER 7, 2007

DOCUMENT NUMBER-DATE

08145 SEP-7 6

FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 070299-EI, GULF POWER COMPANY'S STORM
HARDENING PLAN

DIRECT TESTIMONY OF R.L. WILLOUGHBY

1 **Q: Please state your name and business address.**

2 A: My name is R.L. Willoughby, and my business address is 1609 Heritage
3 Commerce Court, Wake Forest, North Carolina 27587.

BACKGROUND AND QUALIFICATIONS

4 **Q: By whom are you employed, and in what position?**

5 A: I am employed by PowerServices, Inc., as Vice President. In my capacity
6 as a Vice President of PowerServices, I provide a range of consulting
7 services to various clients, including municipal and investor-owned
8 utilities, municipalities, and private-sector companies with regard to many
9 electric issues. For example, I advise clients on energy efficiency matters
10 and on how best to set up their facilities, including overhead and
11 underground distribution facilities, inside-the-fence power supply
12 arrangements, and so on.

13 **Q: Please summarize your educational background and any training**
14 **relevant to your testimony in this proceeding.**

15 A: I have a Masters Degree in Administration from Central Michigan
16 University (1992), a Bachelor of Science Degree in Business Management
17

DOCUMENT NUMBER-DATE

08145 SEP-7 5

FPSC-COMMISSION CLERK

1 from Mt Olive College (1988), and an Associate of Arts & Sciences Degree
2 in Industrial Management from Lenoir Community College (1987). In
3 addition, over my career, I have attended numerous seminars, short courses,
4 and continuing education courses in electric utility engineering and
5 management. A copy of my resume' is included as Exhibit ____ (RLW-1)
6 to my testimony.

7 **Q: Please summarize your employment history and work experience.**

8 A: I have over 40 years experience working in the operation and management
9 of electric transmission and distribution systems. From 2005 to the present,
10 I have been in my current position as Vice President with PowerServices
11 Inc. From 2003 to 2005, I was Director of Management Services with
12 Booth & Associates, Inc. From 1996 to 2003, I served as City Manager of
13 the City of Washington, North Carolina, and from 1988 to 1996, I was the
14 Electric Utility Director for the City of Washington. From 1985 to 1988, I
15 was Electric System Manager for the City of Kinston, NC. From 1968 to
16 1970 and from 1971 to 1985, I held various jobs with increasing
17 responsibilities in the Electric Department of the City of Kinston. In 1970
18 and 1971, I was a Line Foreman with E&R, Inc, where I supervised crews
19 of electric line workers. In 1967 and 1968, I held various positions,
20 working with electric utility facilities, with the Greenville Utilities
21 Commission in Greenville, NC.

1 **Q: Please summarize any responsible positions other than previously**
2 **listed work experience that is relevant to your testimony.**

3 A: From 2000 through 2005 I served on the Board of Directors for
4 ElectriCities of North Carolina Inc. In 2001, I was Vice Chairman, and in
5 2002 I was Chairman of ElectriCities' Board of Directors.

6 **Q: What is the primary function of ElectriCities of NC?**

7 A: ElectriCities of NC is the management organization for the two municipally
8 owned power agencies in North Carolina, the North Carolina Eastern
9 Municipal Power Agency (NCEMPA) and North Carolina Municipal
10 Power Agency 1 (NCMPA 1). These two power agencies are the full
11 requirements providers for 51 municipal electric utilities in NC with a
12 combined annual demand of 3,000 megawatts and a \$1 billion annual
13 budget. The two Power Agencies have ownership interests in 4 nuclear
14 plants and 2 fossil fuel generation plants in North Carolina.

15 ElectriCities also functions as a Joint Municipal Assistance Agency
16 with 90 members in North Carolina, Virginia and South Carolina. The
17 Assistance Agency provides customer service, safety training, emergency
18 & technical assistance, and government and legal affairs services to
19 ElectriCities' members. During hurricanes, ice storms, and other natural
20 disasters, ElectriCities is instrumental in assisting all its members with Joint
21 Municipal Assistance and Communications. ElectriCities is a member of
22 the State Emergency Response Team (SERT) in North Carolina; the SERT

1 Team insures proper flow of information to maximize resource allocation
2 during State emergencies.

3 Prior to serving on the Electricities Board of Directors, I was
4 selected by my peers to serve as Chairman of the Electricities Standards
5 Committee. This committee was formed to aid the municipal systems with
6 standardization of overhead and underground design and materials.

7 **Q: What is your experience dealing with overhead and underground**
8 **electric facilities?**

9 A: The electric utility systems I directly worked for, including those serving
10 Greenville, Kinston, and Washington, NC, owned and operated both
11 transmission and distribution facilities. The systems had both overhead and
12 underground distribution facilities. When I began my utility career in the
13 late 1960s, the amount of underground facilities was limited, but as
14 technology improved and costs came down, more and more distribution
15 facilities were placed underground. All the new subdivisions built in
16 Washington, Kinston and the vast majority of Electricities member cities in
17 the last ten years have underground electric distribution facilities.

18 As municipal utility systems serving our citizens and customers, we
19 supported underground facilities because a properly designed and
20 maintained underground system has lower operations and maintenance
21 costs, has lower storm restoration costs, is more reliable in hurricanes and
22 in other extreme and ordinary weather events, and is safer to the public.

1 Early in my career, I constructed and installed overhead and
2 underground electric distribution facilities. I also had to respond to power
3 outages 24 hours a day for a one-week rotation every 4-5 weeks.

4 Where the utilities I worked with experienced problems with
5 underground facilities, those problems were almost always with old-vintage
6 cables and equipment or with improperly installed cables.

7 In North Carolina, in addition to a fair number of hurricanes and
8 tropical storms, we have to deal with numerous thunderstorms in the
9 summer months and occasionally with ice storms in the winter. The utilities
10 that I worked with had very few problems with underground distribution
11 facilities associated with major storms (hurricanes and tropical storms) or
12 thunderstorms, which were the primary cause for significant customer
13 outages on our systems. Additionally, the utilities that I worked with had
14 virtually no problems with our underground systems in ice storms.

15 **Q: Have you previously testified before utility regulatory authorities, in**
16 **administrative proceedings before other government agencies, or in**
17 **courts of law?**

18 A: I made a presentation, not formal sworn testimony, to the Florida Public
19 Service Commission in April 2007, regarding Florida Power & Light
20 Company's contributions in aid of construction for underground conversion
21 projects. My comments addressed the appropriate treatment of the cost
22 savings from undergrounding in determining the appropriate level of such

1 contributions. In my long career of service to North Carolina cities, I
2 testified many times before city commissions and councils.

3 **SUMMARY AND PURPOSE OF TESTIMONY**

4 **Q: What is the purpose of your testimony in this proceeding?**

5 A: I have been asked by the City of Panama City Beach and the Panama City
6 Beach Community Redevelopment Agency to testify regarding my
7 opinions, as a former municipal electric utility director and city manager,
8 and as a board member of two major municipal power agencies (over 3,000
9 megawatts of delivered power capacity), regarding Gulf's proposed Storm
10 Hardening Plan.

11 **Q: Please summarize your testimony.**

12 A: It has been my experience not only as a manager and supervisor but also a
13 technician (line worker) responsible for power restoration during all types
14 of inclement weather that underground electric facilities are far superior to
15 that of overhead facilities when compared to reliability, reduction in
16 restoration costs, reduction in normal O&M costs, public safety, and
17 reduction in lost revenues.

18 As City Manager of Washington, North Carolina from 1996 to 2003,
19 I was the head of Washington's city government when our electric utility
20 system experienced 5 named storms. Hurricane Fran in 1996, Hurricane
21 Bertha in 1996, Hurricane Bonnie in 1998, Hurricane Dennis in 1999, and
22 Hurricane Floyd in 1999. Hurricane Dennis was a Tropical Storm when it

1 came through Washington. Even with extensive flooding of the brackish
2 waters of Pamlico Sound, our underground distribution system performed
3 very well.

4 I believe that Gulf's claims that it lacks data to evaluate the benefits
5 and costs of undergrounding are surprising, and that Gulf should examine
6 its own data carefully and proceed toward a thorough evaluation of
7 undergrounding as a storm hardening and reliability improvement measure.

8 GULF'S DATA COLLECTION PROPOSALS

9 **Q: Please summarize your familiarity with utility records and data**
10 **regarding**

11 **A:** The utilities I worked with used typical budget guidelines for accounting of
12 expenses. The major groupings were Administration, Support Services,
13 Operations & Maintenance, and Capital. Within the O&M and Capital
14 budgets we further delineated between underground and overhead.

15 Sometimes if we knew a major storm was approaching we would set
16 up specific cost centers for that event with the subcategories.

17 Regardless, we always had separate cost centers to identify our costs
18 for underground repairs, overhead repairs, or capital expenses for each.

19 **Q: From your experience, do you have any reaction or opinion regarding**
20 **Gulf's apparent position that it lacks data and lacks "definitive proof"**
21 **of the benefits of undergrounding as a means of improving reliability**
22 **and reducing costs in and following major storm events?**

1 A: Yes. To say the least, I find it surprising. It is inconceivable to me
2 that a utility such as Gulf Power could not access its historical records for
3 comparable if not better data particularly since they are a regulated utility
4 and neither Washington nor Kinston where I served were. Regarding cost
5 information, while I would agree that keeping exact track of labor costs in a
6 storm restoration effort may be difficult, I would not agree that keeping
7 track of the materials used in storm restoration is difficult at all. And, since
8 any utility should have a good handle on the materials that it uses in storm
9 restoration, it should be fairly easy to estimate the labor involved for
10 underground and overhead restoration by analyzing the breakdowns of
11 materials used.

12 The municipal utilities that I worked for had this information. And,
13 even though we could easily quantify the different cost centers to identify
14 the costs associated with overhead and underground repairs and restoration
15 efforts, it was readily apparent to me and the electric department
16 management that virtually all of our storm restoration costs, other than
17 routine post-storm checking of our UG system, were associated with the
18 OH system.

19 **Q: From your experience, do you have any reaction or opinion regarding**
20 **Gulf's plans to essentially wait to do anything further with**
21 **undergrounding until additional data becomes available when future**
22 **storms hit Gulf's service area?**

1 A: Yes, I do. First, although Mr. Battaglia's testimony states (page 10) that
2 Gulf's Plan describes certain UG "pilot projects," when I look to the
3 referenced Section 6.0 of the Plan, I do not see any such projects identified
4 or described. I believe that waiting to act, based on Gulf's claim (in its
5 response to Panama City Beach's Interrogatory No. 41) that there is no
6 "definitive proof" of the benefits of undergrounding, is unwise and
7 unsound, and not in the best interests of Gulf's customers or Gulf itself.

8 Any well-managed utility, and I believe that Gulf is generally a well-
9 managed utility, should have sufficient information to analyze the benefits
10 and costs of undergrounding. In fact, my colleague, Peter Rant, P.E.,
11 presents analyses of the experience of a high-UG-percent city, Panama City
12 Beach, and a high-OH-percent city, Pensacola, in similar storm conditions
13 experienced in Hurricane Dennis. Based on Gulf's own data, it appears that
14 Panama City Beach, a barrier island that experienced a higher storm surge
15 than Pensacola, fared much better under comparable conditions than the
16 high-UG city. At the very least, Gulf should have examined this data and
17 should, accordingly, be investigating undergrounding much more seriously
18 than it appears to be.

19 **FLOODING AND STORM SURGE IMPACTS**

20 **Q: Some utilities, including Gulf, assert that UG facilities are more**
21 **vulnerable to damage from flooding and storm surges. Do you have**
22 **any experience relative to this assertion?**

1 A: Yes. Like most people who work with electric distribution facilities, both
2 underground and overhead, I am familiar with the unusual event of a
3 "washout" of underground facilities in extreme storm surge events.
4 However, it is my experience that these events are very unusual.

5 Additionally, my specific experience with 5 named storms while I
6 was City Manager of Washington, North Carolina, is that underground
7 facilities, especially where they are properly designed, installed, and
8 maintained, suffer minimal permanent damage from flooding and virtually
9 none from other storm related issues.

10 Washington is a city of approximately 10,000 residents with 25,000
11 residents within 1.5 miles of the city. Washington is on the east coast of
12 North Carolina, on the Pamlico River near the mouth of the Pamlico Sound.
13 The Electric System serves approximately 12,000 customers over 350 miles
14 of line. Approximately 10%-15% of the system is underground.

15 In those storms, we not only experienced extensive damage to our
16 overhead system from the winds and windblown debris from these storms,
17 we also experienced extensive flooding by the brackish waters of Pamlico
18 Sound. The outages we had on the underground system were associated
19 with flooding where we had live front equipment. As soon as the water
20 subsided, we could reenergize those lines immediately. We had no
21 problems with the UG components of our system, from wind-related issues.

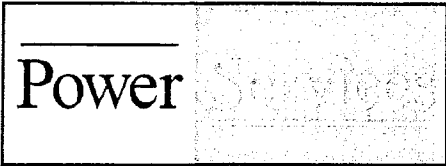
22 **CONCLUSIONS**

1 **Q: Do you have any advice or recommendations for Gulf or the Florida**
2 **Public Service Commission?**

3 A: Yes. I would recommend that Gulf Power Company immediately
4 undertake a serious, in-depth analysis of available data relating to the
5 reliability, costs, and benefits of undergrounding using data from its own
6 experience and using "borrowed" data from other utilities. Rather than
7 sitting tight until it has definitive proof, Gulf should take the initiative to
8 identify benefits of undergrounding and should act, reasonably, to promote
9 undergrounding in order to promote reliability and reduced outages and to
10 obtain the storm cost savings and other benefits that are available from
11 undergrounding. The Florida PSC should require Gulf to come back before
12 it soon, within the next 6-9 months, with better analyses and a better Storm
13 Hardening Plan, as it relates to undergrounding.

14 **Q: Does this conclude your testimony?**

15 A: Yes, it does.



Management Services For Utilities®

**R. L. WILLOUGHBY
VICE PRESIDENT**

**PROFESSIONAL
EDUCATION:**

CENTRAL MICHIGAN UNIVERSITY, Mt. Pleasant, MI
MSA - Masters of Science Administration, 1992

MT. OLIVE COLLEGE, Mt. Olive, NC
BS - Business Management, 1988

LENOIR COMMUNITY COLLEGE, Kinston, NC
A.A.S. - Industrial Management, 1987

EXPERIENCE:

Mr. Willoughby has 40 years experience with operations, maintenance, and management of utility systems. He has worked with all aspects of utility operations and management, including 8 years as an electric utility director, and 7 years as a city manager.

From January 2000 through December 2005, Mr. Willoughby has served on the Board of Directors for two nationally recognized Joint Municipal Power Agencies, and one Joint Municipal Assistance Agency. The combined annual budget for the three agencies was over \$1 billion dollars. The two Joint Municipal Power Agencies have 51 members with a combined annual demand of 2300 megawatts, and the Joint Municipal Assistance Agency has 90 members in three states.

2005 - Present

Vice President
POWERSERVICES, INC.
Wake Forest, North Carolina

Assisting utilities in management and planning to achieve optimum reliability and cost management for power systems, including long-range planning, economic analyses, privatization studies, coordination studies, rate issues and studies, system improvement studies, and power supply contracts and negotiations.

Also provides assistance to president with accident investigation, fire investigation, forensic engineering, and product evaluation in expert witness services.

R. L. WILLOUGHBY
(Continued)

- 2003-2005 Vice President of Management Services
BOOTH & ASSOCIATES, INC., Consulting Engineers
Raleigh, North Carolina
- Assisted with implementation, assignation, and focusing direction of System Planning and Power Quality Division company management personnel.
- Supervised the System Planning and Power Quality Division to provide planning solutions to fill individual utility client's needs. Assisted in providing Long-Range Plans, Construction Work Plans, creation of system models, Automation Integration Plans, protective coordination, environmental reports, power requirements studies, system upgrades and replacements, and power quality studies.
- 1996-2003 City Manager
CITY OF WASHINGTON
Washington, North Carolina
- Provided leadership and administration of the day to day operations of the city. Worked with the City Council and citizens, to ensure quality services and programs for the citizens and the business community.
- City had 225 employees and a \$40 million dollar annual budget.
- 1988-1996 Electric Utility Director
CITY OF WASHINGTON
Washington, North Carolina
- Planned, directed, and coordinated all activities of the city's electric utility division. Accomplished directives identified by the City Council and City Manager, coordinated activities of the electric department and between the electric department and other city departments, identified operating, maintenance, and/or construction concerns and initiated appropriate corrective actions, administered annual budget for electric department, participated in load and rate studies, provided oversight for staff technical and safety training programs, and conferred with technical and engineering personnel relative to plans and specifications for construction projects.

**R. L. WILLOUGHBY
(Continued)**

1985-1988

Electric System Manager
CITY OF KINSTON
Kinston, North Carolina

Provided for the direction of the Utilities Department electrical engineering sections. Included responsibility for all aspects of utility operations, including technical and economic feasibility analysis; operation and maintenance programs; and inspections.

1971-1988

CITY OF KINSTON
Kinston, North Carolina

Various job responsibilities dealing with the operations and maintenance of the electric distribution system.

**PROFESSIONAL
AFFILIATIONS:**

International City/County Managers Association (ICMA)