

ORIGINAL

**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

**DOCKET NO. _____-EI
FLORIDA POWER & LIGHT COMPANY**

**IN RE: FLORIDA POWER & LIGHT COMPANY'S PETITION FOR
ISSUANCE OF A STORM RECOVERY FINANCING ORDER**

CMP _____

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SEC _____

OTH _____

JANUARY 13, 2006

DIRECT TESTIMONY & EXHIBITS OF:

GEISHA J. WILLIAMS

DOCUMENT NUMBER-DATE

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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF GEISHA J. WILLIAMS**

4 **DOCKET NO. XXXXXX-EI**

5 **January 13, 2006**

6

7 **Q. Please state your name and business address.**

8 A. My name is Geisha J. Williams. My business address is Florida Power & Light
9 Company, 9250 W. Flagler Street, Miami, Florida, 33174.

10 **Q. By whom are you employed and what is your position?**

11 A. I am employed by Florida Power & Light Company (FPL or the Company) as
12 Vice President, Distribution.

13 **Q. Please describe your duties and responsibilities in that position.**

14 A. I am responsible for the planning, engineering, construction, operations,
15 maintenance, and restoration of FPL's Distribution infrastructure. During storm
16 restorations, I assume the additional role of FPL's Emergency Operations Officer.
17 In this capacity, I am responsible for the overall coordination of all restoration
18 activities to ensure the successful implementation of FPL's restoration strategy -
19 to restore service to our customers as safely and quickly as possible.

20 **Q. Please describe your educational background and professional experience.**

21 A. I have a Bachelor of Science degree in industrial engineering from the University
22 of Miami and a Master of Business Administration from Nova Southeastern
23 University. I joined FPL in 1983 and have served in a variety of positions in

1 distribution operations, customer service, and marketing. I have been manager of
2 commercial/industrial marketing, regional manager of customer service, and
3 manager of external affairs. I also am a member of the Dean's Advisory Council
4 for the College of Engineering at Florida International University, a member of
5 the Association of Edison Illuminating Companies' Power Delivery Committee,
6 and on the Board of Regents for Leadership Florida.

7 **Q. Are you sponsoring an exhibit in this case?**

8 A. Yes. I am sponsoring an exhibit consisting of 6 documents, GJW-1 through GJW-
9 6, which is attached to my testimony.

10 **Q. What is the purpose of your testimony?**

11 A. The purpose of my testimony is to provide an overview of FPL's emergency
12 preparedness plans and processes. I will also provide details on the 2005
13 hurricanes impacting FPL's service territory, FPL's response to these storms, and
14 the associated costs of restoring service to FPL's customers and restoring FPL's
15 facilities to pre-storm conditions. Finally, I will discuss the factors contributing to
16 FPL's overall successful performance in safely restoring service to the greatest
17 number of customers in the least amount of time. In these ways, my testimony
18 supports the reasonableness and prudence of the storm restoration costs for which
19 FPL is seeking approval. My testimony also describes storm restoration activities
20 that are included in the amounts which FPL is proposing to finance in this matter.

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1 **EMERGENCY PREPAREDNESS PLAN & RESTORATION PROCESS**

2 **Q. What is the objective of FPL's emergency preparedness plan and restoration**
3 **process?**

4 A. Consistent with Commission rules, industry practice and state and local
5 governments' interests, the primary objective of FPL's emergency preparedness
6 plan and restoration process is to safely restore the greatest number of customers
7 in the least amount of time. Meeting this objective is the most prudent response
8 after a major storm. Experience has shown that extensive planning, training,
9 adherence to established storm processes, and execution that can be scaled
10 quickly to match each particular storm are critical to successfully achieving this
11 objective. It must be understood, of course, that the objective of safely restoring
12 electric service as quickly as possible does not permit restoration to be
13 accomplished at the overall least cost. Said another way, restoring service at the
14 lowest possible cost does not result in the most rapid restoration. However, FPL is
15 ever mindful of costs and has processes in place to both control and mitigate costs
16 to customers. I will discuss this more, later in my testimony.

17 **Q. Why is FPL's emergency preparedness plan reasonable and what are its key**
18 **components?**

19 A. The plan is the product of years of planning, study and refinements based upon
20 actual experience. The key components include:

- 21 • Disaster response policies and procedures;
- 22 • Adjustable internal organizational structures based on the required
- 23 response;

- 1 • Timeline of activities to assure rapid notification and response;
- 2 • Mutual assistance agreements and vendor contracts and commitments;
- 3 • Plans for movement of resources, personnel, materials, and equipment to
- 4 areas requiring service restoration;
- 5 • Communication and notification plans for employees, customers,
- 6 community leaders, emergency operating centers, and regulators;
- 7 • An established centralized command center with an organization for
- 8 command and control of emergency response forces;
- 9 • Checklists and conference call agendas to organize, plan, and report
- 10 situational status;
- 11 • Damage assessment modeling and reporting procedures;
- 12 • Field and aerial patrols to assess damage;
- 13 • Comprehensive circuit patrols to gather vital information needed to
- 14 identify the resources required for effective restoration; and
- 15 • Systems necessary to support outage management procedures and
- 16 customer communications.

17 **Q. How does FPL prepare and ensure readiness to effectively respond to storm**
18 **events?**

19 A. Each year, prior to storm season, FPL reviews and updates its emergency
20 preparedness plan. To ensure rapid restoration, key focus areas of this plan are
21 staffing the storm organization, preparing logistics and support, enhancing
22 customer communication methods and computer and telecommunication systems.
23 As part of this process, all business units in the company identify personnel for

1 staffing the emergency response organization. In many cases, employees assume
2 roles different than their regular responsibilities. Training is conducted for many
3 storm personnel each year regardless of whether they are in a new role or a role in
4 which they have served many times. This includes training on processes that
5 range from analytical and clerical to reinforcing restoration processes for
6 managers and directors.

7
8 In the logistics support area, preparations include increasing material inventory,
9 establishing staging site plans, expanding and verifying lodging arrangements,
10 and securing agreements and contracts for catering, busing, and office trailers.
11 These activities are important to ensure availability and delivery of these critical
12 items on time and at a reasonable cost. If FPL is not impacted by storms, the
13 increase in material inventory is absorbed through normal business by year end.
14 All of these agreements and activities provide the foundation to begin any
15 restoration effort. This allows us to scale up resources and commitments as
16 necessary, and at the same time, provides flexibility for adjusting our plans in
17 case a storm does not impact FPL's service territory. Costs associated with these
18 preparation activities are treated as normal operating expenses and are not
19 included in our storm costs.

20 **Q. How do you test your emergency preparedness plan?**

21 A. Each year prior to the start of hurricane season, FPL's tests its readiness during a
22 hurricane "dry run" exercise. This event simulates a storm impacting FPL's
23 territory. The purpose is to provide a realistic, challenging scenario that causes the

1 organization to practice functions not generally performed during normal
2 operations. It is a full scale drill which takes place with active participation from
3 employees represented from every business unit in the company. After months of
4 preparation, the formal drill activities begin 72 hours from the mock hurricane's
5 forecasted time and date of impact. The General Office Command Center
6 (GOCC) is fully mobilized and staffed. Field patrollers are required to complete
7 simulated damage assessments which are then utilized by office staff to practice
8 updating storm systems, acquiring resources, and developing estimated times of
9 restoration. The exercise also includes simulating customer and other external
10 communications, updating our outage management system, and other storm
11 specific applications. Again, costs associated with these activities are treated as
12 normal operating expenses and are not included in our storm costs.

13 **Q. How does FPL respond when a storm threatens its territory?**

14 A. FPL responds by taking well-tested actions at specified intervals prior to a storm's
15 landfall. While these storms are developing in the Atlantic Ocean or Gulf of
16 Mexico, our staff meteorologists are monitoring conditions and various
17 departments throughout the company initiate preliminary preparations for
18 addressing internal and external resource requirements, logistics needs, and
19 system operation conditions. At 72 hours prior to the projected impact to FPL's
20 system, the GOCC is activated, all storm personnel are alerted, resource
21 requirements are forecasted, initial restoration plans are developed, contingency
22 resources are activated, and available resources from mutual assistance utilities

1 are identified. In addition, all FPL sites begin to prepare their facilities for the
2 impact of the storm.

3

4 At 48 hours, computer models are run based on the projected intensity and path of
5 the storm to forecast expected damage, restoration workload and potential
6 customer outages. Based on the modeled results, commitments are confirmed for
7 restoration personnel, materials, and logistics support. Staging site locations are
8 then identified and confirmed based on the storm's expected path. Staging sites
9 are temporary work sites that are opened to provide parking, food, laundry
10 service, medical care, hotel coordination, and, if necessary, housing for large
11 numbers of external and internal resources. Communication lines are ordered for
12 the staging sites and satellite communications are expanded to improve
13 communication efforts. External resources are activated and begin moving toward
14 Florida and internal personnel may also be moved so as to be closer to the
15 expected damage.

16

17 At 24 hours, the focus turns to positioning personnel and supplies to begin
18 restoration as soon as it is safe to do so. Damage models are continuously re-run
19 as the path and strength of the storm changes and plans are adjusted accordingly.
20 Also, community leaders and County Emergency Operations Centers (EOC) are
21 contacted to share FPL's restoration plans, verify those infrastructure facilities
22 that have been identified as critical, confirm assignment of FPL personnel to
23 remain in the various EOCs for the remainder of the storm and identify restoration

1 personnel to assist with road clearing and search and rescue efforts. Throughout
2 the process the Company also provides information to the news media, customers
3 and community leaders regarding storm preparation, what to do in the event of an
4 outage, as well as public safety messages.

5 **Q. Has FPL had previous opportunities to execute its emergency preparedness
6 plan and restoration process?**

7 A. Yes. Since Hurricane Andrew made landfall in 1992, FPL has experienced a
8 number of events which have provided opportunities to execute and refine our
9 storm plans. Most recently, in 2004, Hurricanes Charley, Frances and Jeanne
10 made landfall in FPL's service territory and required full scale implementation of
11 our restoration processes.

12 **Q. Please summarize the Company's 2004 hurricane restoration performance.**

13 A. The 2004 hurricane season was unprecedented. Responding to three hurricanes
14 that made landfall in FPL's territory and affected our entire system, all within a
15 six week period, required an extraordinary effort. In total, FPL restored service to
16 nearly 5.4 million customers. Our restoration processes and efforts were
17 recognized by most as being extraordinary.

18 **Q. Did FPL further improve its emergency preparedness plans and restoration
19 process for 2005 based on its experience in 2004?**

20 A. Yes. Consistent with FPL's culture of continuous improvement, we implemented
21 several enhancements to our processes based upon our experiences in 2004. I will
22 discuss these later in my testimony.

1 **Q. How does FPL ensure the emergency preparedness plan and restoration**
2 **process are consistently followed in any given storm experience?**

3 A. Significant standardization in field operations has been institutionalized including:
4 work-site organization; work preparation and prioritization; and damage
5 assessment. For external crew personnel, we provide an orientation including
6 safety rules, work practices and engineering standards. For external personnel
7 providing patrol and management assistance, a training class is provided to
8 explain their duties as well as FPL processes and procedures. Also, procedures to
9 ensure rapid preparation and mobilization of remote staging sites have been
10 developed to allow us to establish these sites in the most heavily damaged areas.

11
12 Storm plan requirements are documented in a variety of media including manuals,
13 on-line procedures, checklists, job aids, process maps, and detailed instructions.
14 System data is continuously monitored and analyzed throughout the storm.
15 Multiple daily conference calls, utilizing structured agendas, are held with GOCC
16 business leaders to discuss overall progress and identify issues, which can then be
17 resolved very quickly since leaders from all business units participate. Twice
18 daily, conference calls are held with all field restoration and logistics locations,
19 providing a mechanism enabling us to ensure critical activities are being
20 performed and communicated at all levels throughout the organization. Also, each
21 organization has its own daily conference call schedule to ensure plans are being
22 executed and issues quickly resolved. Overall monitoring and performance
23 management of field operations is performed through the GOCC. In addition,

1 field visits by GOCC personnel are routinely conducted to validate process
2 application and progress at remote work sites, as well as identify any adjustments
3 that may be required.

4 **Q. How does FPL assess its workload requirements?**

5 A. There are a variety of factors which impact restoration workload. In each storm,
6 we utilize FPL's damage assessment model to predict the expected damage and
7 hours of work to restore service. These estimates are based on the location of
8 FPL's facilities, the storm's projected path, and the effects of varying wind
9 strengths on different facilities. These workload projections are matched with
10 resource factors such as availability and location, and FPL's capacity to
11 efficiently and safely manage and support available resources. As soon as the
12 storm passes, certain employees are tasked with driving predetermined routes to
13 survey damage. Additionally, FPL assesses damage through aerial and field
14 patrols and utilizes results of customer outage information contained in the outage
15 management system to validate the damage model's estimates. This enables us to
16 finalize the workforce requirements and adjust our plans for acquiring and
17 allocating external resources.

18 **Q. How does FPL begin to acquire resources?**

19 A. Normally 72 hours prior to expected storm impact, FPL begins to contact utilities
20 and selected contractors to assess their availability. At 48 hours, depending on the
21 storm track certainty and forecasted intensity, FPL may begin to financially
22 commit to acquire necessary resources and ask that travel to Florida commence.

1 Resource needs are continually reviewed and adjusted, if necessary, based on the
2 storm's path, intensity fluctuations, and corresponding damage model results.

3 **Q. How does FPL take cost into account when acquiring resources for storm
4 restoration?**

5 A. Although as I indicated earlier, rapid restoration is our primary objective, FPL
6 takes cost into consideration. Prior to storm season, FPL's storm preparation
7 process includes negotiating contracts with vendors. These vendors include line
8 contractors, tree trimming contractors, logistics, environmental and salvage
9 contractors. For line and tree contractors, we endeavor to acquire resources based
10 on a low to high cost ranking and release these same resources in reverse cost
11 order. FPL also takes traveling distance into account when procuring resources for
12 storm restoration. Longer distances require increased drive times and can result in
13 higher costs. Final resource decisions take relative labor cost, travel distance and
14 numbers of resources into consideration. This information is then evaluated
15 relative to the expected time to restore affected customers.

16 **Q. Does FPL consider alternative levels of storm resources prior to making
17 commitment decisions?**

18 A. Yes. FPL uses the damage assessment model referenced earlier to run multiple
19 scenarios - one of which is a "near miss" scenario. This would be a storm that
20 does not directly make landfall in FPL's service territory, but does have the
21 potential of causing wide spread outages. During the 72 hour period prior to
22 impact, FPL reviews the model output and establishes resource acquisition
23 targets. The ability and flexibility to scale up resource commitments minimizes

1 the risk of procuring unnecessary resources, and spending money on an event that
2 does not materialize.

3 **Q. What steps does FPL take to acquire additional resources?**

4 A. An important component of each restoration effort is FPL's ability to scale up its
5 resources to match the increased volume of workload. FPL is a participating
6 member of the Southeastern Electric Exchange Mutual Assistance group. While
7 this group is a non-binding entity, it provides FPL and other members with
8 guidelines on how to request assistance from a group of approximately 20
9 utilities, primarily located in the southern and eastern United States. The
10 guidelines require reimbursement for direct costs of payroll and other expenses,
11 including travel costs to and from, when providing mutual aid in times of
12 emergency. In addition, FPL participates with the Edison Electric Institute to gain
13 access to other utilities and has requested assistance from those companies based
14 on similar mutual assistance agreements. Resource requests are made for line
15 crews, tree trimming crews, patrol personnel, crew supervisors, material-handling
16 personnel and in some cases, logistics support.

17
18 FPL also has a number of contractual agreements with line and vegetation
19 contractors throughout the U.S. Many of these agreements are with contractors
20 that we utilize during normal operations. These contracts are competitively bid,
21 and as a result, FPL has among the lowest labor rates for contractors in the
22 industry. Depending on the severity of the storm and our resource needs, a large
23 number of additional line and vegetation companies can be contracted to provide

1 additional support, pending release from other utilities for which they normally
2 work. If these additional line and vegetation companies are needed, FPL
3 negotiates rates with these new contractors on an as needed basis, prior to the
4 commencement of work.

5 **Q. Describe FPL's plan for the deployment and management of these incoming**
6 **external resources.**

7 A. Deployment and movement of resources are controlled through the GOCC,
8 utilizing personnel tracking and outage management systems to monitor execution
9 of the plan. Daily management of the crews is performed by the field operations
10 organization, which is responsible for effectively implementing FPL's restoration
11 strategy. Decisions on opening staging sites to position the workforce in the most
12 damaged areas are based on the timing of the arrival of external resources. Daily
13 analysis of workload execution and restoration progress permits dynamic and
14 effective resource management. This enables a high degree of flexibility and
15 mobility in allocating and deploying resources in response to changing conditions
16 and requirements. Another critical factor is FPL's ability to assemble trained and
17 experienced management teams to direct field activities. As part of the storm
18 organization, management teams include group leaders and crew supervisors to
19 directly oversee field work.

20 **Q. Are there controls in place over the acquisition of resources?**

21 A. Yes. FPL has centralized all external resource (linemen, tree contractors)
22 acquisition within the GOCC organization. I approve acquisition targets and they

1 are continually monitored by the resource acquisition director, who reports to me
2 and keeps me informed during the entire restoration process.

3 **Q. What processes and controls are in place to ensure that once these resources**
4 **arrive, their work and time is properly accounted for?**

5 A. These external resources are assigned to an FPL contract compliance coordinator
6 referred to as a “CCR” as they arrive at their designated staging site. The CCR is
7 responsible for verifying crew rosters as we accept these resources on to our
8 system. The CCR also reviews and approves daily time tickets to ensure that time
9 and personnel counts are accurately recorded. These time tickets are sent to FPL's
10 contractor payment center, where they are used to verify invoices when they are
11 received from the contract company.

12 **Q. What logistics and support personnel and activities are required?**

13 A. To support the overall restoration effort and the thousands of workers involved,
14 various logistics functions are required. These functions include, but are not
15 limited to, acquisition, preparation and coordination of: staging sites,
16 environmental, salvage, lodging, laundry, buses, caterers, ice and water, office
17 trailers, light towers, generators, port-o-lets, security guards, communications, and
18 fuel delivery. Also, agreements with primary vendors are in place prior to the
19 storm season as part of our storm planning process. Additional logistic staffing
20 needs are provided by FPL personnel from all parts of our company. Most of
21 these employees are pre-identified, trained and assigned to provide site logistics
22 management as well as to support other needs of the restoration workforce. For

1 larger restoration efforts, when the workforce exceeds internal logistic support
2 capabilities, FPL contracts for additional logistics manpower.

3 **Q. What controls ensure that only necessary items are procured and that they**
4 **are appropriately accounted for?**

5 **A.** In addition to the procurement of external resources which have been previously
6 discussed, our logistics organization is responsible for overseeing and
7 coordinating the procurement of resources required at our staging sites. Staging
8 sites serve as the major hubs for resources involved in daily restoration activities.
9 Utilizing experience from previous storms, specific staging site resource
10 requirements, e.g., the sites' footprint, tents, meals, water, ice, buses, hotel
11 requirements, etc., have been pre-determined. Based on this, a logistics
12 coordination team ensures that each staging sites resource requirements are
13 initially procured and received. This, along with the constant coordination of
14 resource requirements with site management, determines the daily needs of each
15 site. Site management at each location is responsible for receiving and tracking of
16 all supplies and materials and provides daily input to the logistics coordination
17 team. The site controller, whose role and functions are discussed in Mr. Davis'
18 testimony, also provides guidance and assistance to help ensure appropriate
19 record-keeping, documentation, and accounting is maintained at each site. In
20 summary, we believe that appropriate controls are in place and that these controls
21 are effective.

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THE 2005 STORM SEASON

Q. Please provide an overview of the 2005 hurricane season.

A. The 2005 Atlantic hurricane season shattered records that have stood for decades. These records include the highest number of named storms (27) and hurricanes (13), the most major hurricanes (4) to make landfall in the U.S., and the most storms (3) to reach Category 5 strength. Wilma became the strongest storm ever recorded, while Rita and Katrina are the fourth and sixth strongest storms ever recorded. Katrina also became the costliest (estimated to exceed \$80 billion) and is also the deadliest U.S. storm, since 1928. Additionally, the 2004 and 2005 storm seasons established many new records for two consecutive storm seasons. These include: most tropical storms (42); most hurricanes (24); most major hurricanes (13); most major hurricanes to make landfall (7); and most major hurricanes to make landfall in Florida.

Q. Please provide an overview of the 2005 hurricanes impacting FPL's service territory.

A. In 2005, FPL and its customers were affected by 4 hurricanes – Dennis, Katrina, Rita, and Wilma. All four of the hurricanes impacted the most densely populated areas in FPL's service territory, Palm Beach, Broward and Miami-Dade counties, where 60% of FPL's customers reside. Hurricane Katrina made landfall near the Miami-Dade and Broward county line. Hurricane Wilma made landfall on the southwest coast of Florida and exited near Palm Beach, significantly impacting Palm Beach, Broward and Miami-Dade counties and causing more outages for

1 FPL than any other previous storm. In addition to the damage to our
2 infrastructure, Hurricane Wilma caused significant damage to our communities.
3 It has been reported that Hurricane Wilma could prove to be the worst storm to
4 impact Miami since August 1992, when Hurricane Andrew caused more than \$25
5 billion in damage. The American Red Cross also has reported that over 27,000
6 dwellings were destroyed or rendered temporarily unlivable, an indication of the
7 destruction caused by Hurricane Wilma. Hurricane Wilma also proved to be a
8 deadly storm, causing 60 deaths, with 35 of the deaths occurring in Florida.
9 Hurricanes Dennis and Rita, while not making landfall in FPL's territory, traveled
10 near enough for their outer bands to cause significant outages, particularly in
11 Miami-Dade and Broward counties.

12 **Q. Can you provide additional specifics for each storm?**

13 **A. Yes.**

14 **HURRICANE DENNIS:**

15 The first hurricane to impact FPL and its customers in 2005 was Hurricane
16 Dennis. Hurricane Dennis entered the Gulf of Mexico, after exiting Cuba, and
17 traveled off the west coast of Florida. Hurricane Dennis, which at its peak reached
18 Category 4 strength, eventually made landfall near Pensacola as a Category 3
19 storm. Hurricane Dennis began affecting FPL's service territory late in the
20 evening on July 8, 2005. At that time, Hurricane Dennis was a Category 2 storm
21 and had tropical storm winds that extended out 175 miles. A satellite picture of
22 Hurricane Dennis, Document No. GJW-1, taken on July 9, 2005, shows the size
23 of the storm. As can be seen, its outer bands essentially covered the entire state.

1 Customers in FPL's southeast territory, especially Broward and Miami-Dade
2 counties, were significantly affected by at least two unpredictable hurricane
3 weather bands with winds of almost 70 mph. By the time the effects of Hurricane
4 Dennis left FPL's territory on Friday, July 9, 2005, approximately 509,000
5 customers required power restoration. By Sunday morning, the second day of
6 restoration, 75% of those customers affected had their power restored. By
7 Monday, the third day, all of the customers had been restored. The total workforce
8 dedicated to the restoration effort totaled approximately 3,800, made up entirely
9 of FPL employees and embedded contractors. External resources were limited
10 because Hurricane Dennis was threatening the Gulf Coast as a Category 4
11 hurricane and all external resources were waiting to be diverted there. Total cost
12 to restore service to FPL's customers and restore FPL's facilities to pre-storm
13 conditions is estimated to be \$10.4 million.

14 **HURRICANE KATRINA:**

15 Hurricane Katrina, which originated as a tropical storm in the Bahamas, was only
16 expected to produce increased rainfall over the FPL territory. However, less than
17 48 hours before it was to make landfall in South Florida, it developed into a
18 hurricane. Hurricane Katrina made landfall near the Miami-Dade and Broward
19 County line on August 25, 2005, as a Category 1 hurricane, the first hurricane to
20 directly hit Broward County in over 40 years. A satellite picture of Hurricane
21 Katrina, Document No. GJW-2, taken on August 25, 2005, shows the size of the
22 storm. Hurricane Katrina exited the southwest part of Florida on August 26.
23 Hurricane Katrina had sustained hurricane force winds that extended over a 30

1 mile-wide corridor and tropical storm winds that extended over a 160 mile-wide
2 corridor. Areas affected were subjected to tropical force winds for 18-20 hours.
3 Almost 1.5 million customers, in 15 counties within FPL's service territory,
4 required power restoration.

5
6 The hardest hit areas were Miami-Dade, Broward, and Palm Beach counties.
7 This tri-county area also contains the greatest number of electrical facilities, many
8 of which are located in areas with difficult access such as alley ways and behind
9 homes, and includes areas with very dense vegetation. Tree damage was
10 extensive, causing damage not only to our overhead facilities but also to our
11 underground facilities, which were damaged as a result of uprooted trees. Damage
12 to facilities required replacing 245 miles of wire, approximately 1,507 distribution
13 transformers, and 1,248 poles, some of which were not owned by FPL. There was
14 also damage to 26 transmission line sections and 10 distribution substations. The
15 workforce dedicated to the restoration effort totaled approximately 14,400,
16 including almost 5,200 foreign utility and other contractor personnel. The 5,200
17 additional support personnel called in to assist FPL's restoration efforts came
18 from 72 different utilities and contractor companies, across 25 different states.
19 The total workforce was made up of approximately 5,500 linemen, 2,900 tree
20 personnel, 1,400 patrol and field support people, and 4,600 FPL corporate and
21 care center support personnel. In total, 12 different staging sites were established
22 in Broward and Miami-Dade counties to help manage and execute the restoration
23 effort. To serve and maintain this workforce during the restoration effort over

1 38,000 meals, almost 69,000 pounds of ice, almost 20,000 gallons of water and
2 over 104,000 gallons of fuel were consumed per day.

3

4 For the first time, system and county level Estimated Time of Restoration (ETRs)
5 were provided within 24 hours of landfall. Sub-county ETRs were provided at 72
6 hours for locations within Broward and Miami Dade County. In addition, as
7 restoration progressed, outbound calls were made to contact customers
8 individually to notify them when their power was to be restored within 48 hours.
9 Power was restored to 77% of all customers affected by the third day, 95% by the
10 fifth day and 100% of our customers were restored by the eighth day. Total cost to
11 restore service to FPL's customers and restore FPL's facilities to pre-storm
12 conditions is estimated to be \$162.1 million.

13 **HURRICANE RITA:**

14 Hurricane Rita, which eventually became a Category 5 hurricane, did not make
15 landfall in FPL's service territory. However, Rita did pass through the Florida
16 Straits and affected the southern portion of FPL's service territory. A satellite
17 picture of Hurricane Rita, Document No. GJW-3, taken on September 20, 2005,
18 shows the size of the storm. While impacting FPL service territory, Hurricane
19 Rita was a Category 1 storm and had tropical storm and gale force winds that
20 extended out 120 miles. Once again, customers in Miami-Dade and Broward
21 counties were the most affected. The outer bands of Hurricane Rita began
22 affecting the southeastern portion of FPL's territory in the afternoon of September
23 19, 2005. The most significant impacts, in Miami-Dade County, started around

1 noon on September 20. By the time the storm's effects subsided late on
2 September 20, over 140,000 FPL customers needed to have their power restored,
3 with over 80% of these customers residing in the Broward and Miami-Dade areas.
4

5 As the weather bands traveled through the South Florida area, FPL was able to
6 restore service between these bands, resulting in no more than 40,000 customers
7 being without service at any one time. The workforce dedicated to this storm
8 totaled almost 4,900 and consisted of approximately 4,600 FPL employees and
9 FPL embedded contractors and 300 foreign utility and contractor personnel. Total
10 cost to restore service to customers and restore FPL's facilities to their pre-storm
11 condition is estimated to be \$12.2 million.

12 **HURRICANE WILMA:**

13 Hurricane Wilma became a hurricane on October 18, 2005. On October 19,
14 Hurricane Wilma strengthened to a Category 5 hurricane with its minimum
15 central pressure estimated at 882 MB, the lowest pressure and therefore the most
16 powerful hurricane on record in the Atlantic basin.

17
18 Hurricane Wilma made landfall on the southwest coast of Florida, near Marco
19 Island on October 24, 2005, as a Category 3 hurricane. It crossed the state and
20 exited just to the north of Palm Beach, as a Category 2 hurricane. While in
21 Florida, Hurricane Wilma had hurricane force winds that extended 125 miles from
22 the center of the storm and winds greater than 40 mph extended 200 miles from
23 the center. A satellite picture of Hurricane Wilma, Document No. GJW-4, taken

1 on October 24, 2005, shows the size of the storm. Hurricane Wilma impacted
2 more customers than ever before in FPL's history. Over 75% or 3.2 million of our
3 customers in 21 counties required power restoration. While Hurricane Wilma
4 affected FPL's customers in Collier and Lee counties on the west coast and from
5 Brevard County south on the east coast, Miami-Dade, Broward and Palm Beach
6 counties were again the most impacted. In this tri-county area 99% of our
7 customers were without power once the storm passed.

8
9 While every storm is different, Wilma was unique in one very significant aspect
10 in contrast to prior storms. Wilma affected our entire infrastructure in ways never
11 before experienced. Power plants, transmission lines and substations as well as
12 distribution facilities all suffered damage. The resulting damage to facilities
13 caused us to replace 1,016 miles of wire, 6,330 distribution transformers, and
14 12,419 poles, some of which were not owned by FPL. While damage was
15 widespread, FPL found pockets of severe damage, where 5, 10, or in several
16 instances more than 50 poles were down in an area or on a particular segment of
17 the distribution system. Damage to poles was indiscriminate, whether the poles
18 were wood or concrete, chromated copper arsenate (CCA) or creosote, new or
19 old. In addition, approximately 100 transmission structures, 2 transmission
20 breakers and 4 substation regulators also required replacement.

21
22 Over 19,000 restoration workers, including approximately 9,200 foreign utility
23 and other contractor personnel, from 36 states and Canada worked to restore

1 power to customers affected by the storm. A restoration team of this size had
2 never before been assembled in FPL's 80-year history. Assembling this team was
3 especially difficult as the industry was still supporting Hurricane Katrina's and
4 Rita's restoration efforts in the Gulf States. FPL initially opened 11 staging sites.
5 Eventually, 20 staging sites were opened, with a peak of 17 operational at one
6 time. At one point, over 5,000 personnel were housed in nearby hotels which were
7 without power and over 200 were housed in on-site tents in order to maximize
8 productive hours. Additionally, to maximize productive hours, FPL leveraged the
9 start of daylight savings time and began the workday at 5 a.m. instead of 6 a.m..
10 This had the effect of maximizing daylight hours and allowing travel to the work
11 site to occur before peak urban traffic time. On a daily basis, FPL served almost
12 49,000 meals, used almost 82,000 pounds of ice, consumed nearly 30,000 gallons
13 of water, and used over 189,000 gallons of fuel. In an effort to provide as much
14 information as possible to the affected communities, estimated time to repair for
15 the service territory was supplied within 12 hours after landfall, at an evening
16 press conference the same day as the storm passed through the territory. County
17 level ETRs were provided in 48 hours and more local level ETRs were provided
18 at 72 hours. In addition, as more information became available, we continued to
19 update the media and our customers with improved restoration times every two or
20 three days. As we had initiated with Hurricane Katrina, outbound calls were made
21 to customers to notify them when their power was to be restored in the next 48
22 hours. By the third day we had restored power to over one million customers, on
23 the fifth day we had restored over two million, by the thirteenth day we had

1 restored over three million and on the eighteenth day all customers were restored.
2 Total cost to restore service to customers and restore FPL's facilities to their pre-
3 storm condition is estimated to be \$721.7 million.

4 **Q. Can you provide some additional cost details, by storm, for Hurricanes**
5 **Dennis, Katrina, Rita and Wilma?**

6 A. FPL's 2005 estimated costs for restoring service and restoring facilities to their
7 pre-storm condition total approximately \$906.4 million - \$10.4 million for
8 Hurricane Dennis, \$162.1 million for Hurricane Katrina, \$12.2 million for
9 Hurricane Rita, and \$721.7 million for Hurricane Wilma. In Document No. GJW-
10 5, I have provided a breakdown of those costs, by storm and cost category. I have
11 also designated whether these costs are actual or estimated. I will explain later in
12 my testimony the difference between actual expenses and estimated expenses.
13 Also, as a result of the magnitude of the repair costs associated with damages to
14 our fossil and nuclear power plant sites and other FPL facilities, Messrs. Davis'
15 and Warner's direct testimonies include a further discussion of these costs.

16
17 The major cost categories contained in Document No. GJW-5 are FPL Payroll,
18 Contractors, Vehicle and Fuel, Materials, Logistics and Employee Related, and
19 Other. "FPL Labor" includes the payroll costs, both regular and overtime, for
20 those FPL employees supporting the restoration efforts. This would include FPL
21 linemen, patrol and field support personnel, as well as corporate and care center
22 personnel. "Contractors" includes foreign utilities' personnel and line clearing and
23 other contractors (both embedded and additional) that supported FPL's restoration

1 efforts. "Vehicle and Fuel" includes FPL's vehicle costs and associated fuel costs,
2 including fuel supplied by FPL to foreign utilities and contractors. "Materials"
3 includes costs associated with items such as wire, transformers and poles and
4 other electrical equipment, used to repair and restore FPL's facilities to pre-storm
5 condition. "Logistics and Employee Related" includes costs associated with
6 managing and supporting the personnel involved in restoration efforts, such as,
7 lodging, meals, equipment and vehicle rental. "Other" includes costs not
8 previously captured. This would include costs for items such as security, nursing
9 and telecommunication at our staging sites, safety and storm related public service
10 announcements, incremental call center costs, and certain storm related employee
11 services. "Other" may also include an amount, referred to as a contingency, to
12 account for differences that may occur when estimates are replaced by actual
13 expenses. For the 2005 storms, this contingency amount accounts for less than 5%
14 of the total 2005 storm costs.

15
16 Costs that are "actual" represent costs that have been reviewed, properly invoiced
17 or charged and are considered to be final. Costs that are "estimated" include
18 invoices that have been received, but are still pending our review and approval,
19 estimates obtained from vendors, foreign utilities and contractors that are still
20 pending receipt of the final invoices, as well as other FPL estimates for work or
21 services performed. Estimated costs also include costs associated with the second
22 phase of restoration: restoring FPL's facilities to their pre-storm condition. This
23 work includes but is not limited to repairing or replacing poles that are leaning or

1 were initially braced during the initial restoration stage, replacing lightning
2 arrestors, and repairing or replacing capacitor banks. While these estimated costs
3 are subject to some fluctuation since they have not been finalized, FPL believes
4 that any fluctuation will not be material since these estimates are based on costs
5 that have been received and obtained from third parties and estimates prepared
6 using very recent cost experience, i.e., our 2004 storm experience.

7 **Q. How effective was FPL's plan and execution during the 2005 storms?**

8 A. As mentioned before, our primary goal is to safely restore the greatest number of
9 customers in the least amount of time to return the communities we serve to
10 normalcy. For the four 2005 storms, approximately 5.3 million customers
11 required power restoration. As mentioned earlier, Palm Beach, Broward, and
12 Miami-Dade Counties, our most densely populated areas, were the most
13 significantly impacted. These three counties also contain a high concentration of
14 electrical facilities, many of which are difficult to access and/or are located in
15 heavily landscaped and vegetated areas. For Hurricanes Dennis and Rita,
16 customers were 100% restored within three and two days, respectively. For
17 Hurricane Katrina, 77% of the customers affected were restored in three days,
18 95% in five days and 100% in eight days. Hurricane Wilma caused significant and
19 widespread damage to FPL's facilities, including the transmission and substation
20 facilities that first needed to be repaired before focusing on the distribution
21 system. For Wilma, FPL restored over two million customers, or 65% of all
22 affected customers by the fifth day, and 100% were restored by the eighteenth
23 day.

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The high percentages accomplished in the first few days in each storm result from FPL's consistently applied restoration strategy - to restore devices that serve the largest number of customers first. For two straight years our facilities, processes and employees have been significantly stressed and challenged like never before. Yet, we have been able to overcome these challenges with unwavering determination and commitment to our customers. We have continued to refine our processes and effectively manage field operations, while acquiring an extraordinary number of workers and managing many staging sites. As a result, we have been able to restore service to our customers in an expeditious and prudent manner.

Q. Can you discuss what factors contributed to FPL's performance in 2005?

A. There are numerous factors that contributed to FPL's overall successful performance. We have solid plans and procedures, a strong centralized command, contingency plans for critical operations, and the tools and processes which ensure effective communications and information flow. Focus on process discipline and consistent execution of the plan resulted in consistent and effective performance. These factors would include:

- Our damage forecasting model, along with aerial patrols and ground assessments which allowed us to identify how many and where resources would be needed;
- Aggressively seeking resources prior to landfall resulted in successfully acquiring the necessary workforce;

- 1 • The centralized function of resource planning allowed us to
2 allocate and redeploy personnel where needed, as the workload
3 shifted;
- 4 • Effective damage assessment through ground patrols confirmed the
5 resource allocation plan and allowed for adjustments;
- 6 • Robust outage management system functionality and a real-time
7 data warehouse allowed us to continually gauge restoration
8 progress and make adjustments as changing conditions and
9 requirements warranted;
- 10 • As transmission and substation field workers completed their
11 restoration efforts, they were redirected to distribution work; and
- 12 • Strong alliances with our vendors assured ample supply of
13 materials and avoided delays;
- 14 • As a result of the increased hurricane activity, materials stocks
15 were also increased to allow us to restore service with no materials
16 issues; and
- 17 • Past experience, constant practice, and employee skill and
18 commitment gave us the ability to anticipate operational barriers
19 and to proactively develop alternative actions to overcome them.

20 I would note that these same factors and efforts are essentially the same as those
21 that were utilized during the 2004 storms.

1 **Q. Describe some of the enhancements to FPL’s emergency preparation plans**
2 **and processes that you implemented based on the Company’s review of its**
3 **2004 storm experience.**

4 **A. As a result of our 2004 restoration experiences, new initiatives were introduced in**
5 **2005. These new initiatives included:**

- 6 • **Earlier resource acquisition:** By making commitments and
7 acquiring external resources earlier and having them travel, and
8 pre-staged closer, yet out of danger, to the expected areas to be
9 affected - before the storms made landfall, restoration execution
10 was enhanced; For Hurricane Katrina over 1,400 external
11 resources were pre-staged in Orlando and for Hurricane Wilma
12 over 1,600 were pre-staged in Orlando and Miami. This enabled
13 these resources to assist our restoration efforts earlier than
14 before, thereby reducing restoration times.
- 15 • **Enhanced fuel strategy:** Physical inventory and in-house delivery
16 capabilities allowed us to avoid fuel supply issues like those
17 experienced during 2004 .
- 18 • **Establishing critical infrastructure facilities:** Established a
19 partnership with the county EOC organizations to identify key
20 community infrastructure facilities requiring restoration
21 prioritization. This enabled the EOCs to better serve the
22 communities’ needs.

- 1 • EOC communications: Dedicating an FPL representative to each
2 EOC to improve communications between us and the community
3 leaders and to more quickly understand and resolve issues.
- 4 • Customer communications: Improving our communication
5 efforts with our customers assisted us in providing more and
6 better information than ever before. A Crisis Information Team
7 was created and became the hub for all external, as well as
8 internal communications. Updates on restoration progress were
9 provided to community leaders and the media four times per day,
10 daily live press conferences were held telephonically as well as
11 live from our headquarters and our staging sites, ETRs were
12 provided to FPL's care centers for customers calling in as well as
13 the media, and FPL's website was updated to provide easier
14 access to restoration information and to report outages. Our
15 improved communication efforts assisted us in providing more
16 and better information than ever before.

17 **Q. What other factors contributed to the successful restoration efforts in 2005?**

18 A. From 1998-2004, FPL has invested over \$4 billion in its distribution
19 infrastructure. This includes investing \$1.2 billion in reliability programs which
20 ensure that our distribution system is well maintained and provides excellent
21 reliability for our customers. FPL's reliability programs are designed to maintain
22 the existing infrastructure, address circuits that are considered outliers and
23 introduce initiatives to help improve the infrastructure. These programs have

1 resulted in a 50% improvement in our customers' overall reliability since 1997, as
2 measured by SAIDI or service unavailability. Also, FPL's overall reliability has
3 been best among the Florida investor owned utilities for the last two years and is
4 significantly better than the national average. Without a properly maintained
5 system, these reliability results and achievements could not be achieved.
6 Additionally, certain of these reliability programs have allowed our infrastructure
7 to better withstand these unprecedented back-to-back hurricane seasons and avoid
8 even more damage to our facilities and customer outages.

9
10 Finally, I would be remiss if I did not mention the commitment and dedication of
11 our employees who, for two straight years now, have demonstrated that they will
12 go to great lengths to serve our customers. They have worked 16 hour days,
13 sometimes for weeks at a time, been away from their families, given up vacations,
14 and left their own damaged homes and not returned until power has been
15 completely restored to all of our customers.

16 **Q. Please provide some examples of the reliability initiatives that have**
17 **contributed to an improved infrastructure and fewer and/or shorter outages?**

18 **A.** As mentioned earlier, since 1998, FPL has spent nearly \$1.2 billion on its
19 distribution infrastructure. Over \$800 million was spent on key reliability
20 programs, which are designed to improve performance, address outlier devices
21 which impact customers experiencing multiple interruptions, maintain our
22 infrastructure and address critical devices. Over \$370 million have been spent on

1 expanding our system in order to meet load requirements of new and existing
2 customers

3
4 Some of our successful reliability programs designed to improve performance
5 include the AFS (automated feeder switch) program and the cable rehabilitation
6 program. Since the beginning of the AFS program in 2002, we have installed
7 approximately 500 switches which we estimate have resulted in avoiding over
8 188,000 customers from being interrupted. Our underground Cable Rehabilitation
9 program also has provided significant outage savings. Since 2000, over 10 million
10 feet of feeder and lateral cable have been rehabilitated and we estimate that, on
11 average, approximately 30,000 customers have avoided being interrupted each
12 year.

13
14 Another program which is a critical component of our reliability initiatives is the
15 “outlier” program. It is designed to address customers who have repeatedly
16 experienced multiple interruptions. At the end of last year, we had approximately
17 16,600 customers experiencing more than eight interruptions within a twelve
18 month period. Even though this is a fraction of our customer base, we are
19 committed to improve the performance level of our system for these customers.
20 Through a targeted program aimed at improving performance, we expect to see a
21 50% reduction over last year.

22

1 Our maintenance programs and practices continue to ensure that our infrastructure
2 and critical equipment are operable and in good condition. Some of our
3 fundamental programs include the following: thermovision inspections, an
4 infrared predictive technology, designed to detect and correct potential failures in
5 overhead facilities; visual inspections; padmounted transformer inspections; vault
6 inspections, designed to ensure that critical underground equipment such as
7 automated throw-over switches are operational in order to allow for the
8 redundancies built into our system to properly function. These and other
9 operations are critical in helping to maintain our excellent reliability performance.

10

11 Additionally, our system expansion and model feeder program allow us to
12 alleviate overloaded conditions that could result in outages or stress equipment,
13 causing it to fail earlier than expected. These conditions are addressed by
14 constructing new feeders, upgrading or retrofitting existing feeders and creating
15 feeder ties. This allows us to reduce the number of customers affected by an
16 outage. It also builds in system flexibility and redundancy in order to be able to
17 minimize restoration efforts by operationally switching loads and isolating faults.

18 **Q. Hurricane Wilma caused more poles to be damaged and subsequently**
19 **replaced than any other previous storm, including the storms in 2004. As a**
20 **result, assertions have been made that FPL has not maintained its pole**
21 **infrastructure. What is your response to these assertions?**

22 **A.** The facts do not support such assertions. To begin, FPL designs and constructs its
23 distribution system to meet and, in most cases, exceed the National Electric Safety

1 Code. With this as the basis, let me provide some facts associated with our poles.
2 We own approximately 1.1 million distribution poles, of which 94% are wood,
3 that meet or exceed the requirements of the American National Standard for
4 Wood Products and the applicable standards of American Wood-Preservers
5 Association. FPL has a pole inspection program that consists of three initiatives -
6 a targeted pole inspection program that specifically addresses one of FPL's older
7 pole types, visual inspections conducted as a part of our thermovision program,
8 and inspections conducted as part of daily work activities. Approximately 12,000
9 poles are replaced annually as part of our business activities.

10
11 As a result of 3 hurricanes that made landfall in FPL's territory during 2004 and
12 affected most of FPL's service territory, FPL replaced approximately 13,000
13 poles. 10,400 of these poles were owned by FPL and represent less than 1% of
14 our pole population. In 2005, as a result of four hurricanes that impacted our most
15 densely populated areas and subjected the majority of our poles to hurricane force
16 winds, FPL replaced about 12,600 poles. While the number of replaced poles
17 owned by FPL is unknown at this time, we currently expect that, like 2004, it
18 should be less than 1% of our pole population. During the period 1999-2004, pole
19 related outages accounted, on average, for approximately 130 outages per year, or
20 just 0.1% of all outages experienced by our customers. In April 2005, the FPSC
21 conducted its own independent survey on FPL's poles, covering 23 counties
22 within FPL's service territory. The FPSC focused on those areas that were not
23 severely impacted by the 2004 hurricanes in order to ensure that they were

1 inspecting older poles and not recently installed poles. The results of the survey
2 showed that out of almost 600 poles inspected, only five poles showed some
3 minor to moderate surface damage and one pole had a severe fracture. However,
4 not one pole was found to have any significant visible deterioration. I believe
5 these facts indicate that the integrity of FPL's pole infrastructure is sound and
6 resilient and has been properly maintained.

7 **Q. Has there been any analysis or investigation performed subsequent to any of**
8 **the 2005 storms that provides any insight into the pole damage issue?**

9 A. Yes. After examining our 2004 hurricane efforts, we determined that it would be
10 helpful to compile more information on our storm-damaged facilities immediately
11 following a storm to better understand failure modes. This information might then
12 be useful in determining how to better protect or "harden" our facilities for future
13 storms. As Hurricanes Katrina and Hurricane Wilma cleared our service territory,
14 we immediately dispatched several teams of FPL engineers to gather forensic data
15 on damaged facilities, including poles. While the data are still being analyzed, we
16 have identified some preliminary findings regarding damaged poles:

17 (1) Pole damage resulted primarily from acts of nature - uprooted trees,
18 high winds or flying debris;

19 (2) Not unlike FPL's experience in 2004, there were many poles damaged
20 that were not owned by FPL ;

21 (3) During Wilma, over 50% of FPL poles were subjected to hurricane
22 force winds, yet only approximately 1% experienced any damage;

1 (4) Almost 75% of the FPL-owned damaged poles in the Hurricane Wilma
2 sample were pole types that have not historically shown any signs of
3 deterioration: concrete poles and newer treated wood poles (CCA type).

4 **Q. Has FPL contracted for an independent third party review of FPL's 2005**
5 **storm performance?**

6 A. Yes. Similar to 2004, when FPL hired Davies Consulting to examine its
7 restoration processes as part of its continued efforts to improve performance, FPL
8 has contracted with KEMA, Inc. (KEMA) to review FPL's transmission and
9 distribution systems' 2005 storm performance. KEMA is an internationally
10 known engineering and consulting firm that has tremendous experience with
11 infrastructure and reliability reviews for other major utilities throughout the
12 world. This review, which is discussed in greater detail in the direct testimony of
13 Dr. Richard Brown, includes a statistical examination of data collected during
14 Wilma, a review of FPL design standards, a comparison of FPL design standards
15 to standard industry practice, a review of relevant FPL and supplier quality
16 standards and a review of FPL's pole inspection and maintenance program.

17

18 **2005 versus 2004 Storm Comparison**

19 **Q. Can you provide any comparative information to help gauge FPL's 2005**
20 **hurricane restoration efforts?**

21 A. It is very difficult to draw precise conclusions when comparing a utility's
22 response to a given event, e.g., customer density, electrical facility density,
23 vegetation density, structural damage, etc. However, I have included information

1 in Document No. GJW-6 for the 2004 and 2005 hurricanes that impacted FPL.
2 This comparison shows very similar results for the number of customers restored,
3 days to complete restoring service and total restoration costs. With respect to the
4 2004 storm restoration efforts, Order No. PSC-05-0937-FOF-EI issued in our
5 2004 storm recovery proceeding (Docket No. 041291-EI) states, starting on page
6 22:

7 “We find that the costs that we found to be appropriately charged to the
8 storm reserve, as set forth in the table above (in Section II.D.), are
9 reasonable and prudent. At the customer service hearings in this docket,
10 extensive testimony was offered in praise of FPL’s storm restoration
11 efforts. No party has challenged the reasonableness or prudence of these
12 efforts. More importantly, no party has challenged the reasonableness or
13 prudence of any specific cost among those that we found to be
14 appropriately charged to the storm reserve. Thus, based on the record
15 established, it appears that the costs we found to be appropriately charged
16 to the storm reserve are reasonable and prudent.”

17 **Q. What are your conclusions with respect to the comparison contained in**
18 **Document No. GJW-6?**

19 **A.** As I have discussed earlier in my testimony, FPL’s 2005 restoration processes,
20 efforts, and actions are essentially the same as those in 2004. In fact, with the
21 improvements implemented in 2005, they are even better. Therefore, I would
22 conclude that our 2005 restoration efforts and associated costs are reasonable and
23 prudent.

1 **Q. Please summarize your testimony.**

2 A. FPL has highly effective emergency preparedness plans and processes. Annual
3 practice, along with recent actual experience, assures consistent and effective
4 performance. Four 2005 hurricanes, Dennis, Katrina, Rita, and Wilma, affected
5 FPL and its customers. Hurricanes Katrina and Wilma made a direct impact in the
6 most densely populated portions of FPL's service territory and Hurricanes Dennis
7 and Rita traveled close enough to FPL's service territory for their outer bands to
8 cause damage and outages. In total, for all four storms, approximately 5.3 million
9 customers required power restoration. Significant resources comprised of FPL
10 employees, other utilities, and contractors were utilized to restore power and
11 restore FPL's facilities to pre-storm condition. Total costs for 2005 associated
12 with the restoration of customers' service and FPL facilities are estimated to be
13 approximately \$906.4 million. FPL's reasonable management actions, which I
14 have previously described with respect to our 2005 storm restoration activities,
15 support that these costs were reasonably and prudently incurred.

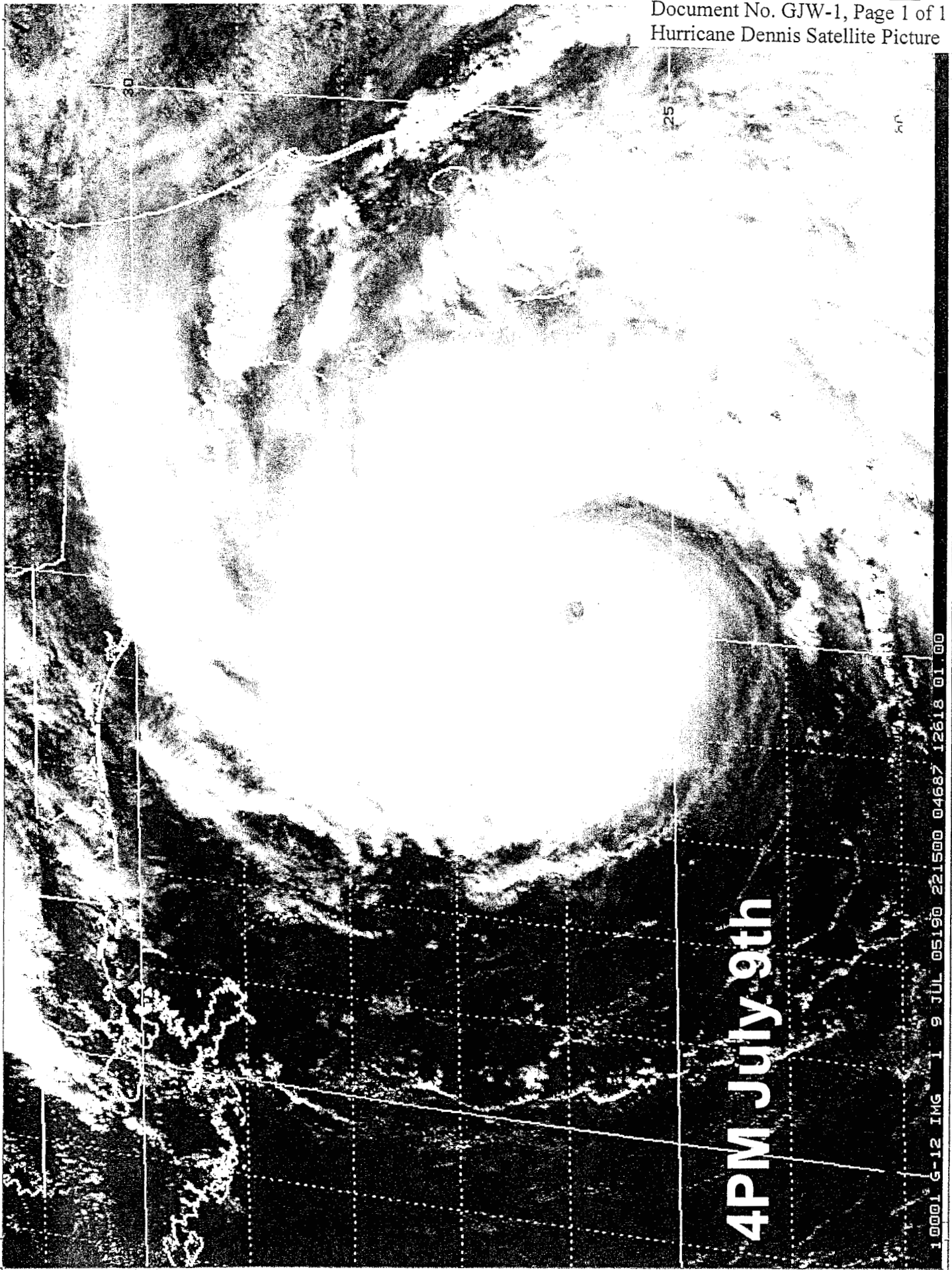
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17 The 2005 storm season was extremely active, testing our plans and expanding our
18 capabilities. In a number of ways, FPL's operational performance in response to
19 the 2005 storms exceeded its very effective 2004 performance. Critical to
20 achieving these results was FPL's proven restoration processes and the
21 management teams' experience. Throughout the storms, FPL worked tirelessly to
22 bring available internal and external resources to bear. We took extraordinary
23 actions in acquiring all necessary resources in order to meet the objective of

1 restoring electric service as quickly and safely as possible, to allow our customers
2 and the communities we serve to return to normalcy. We focused on the
3 objectives and strategies required to successfully execute our plans. We took
4 reasonable, necessary, and prudent actions in meeting our restoration objective for
5 each storm.

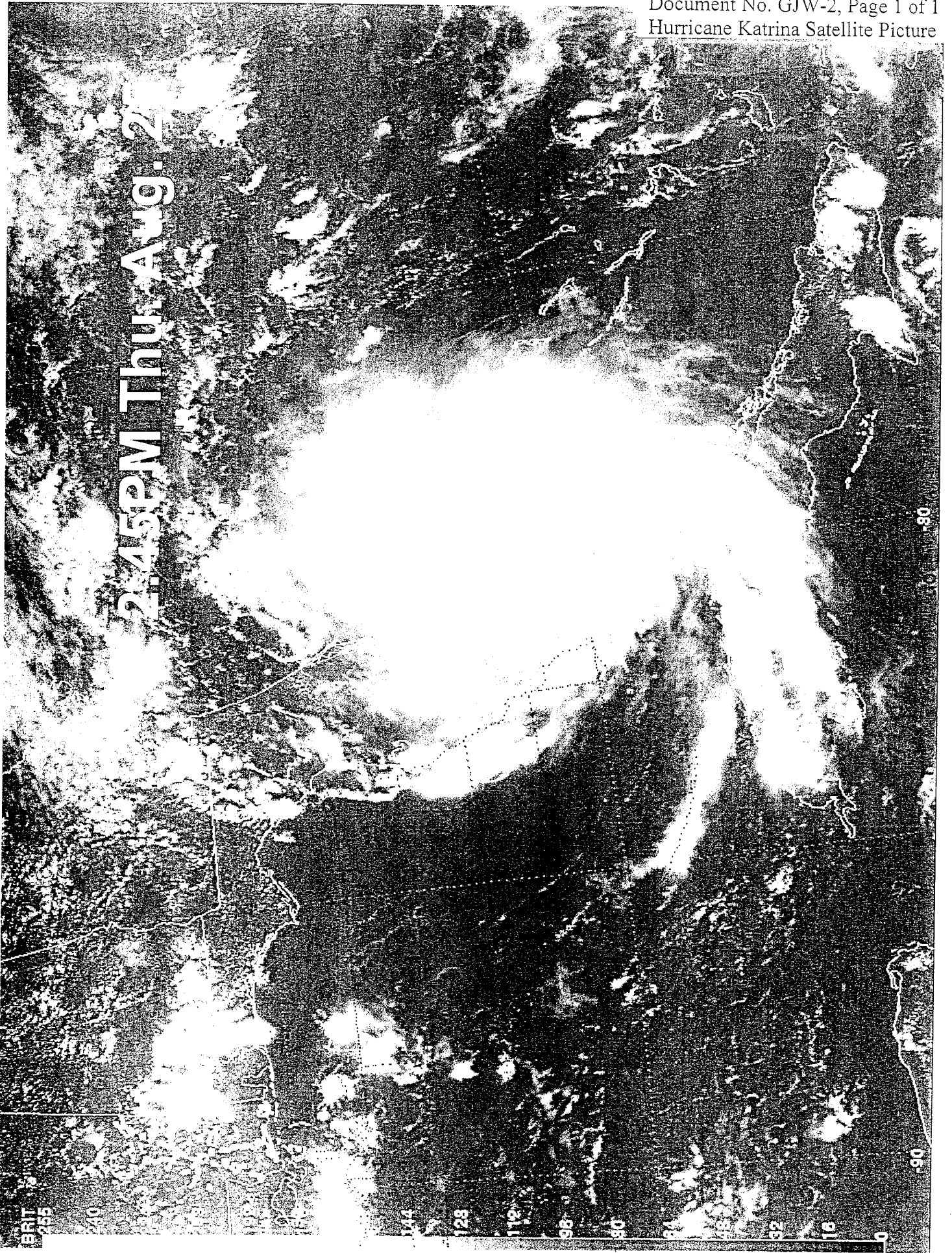
6 **Q. Does this conclude your direct testimony?**

7 **A. Yes.**



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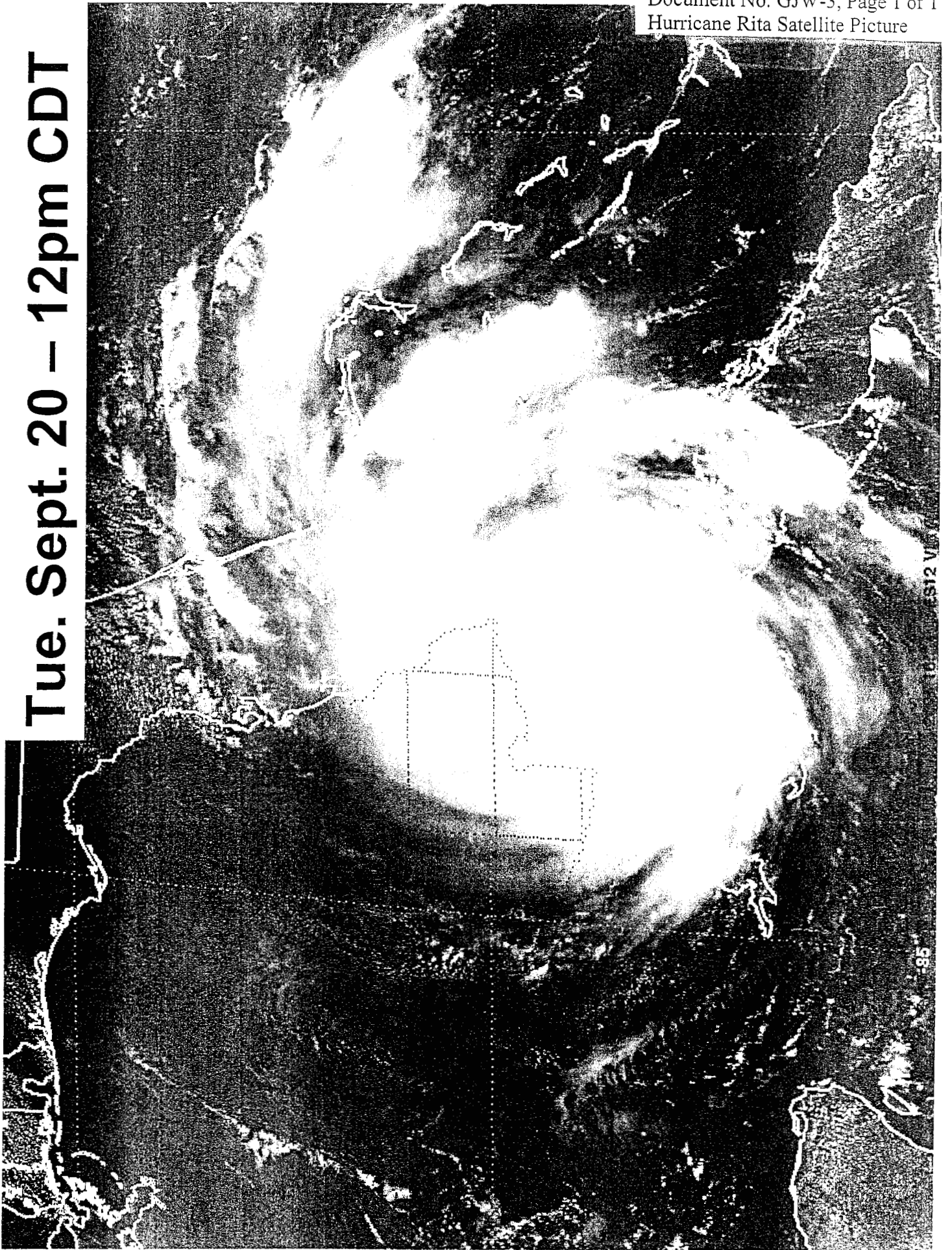
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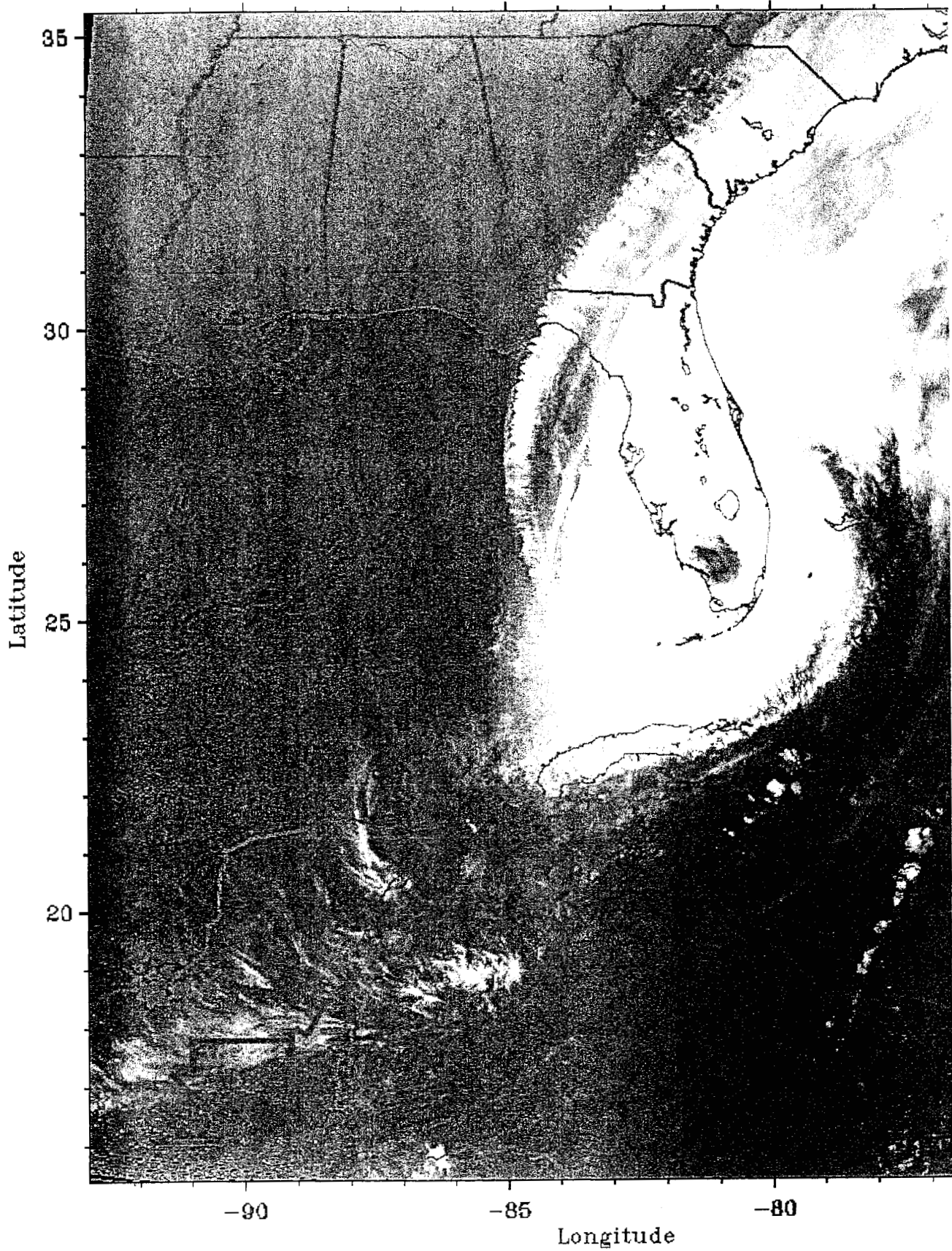
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Florida Power and Light Company
2005 Storm Cost *
 (\$000's)

	Dennis	Katrina	Rita	Wilma	Total
Payroll					
Regular	\$ 517	\$ 4,818	\$ 1,032	\$ 19,725	\$ 26,092
Overtime	3,926	14,519	1,311	40,578	\$ 60,334
Contractor & Line Clearing					
External Line & Contractor	2,455	80,618	4,867	425,086	\$ 513,026
Line Clearing	1,241	19,082	1,500	39,897	\$ 61,721
Vehicle & Fuel					
Vehicles & Equipment	454	1,781	239	10,611	\$ 13,085
Fuel	144	4,321	461	8,983	\$ 13,909
Material					
Material & Supplies	128	5,514	119	43,014	\$ 48,775
Reserve Equipment	168	2,304	190	9,188	\$ 11,850
Logistics					
Lodging	195	6,004	336	27,217	\$ 33,753
Equipment Rentals	64	3,455	34	8,048	\$ 11,601
Meals	161	6,174	404	20,798	\$ 27,537
Busing & Vehicle Rental	6	3,010	115	8,500	\$ 11,632
Other	927	10,500	1,589	60,074	\$ 73,090
TOTAL	\$ 10,388	\$ 162,100	\$ 12,195	\$ 721,721	\$ 906,404

Actual Costs	10,165	110,389	6,634	132,290	\$ 259,478
Estimated Costs	223	51,711	5,561	589,431	\$ 646,926
TOTAL	\$ 10,388	\$ 162,100	\$ 12,195	\$ 721,721	\$ 906,404

* Actual and estimated costs are as of November 30, 2005, except for certain estimate updates received on or about December 15, 2005.

FPL Storm Comparison - 2005 vs.2004

<u>Year</u>	<u>Storm Name</u>	<u>Strength of Storm at Landfall</u>	<u>FPL Territory Most Affected</u>	<u>Customer Outages (millions)</u>	<u>Days to Restore</u>	<u>Total Cost (millions)</u>
2005	Dennis	N/A**	Southeast	0.5	3	\$10
2005	Katrina	Category 1	Southeast/Southwest	1.5	8	\$162
2005	Rita	N/A**	Southeast/Southwest	0.1	2	\$12
2005	Wilma	Category 3	Southeast/Southwest	<u>3.2</u>	<u>18</u>	<u>\$696</u>
				<u>5.3</u>	<u>31</u>	<u>\$880</u>
						<u>\$26*</u>
						<u>\$906</u>
2004	Charlie	Category 4	West/Central/East	0.9	13	\$252
2004	Francis	Category 2	East/Central/North	2.8	12	\$316
2004	Jeanne	Category 3	East/Central/North	<u>1.7</u>	<u>8</u>	<u>\$322</u>
				<u>5.4</u>	<u>33</u>	<u>\$890</u>
						<u>\$109*</u>
						<u>\$999</u>

* Insurance recoveries

** Storm did not make landfall in FPL's territory