Docket No. 041272
Witness: Javier Portuondo
Exhibit ___ (JP-4)
FP&L Transmission & Distribution
Insurance Replacement
FPSC Docket No. 930405-EI

SCANNED

OFFICIAL
FILE COPY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 930405-EI

TRANSMISSION AND DISTRIBUTION INSURANCE REPLACEMENT

FLORIDA POWER & LIGHT COMPANY
OCTOBER 1, 1993

STUDY

DOCUMENT NUMBER-DATE
10539 OCT-18
FPSC-RECORDS/REPORTING

Steel Hector & Davis
Tallahassee, Florida

Matthew M. Childs, P.A.
(904) 222-4448

FILE COPY

October 1, 1993

Mr. Steve Tribble, Director
Division of Records and Reporting
Florida Public Service Commission
101 East Gaines Street
Tallahassee, FL 32399

RE: **DOCKET NO. 930405-EI**

Dear Mr. Tribble:

Enclosed for filing please find the original and fifteen (15) copies of Florida Power & Light Company's Study required by FPSC Order No. PSC-93-0918-FOF-EI in Docket No. 930405-EI, Petition to Implement a Self-Insurance Mechanism for Storm Damage to the T & D System.

ACK ____
AFA ____
APP ____
CAF ____
CMU ____
CTR ____
EAG 2
LEG 1
LIN 6
OPC ____
RCP ____
SEC 1
WAS ____
OTH ____

Respectfully submitted,

Matthew M. Childs, P.A.

MMC/eg

cc: All Parties of Record
William G. Walker, III

RECEIVED & FILED
FPSC-BUREAU OF RECORDS

DOCUMENT NUMBER-DATE
10599 OCT-1 93
FPSC-RECORDS/REPORTING

Tallahassee Office
215 South Monroe
Suite 601
Tallahassee, FL 32301-1804
(904) 222-2300
Fax: (904) 222-8410

4000 Southeast Financial Center
Miami, FL 33131-2398
(305) 577-7000
Fax: (305) 358-1418

1900 Phillips Point West
777 South Flagler Drive
West Palm Beach, FL 33401-6198
(407) 650-7200
Fax: (407) 655-1509

CERTIFICATE OF SERVICE

DOCKET NO. 930405-EI

I HEREBY CERTIFY that a true and correct copy of Florida Power & Light Company's Study required by FPSC Order No. PSC-93-0918-FOF-EI has been furnished by U. S. Mail and Hand Delivery (When indicated by an asterisk) to the following parties on this 1st day of October, 1993.

Michael Palecki, Esq.*
Division of Legal Services
Florida Public Service Commission
101 East Gaines Street
Tallahassee, FL 32399

Arthur C. Dannecker, Jr.
2545 S. Atlantic Ave.
#2106
Daytona Beach Shores, FL
32118

John Roger Howe, Esq.
Office of Public Counsel
111 West Madison Street
Room 812
Tallahassee, FL 32399

Joseph A. McGlothlin, Esq.
Vicki Gordon Kaufman, Esq.
McWhirter, Grandoff & Reeves
315 South Calhoun Street
Suite 716
Tallahassee, FL 32301

Matthew M. Childs, P.A.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 930405-EI

TRANSMISSION AND DISTRIBUTION INSURANCE REPLACEMENT

FLORIDA POWER & LIGHT COMPANY OCTOBER 1, 1993

STUDY

DOCUMENT NUMBER-DATE
10599 OCT-1 93
FPSC-RECORDS/REPORTING

October 1, 1993

Study Required by FPSC Order No. PSC-93-0918-FOF-EI Docket No. 930405-EI

I. Requirement

In the above Order the Commission required, in part, that Florida Power & Light Company (FPL or Company) file a study indicating the appropriate amount that should be contributed to the Storm and Property Insurance Reserve Fund (Storm Fund) annually. The Company was required to include in the study the type of costs it intends to charge to the reserve and information concerning the treatment of all Hurricane Andrew related transmission and distribution (T&D) damages under its then existing insurance policy. The order required that the study be filed three months from the date of the vote in the docket which took place on May 25, 1993. At the Agenda Conference on August 17, 1993, the Commission approved a request by the Company for an extension of the filing date to October 1, 1993. This study has been prepared to meet these specific requirements as set out in the Order.

II. Management Summary

The Company's Storm and Property Insurance Reserve (Reserve) was originally established to cover losses from hurricanes and tropical storms. In the 1980's the Commission expanded the potential use to include losses resulting from retrospective premium assessments associated with the Company's nuclear property insurance.

The Storm and Property Insurance Reserve (Reserve) is currently a "funded reserve." The company recognizes an expense on an annual basis as an accrual to build the Reserve. Then, in order to fund the Reserve, a contribution is made to an external fund, custodied by Melon Bank, equal to the accrual less deferred income taxes, since accruals to the reserve are not currently deductible for income tax purposes. Throughout the rest of this study we will refer only to the Reserve, and the accrual amounts which represent gross accruals to the Reserve rather than the "net-of-tax" contributions which would be made to the Storm Fund.

Until June 1,1993, FPL had replacement cost insurance covering damage to T&D facilities resulting from storms. In the aftermath of Hurricane Andrew, this T&D coverage is unavailable at a reasonable cost and the Company is now self insured for all storm related damage to T&D facilities. While we believe that some insurance may become available in the future at a fair cost, a level of self insurance must be anticipated into the foreseeable future. Self insurance will result in a greater dependance on the Reserve and special customer assessments may be needed to offset losses, therefore, a review of the costs to be charged against the Reserve and the amount of the annual accrual to the Reserve may be appropriate.

The primary questions addressed by this study are: 1) what costs should be charged to the Reserve during the period of self-insurance, and 2) what is the appropriate annual accrual.

1. Costs To Be Charged to the Reserve

Attachment I was developed to present the alternatives for determining costs to be charged to the Reserve when self insured. The amounts presented represent estimated costs for Hurricane Andrew assuming the Company had been self insured for T&D damage when the storm occurred. Three alternatives are presented on this attachment; 1) the actual restoration cost approach, 2) the actual restoration cost approach with a net book value adjustment, and 3) the incremental cost approach.

The Company recommends that the actual restoration cost approach, without adjustment, be used. A "net book value adjustment" will increase the Company's financing requirements, rate base and ongoing depreciation expense resulting in higher revenue requirements and ultimately higher customer rates. Initially the incremental cost approach appears appropriate, however, after evaluating the result, and the numerous adjustments based on estimates and allocations that are required to arrive at incremental cost, we do not believe that the method provides a benefit when compared to use of the simple and more straightforward actual restoration cost approach. Under the actual restoration cost approach, without adjustment, the only review required would be for the necessity and reasonableness of the costs actually incurred and recorded on the Company's books. Further, since the actual restoration cost approach mirrors replacement cost insurance, this approach allows the company to easily switch from self-insurance to traditional insurance if and when it becomes available at reasonable rates. (See Part VII for additional discussion.)

2. Appropriate Annual Accrual

We believe that there is no one precise amount that can be calculated which will be the appropriate accrual. The appropriate accrual depends on many factors, including the availability of insurance, the Reserve balance, the purpose the Reserve is expected to serve, the frequency of required amortization of losses in excess of the Reserve balance, the level of customer revenues acceptable to cover storm losses, and the actual occurrence of storms and their impact on customer facilities. Considering these factors, FPL believes that the annual accrual should remain at its currently approved level of $7.1 million.

In the short-term (i.e. five years) if a catastrophic storm such as Hurricane Andrew were to strike FPL's service territory, the Reserve balance would be inadequate to cover the loss under any reasonable accrual scenario and, therefore, some type of special customer assessment would be necessary. Even long-term, our analysis shows that it is unreasonable to expect that the Reserve will have a balance sufficient to cover losses from all potential catastrophic storms even if the estimated average annual loss is accrued. Therefore, it will be necessary to utilize a combination of the Reserve and special assessments. Thus, we believe the primary objectives of the Reserve become to cover losses from moderate storms and avoid frequent special customer assessments.

Considering these objective, our statistical analysis shows that with an annual accrual of $7.1 million a) the Reserve is expected to have a positive balance, b) the potential for an extreme positive or negative reserve balance is limited (there is a relatively low level of variability in the reserve), and c) on average, special assessments will only be needed once in every ten years. At the same time, total potential payments by customers, both to provide for the accrual and special assessments, would be expected on average to be only about 0.3% of total revenue.

In addition, from a pragmatic short-term perspective, the current balance ($74 million) in the

Reserve increased by annual accruals of $7.1 million over the next five years (7.1 million x 5 = 35.5 million) would result in a Reserve balance of $109.5 million, which is adequate to cover storm losses, assuming the average expected loss of $20.3 million was actually incurred in each of the next five years. However, if FPL does not experience any significant storms within the next several years, reasonably priced insurance could again become available, reducing our reliance on the Reserve. If accruals to the Reserve are set at the level of the estimated average annual loss this would create an unnecessarily high Reserve balance. We are also proposing to reduce the accrual level by the amount of premiums related to any new insurance obtained. In this way the annual accrual will be adjusted to reflect the availability of insurance.

Storm restoration expenses are a legitimate cost of service, and as such should be recovered from utility customers. These costs can be collected in advance (prepaid by accruals to a reserve) or collected after the fact through a special assessment. We are proposing that a combination of these two methods is both appropriate and necessary. To the extent that the costs are collected in advance, through an accrual, it is appropriate to set the accrual at the amount embedded in base rates, which is the amount actually being contributed by customers. $7.1 million represents the amount customers are currently contributing for both insurance premiums and accruals to the Reserve. FPL included the amount of insurance premiums included in base rates as a component of the accrual because traditional insurance was not available. If and when insurance does become available it would be appropriate to adjust the annual accrual so that the combination of insurance premiums and Reserve accrual remains at $7.1 million. It would also be appropriate, on an ongoing basis, to review the status of the Reserve, accrual level and underlying assumptions in detail in conjunction with rate proceedings so that rate recovery and any necessary changes in the accrual can be matched at that time.

3. Conclusion

We believe that the use of the actual restoration cost approach for determining the appropriate amounts to be charged to the Reserve is the proper method to use. This approach is simple, straight forward and is consistent with and would work much like replacement cost insurance.

The Company is currently accruing $7.1 million annually to build the Reserve. We believe the $7.1 million accrual should remain in effect at the present time. We would propose, however, that to the extent some amount of T&D insurance again becomes available at a reasonable price, and until the Company's next rate case, the accrual be reduced by the amount of any premium related to the new insurance. The $7.1 million is equal to the cost embedded in FPL's base rates to cover accruals to the Storm Reserve and T&D insurance premiums, and represents what we currently believe to be the appropriate accrual amount.

III. Background

As a result of the unavailability of reasonably priced insurance for its T&D facilities in the aftermath of Hurricane Andrew, and with the approaching expiration of FPL's current policy on May 31, 1993, FPL prepared a self insurance proposal for consideration by the Commission, on April 19 1993. FPL requested approval of the self insurance proposal prior to the start of the 1993 hurricane season which began on June 1, 1993. FPL's self insurance proposal included three parts:

1. Annual contributions to the Storm Fund in the amount of $7.1 million, net-of-tax.
2. Obtaining a dedicated $300 million line of credit.
3. Authorization to recover losses in excess of the Reserve balance over a period of five years through a charge to customers.

The matter went to hearing before the Commission on May 17,1993. The Commission voted on the matter at a special agenda conference held on May 25, 1993 and the final order was issued on June 17, 1993.

In their decision, the Commission acknowledged the adverse effects that Hurricane Andrew has had on FPL's efforts to obtain reasonably priced T&D insurance at an adequate level of coverage and agreed that a self insurance program is a reasonable approach for the Company to follow at this time. The Commission recognized the changing nature of the insurance markets and indicated that, in the future, a combination of self insurance and traditional insurance may become a viable alternative.

The Commission agreed that there is a need for lines of credit to provide for liquidity under the self insurance plan but decided that the appropriate amount of the lines of credit would not be subject to pre-approval. They stated that the needs will vary through time depending on FPL's circumstances including liquidity, the level of the Reserve balance and the T&D inventory. The Company was given the discretion to increase or decrease the amount of the lines of credit established for storm damage liquidity.

The Commission found that FPL should resume and increase its contribution to the Storm Fund by $7.1 million, net-of-tax, effective June 1, 1993. However, FPL's request that the $7.1 million be reduced by the commitment fees for the dedicated lines of credit was rejected. The $7.1 million represents the amount embedded in FPL's base rates, $3 million for Storm Fund contributions and $4.1 million for traditional T&D insurance. The Commission also required that FPL prepare a study indicating the amount that should be contributed to the Storm Fund annually.

The Commission declined to approve the automatic Storm Loss Recovery Mechanism requested by the Company, but they did indicate that if the magnitude of a future storm loss is great, FPL could petition the Commission to act quickly to allow expense recovery from customers. FPL would be allowed to defer the storm damage loss until the Commission acted on the petition. The Commission provided assurance that the Company's petition would be acted on quickly and expeditiously in an emergency situation. The Commission made it clear that the vote did not foreclose or prevent further consideration at a future date of some type of a cost recovery mechanism.

In addition to presenting the Commission's decision on the above issues, the order pointed out that it was unclear what storm related expenses FPL intends to charge against the Reserve or whether the cost of damaged assets would be accounted for at replacement cost or net book value. As a result, and so that the issue related to the appropriate annual accrual to the Reserve could be addressed, the Commission ordered that FPL submit a study. This document represents the study, the specific requirements of which have been discussed earlier under the caption "Requirement".

Finally the order required that the Company file an annual report with the Commission, beginning January 1, 1994, addressing: 1) FPL's efforts to obtain traditional insurance for

the T&D windstorm risk; 2) the status of the proposed industry wide program to insure against losses from natural disasters and any decision made related to participation in that program; 3) an update of the Company's exposure to storm damage and the adequacy of the Reserve; and 4) FPL's assessment of the feasibility and cost effectiveness of a risk sharing plan among the investor owned electric utilities in Florida.

IV. Methodology for Long-Term Statistical Study

FPL's original filing in this docket included a statistical analysis of the annual damage that can be expected to the Company's T&D system as a result of storms. The analysis indicated that, over the long term, FPL could expect to incur damage to its T&D facilities of $19.5 million annually, on average, as a result of hurricanes. While the purpose of the analysis was only to evaluate the economic benefits of purchasing the limited T&D insurance coverage that had been offered to the Company and the results were admittedly "rough" due to the unpredictable nature of hurricanes and the assumptions that had to be made, the analysis was based on the best information available to the Company and provides the starting point for this study.

Utilizing this same methodology and calculating the Hurricane Damage Potential Index, or HDP, as published by Dr. Grey of Colorado State University, the Expected Damage in HDP Units that the state of Florida could expect in damage to T&D facilities annually is 3.329 HDP units. By applying the annual probability of Category I through V storms and the $270 million estimate of Hurricane Andrew T&D damage as the basis for a category IV storm, adding the additional insurance deductibles for non-T&D damage to be charged to the Reserve, and applying 35%, the percentage of FPL-owned T&D facilities within the state of Florida, FPL's average annual loss can be estimated at approximately $20.3 million per year. However, simply putting $20.3 million into a Reserve each year is not a correct answer to the problem. The $20.3 million does not consider the beginning balance in the Reserve which, as of June 1, 1993, totalled $74 million nor does it consider those times when damages exceed the level of the Reserve, or, alternately, when the Reserve balance becomes too high. Nor does it consider that all or a portion of future losses may be covered by traditional insurance. It should also be noted that $20.3 million dollars represents the long-term average annual loss and does not provide an indicator of the loss which can be expected in any given year.

To determine an appropriate amount to put in the Reserve each year it is necessary to perform an additional statistical analysis using a computer simulation technique known as Monte Carlo Simulation, as well as make a number of additional assumptions related to the considerations discussed in the preceding paragraph. This simulation, which uses the damage indices mentioned above, evaluates the effects of four potential policies. Policy I sets the annual accrual equal to FPL's expected annual loss from future hurricane damage, $20.3 million, and assumes no additional action will be taken in the event that future losses exceed the Storm Reserve. Policy II sets the annual accrual equal to $20.3 million, as in Policy I, but, if future losses exceed the Reserve, assumes a special assessment over a five year period to return the Reserve to the $74 million target. Policy III sets the annual accrual to $7.1 million, the amount the Company is currently accruing, and, if future losses exceed the Reserve, assumes a special assessment over five years to return the Reserve to the $74 million target. Policy IV has no annual accrual but, again if future losses exceed the Reserve, assumes a special assessment over five years to return the Reserve to the $74

million target. Using the Monte Carlo Simulation Model to simulate future hurricane landfalls in Florida and charges against the Reserve, FPL was able to study the impact on the Reserve for each of the four policies. The results were tracked through the simulation process for a period of 33 years and repeated for a total of 500 iterations for each of the four Policies.

As can be seen in detail in **Attachment** 3, Policy III, setting the annual accrual to $7.1 million and special assessments over a five year period to restore the Reserve once losses exceed the balance, is superior to the other policies. Policy I, provides the most uncertainty regarding Storm performance and has the highest probability of the Reserve having a negative balance of any of the alternatives. Policy II has the greatest probability of maintaining reserve balances above zero. This performance is gained by charging today's customers an expected $1.30 for every expected $1.00 in future hurricane losses. The resultant build up in reserve balance may ultimately require a reduction in annual accruals paid by future customers or prove to be redundant if insurance markets eventually return to more normal conditions. Policy IV, a pay-as-you-go policy, sets the target balance of $74 million as a cushion and illustrates that the amount chosen for an accrual can be relatively arbitrary so long as it is within a range low enough as to not result in unbounded Reserve growth and includes a mechanism to address restoration of reserve balances when losses exceed the Reserve. Analysis indicates that an accrual as low as $9 million would result in some fund growth over time, if potential negative balances do result in special assessments.

We believe that the Company's current accrual of $7.1 million is fair to customers as well as stockholders since it a) provides reasonable assurance of the reserve being greater than zero, b) has a good measure of stability to assure intergenerational equity c) would, on the average, only require the Company to implement special assessments once in every 10 years, and d) is the amount currently provided in rates for insurance premiums and accruals to the Storm Fund. While the other policies have some merit on their own, Policy III has the greatest probability of assuring that current customers do no overpay for storm costs.

In addition, in the short-term an accrual of $7.1 million coupled with the existing reserve balance would be adequate to cover the expected losses and avoids an unnecessarily high build up in the reserve if reasonably priced T&D insurance once again becomes available.

V. Treatment of Hurricane Andrew Related T&D Damages (Under Prior Insurance Policy)

Until May 31 1993, FPL's T&D facilities were insured by Arkwright Mutual Insurance Company through a replacement cost policy. Among other things, this policy covered FPL's T&D facilities for loss or damage arising from a windstorm designated by the National Oceanic and Atmospheric Association as a tropical storm or hurricane with a $20 million deductible and covered other losses with a $1 million deductible. In the event of a loss, the policy payed the lesser of the cost to repair or the cost to replace the property with material of like kind and quality. Generally, the policy covered the cost of direct labor charges, including overhead costs attributed to the repair or replacement of the damaged property, and the cost of materials and supplies used in repairing or replacing the damaged property, along with the direct expenses associated with handling of materials and supplies by storeroom personnel. Further, the policy payed an additional amount of 83.61% of direct labor charges, which was designed to cover the cost of administrative, supervisory and engineering expenses and applicable employee benefits. Examples of items not covered are damage related to normal wear and tear, costs arising from the interruption of business, loss or

damage to currency deeds or securities or losses arising from radioactive contamination. Since the language in the policy was broadly worded, it is not practical to specifically identify every cost which was or was not covered by the policy.

FPL has received advances from Arkwright; however, as of this date, FPL has not submitted its full claim, since restoration work and damage assessment is still in process. Currently, the major cost areas at issue are the amount of damage to underground facilities as a result of the storm surge and the proper level of the overhead charges. Negotiations are continuing.

By letter dated July 30, 1993, in conjunction with Docket No. 910081-EI et. al., Order No. PSC-93-0211-FOF-EI, FPL filed a report with the Commission which provides an accounting of Hurricane Andrew restoration costs incurred as of June 30, 1993, and the disposition of insurance proceeds received. As indicated in the report, FPL has incurred (direct) restoration costs in the T&D function, exclusive of substations which were covered under the non-T&D insurance policy, of approximately $246 million. We continue to expect total T&D costs to reach approximately $270 million. Through June 30, we had received advances from Arkwright totaling $220 million. The report is included in the **Appendix** to this study. The Commission required the Company to file the next report by December 31, 1993.

VI. Industry Mutual Insurance Coverage

As was discussed at the hearing, an industry mutual, Line Insurance Company ("Line"), was developed to pursue providing T&D property insurance to electric utility companies. In July 1993, Line provided premium indications to 39 utilities and expected that 20 utilities would join the program. As of late September, only eight utilities (including FPL) have indicated a positive commitment to Line's program. To have a viable program, Line has indicated that either additional utilities must commit to the project or the reinsurance program must be restructured. Line is working (with Marsh & McLennan) to resolve the issues and make the program a viable option. While we continue to believe that some viable form and level of affordable T&D insurance coverage will ultimately become available at some point in the future, efforts to secure such insurance have not materialized.

VII. Charges to the Reserve Under Self Insurance

In conjunction with self insurance for T&D facilities the Company has been asked to consider the appropriateness of charging the Reserve for the incremental cost associated with storms and with the net book value of destroyed property only. Incremental cost would represent costs incurred for storm restoration to the extent that those costs exceed costs which would normally have been incurred. The determination of incremental costs should also consider revenues lost as a result of the storm conditions. To the extent normal cost levels are not recovered due to lower than normal sales, the loss of revenue can be viewed as resulting in normal cost becoming incremental costs. We interpret the net book value adjustment to include capitalization of the normal or fair costs of new facilities installed as a result of the storm, and only charging the Reserve for any abnormal or premium cost of capital additions and for the unrecovered investment in the facilities replaced and retired.

In general, we believe there are three options for calculating charges to the Reserve which we have termed: 1) the actual restoration cost approach, 2) the actual restoration cost approach with a net book value adjustment and 3) incremental cost approach. **Attachment**

1 has been prepared to compare these alternatives. The starting point for the comparisons is the estimated restoration cost for damage to FPL's T&D facilities resulting from Hurricane Andrew. Our analysis indicates that, had FPL been self insured for losses resulting from Hurricane Andrew, calculation of losses charged to the Reserve based on these three approaches would be:

1. Actual Restoration Cost Approach - $270 million
2. Actual Restoration Cost Approach With Net Book Value Adjustment - $228 million
3. Incremental Cost Approach - $299 million

We believe that the actual restoration cost approach, without adjustment, should be used to calculate charges to the Reserve.

1.) Actual Restoration Cost Approach

We would define actual restoration costs to be those direct and indirect costs which are incurred to safely restore customer service, or to return plant and equipment to its original operating condition. In general, these costs include FPL payroll costs, costs associated with the use of vehicles and equipment, inventory costs, payments for outside services provided by contractors and other utilities, security services and crew support costs such as food, lodging, transportation and miscellaneous temporary subsistence costs. Development of a complete, detailed listing of all costs that could possibly be incurred as the result of a storm is neither practical or possible. On pages 2 and 3 of **Attachment 1** we have provided representative examples of the types of activities and related costs that would fit the definition of actual restoration cost and can reasonably be expected to be incurred as a result of a storm.

To capture the actual restoration costs associated with a storm, FPL would use the work order system as was done for Hurricane Andrew. In an emergency situation the focus of attention must be on restoring service and not on completing paperwork. The field accounting must be as simple as possible. Identifying and capturing actual restoration costs incurred as the result of a storm is relatively simple and straightforward. Actual restoration costs are closely related to costs which would be expected to be provided for under a replacement cost insurance policy when insurance is available.

Depending on the future level of replacement cost insurance, varying levels of reliance on the reserve can be anticipated. It is probable that future storm losses will be covered by some combination of insurance proceeds and charges to the reserve. Use of the actual restoration cost approach is consistent with replacement cost insurance and avoids the cumbersome (and potentially arbitrary) accounting for storm restoration utilizing two different methodologies. The use of the actual restoration cost approach also avoids the need to determine what portion of insurance proceeds apply to capitalized costs, normal costs or to non-incremental costs, which would be required, if either the net book value or incremental cost approach is used for determining the cost to be charge to the Reserve.

It is important to note that actual restoration costs charged to the storm work order(s) would not include all costs resulting from a storm. Specifically excluded would be costs which are an indirect result of the storm. In particular, overtime incurred by Company personnel in work areas not directly affected by the storm due to loss of some personnel to storm

assignments (backfill work) and costs associated with work which must be postponed due to the urgency of the storm restoration and accomplished after the restoration is completed (catch-up work) would not be included. In addition, revenues lost by the Company due to the disruption of customer service or the disappearance of customers after the storm would not be included. While these are real costs incurred by the Company as a result of the storm, quantification of these costs must be based on estimates and an arbitrary time period for tracking these costs would be required. For Hurricane Andrew we believe these indirect costs to total approximately $48 million; however this is a rough estimate. While the actual restoration cost approach does not consider these indirect costs, the indirect costs are partially covered since there is also no adjustment to remove costs which would normally be incurred during the restoration period. In this way the use of the actual restoration cost approach to charge the Reserve when self insured would work much like replacement cost insurance.

2.) Actual Restoration Cost Approach With Net Book Value Adjustment

A net book value adjustment would require a clear identification of facilities destroyed by the storm and the normal cost to replace these facilities to calculate the amount to be capitalized. Also, the original cost of destroyed assets and the accumulated depreciation associated with those assets would need to be developed to determine the charge to the Reserve.

The damage done to the T&D facilities by a storm includes both capital and maintenance work. Capital work entails the replacement of a complete retirement unit of property as defined in FPL's Property Unit Catalog. This would include setting a new pole or replacing a span of conductor equal to or greater than a defined retirement unit. Maintenance work involves replacement of less than a retirement unit of property or putting existing facilities back into operation. Maintenance work, for example, would include resetting a toppled pole, rehanging downed conductor and replacing a length of conductor of less than a retirement unit. While capital versus maintenance work is defined and generally identifiable under normal conditions, in a storm restoration situation the distinction can at times become less exact.

Additionally, specific retirements must be based on estimates. Distribution property is treated as mass property in FPL's accounting system. Under the mass property concept the cost of distribution plant is recorded at a retirement unit account level and maintained in total by vintage year of addition to plant in service. The identification of specific vintage year for individual components of property is not maintained. Therefore, to record retirements, a statistical aging program is typically used to estimate the vintage year and original cost to be retired. Transmission properties are maintained by identifiable units of property and specific vintage year of addition, which are the basis of determining the original cost of the asset to be retired. These methods would be used to estimate the original cost for the retirement and to calculate the net book value of T&D property replaced and to be charged to the Reserve as a result of a storm.

The cost of both storm related capital and maintenance work can be substantially higher than the normal cost of the same work due to the adverse working conditions, the increased support costs and the need to restore service as quickly as possible. If costs are to be capitalized, the amount capitalized should be based on normal cost, and the incremental capital work costs incurred in excess of this amount should be treated as abnormal maintenance and charged to the Reserve. This is consistent with National Association of

Regulatory Commissioners (NARUC) Interpretations of the Uniform System of Accounts for Electric and Gas Utilities No. 26-EG, revised July 1987. These Interpretations included the following question and answer:

> Question:
> Considerable damage has been done to utility property by storms. It has become necessary in some instances to go to great expense to replace individual units of property. If the total cost of installing the new plant is charged to plant, a very high unit price results. Is it permissible under such circumstances to charge a normal or "fair" cost to plant and to charge the remaining cost to maintenance?
> Answer:
> Each case should be considered on its merits and presented to the Commission. It is recognized under the conditions cited that the abnormal expenditure is due to the necessity of restoring the property to operating condition without delay and as such a part of the cost is chargeable to maintenance.

The company has the ability to develop "normal" costs for capital work utilizing its existing engineering and cost estimating systems, construction practices, and the actual/estimated quantities of materials installed during the reconstruction period. The result of this process is an estimate of the installed cost that would have been recorded under non-storm conditions.

The Company was asked to consider the appropriateness of capitalizing the cost of the new facilities in the normal manner and charging the Reserve for only the net book value, or unrecovered cost, of the facilities destroyed. To the extent insurance becomes available, a net book value adjustment would be inconsistent with replacement cost insurance recovery. While a net book value adjustment is an alternative, we do not believe it is necessary or appropriate. The cost of replacing and restoring the system to the level of service and conditions that existed prior to the storm are not an on-going cost of service in that there is no incremental benefit other than the restoration of service. The net book value adjustment would increase the Company's rate base and expenses resulting in increased revenue requirements and higher customer rates in the long run. The Company will be adversely affected since the financing cost and ongoing higher depreciation expense associated with the capitalized costs will reduce earnings until base rates are adjusted in conjunction with a rate case. If a net book value adjustment is to be made, capitalized costs should continue to be based on the normal or fair cost of the new facilities, not the premium costs caused by the storm situation. In addition we believe that if a net book value adjustment is made, such an adjustment should be made only in conjunction with the actual restoration cost approach for charging the Reserve. Applying this adjustment in conjunction with the incremental cost approach would defeat the implied purpose of attempting to capture incremental cost, i.e., to charge the Reserve for only those costs in excess of the costs the Company would have normally experienced and thereby leave the Company's earnings level neither negatively or positively affected.

3.) Incremental Cost Approach

While it may seem reasonable in theory to charge only incremental costs resulting from a storm to the Reserve, we believe that there is not a clear benefit derived by attempting to quantify incremental cost. Both direct incremental and indirect incremental costs should be considered if an incremental cost approach is to be used. Recoverable incremental costs

would exclude reasonably estimable and quantifiable costs that would be charged to expenses normally in the absence of a storm. We believe such charges to be straight time FPL employee payroll charged to the storm work order, appropriate loadings for pension, welfare, taxes and insurance applicable to the straight time payroll, and a representative level of normal Company vehicle use charges. If the incremental cost approach is to be used then all incremental costs should be considered, including backfill work, catch-up work and revenues lost by FPL as a result of the storm. While incremental cost can be calculated, it requires starting with actual restoration cost and making numerous adjustments which depend on estimates and allocations. The complexities are apparent when the incremental costs column on page 1 of **Attachment 1** is reviewed. In addition, the exclusion of non-incremental, or normal, costs is based on the premise that these costs are recovered through base rates. Therefore, such an adjustment is only appropriate to the extent that the Company had a normal level of revenue during that period of time. In fact, FPL did not have a normal level of sales after Hurricane Andrew and we believe that the lost revenue experienced exceeded the level of non-incremental expenses included as part of the cost of restoring the T&D system after the storm. The adjustments required to develop the incremental costs are explained on page 6 of the attachment.

Even if the incremental cost approach for calculating charges to the reserve were used, actual restoration costs incurred as a result of the storm would still need to be captured and recorded. Excluding T&D, FPL's properties are still insured at replacement cost and some amount of reasonably priced T&D insurance is expected to again become available in the future. In addition, the field accounting must remain simple and it would be unworkable to attempt to record only incremental costs to the storm work order. Furthermore, each storm can be expected to impact the Company in a unique way and the assumptions and the estimation and allocation techniques needed to calculate indirect incremental costs and non-incremental costs might need modification. We can envision extensive debate before the Commission over these calculations which could result in unnecessary delays. As is the case with the net book value adjustment, the incremental costs approach would be inconsistent with replacement cost insurance recovery when some level of insurance is obtained. In contrast we view the actual restoration cost approach as relatively simple and fair. For these reasons we believe that substantial time and effort could be saved, and debate before the Commission avoided, by simply charging the Reserve for costs incurred directly as a result of storm restoration and clearly attributable to the storm.

VIII. Accounting Entries related to T&D Restoration Costs Under Self Insurance

On February 10, 1993 the FPSC issued order No. PSC-93-0211-FOF-EI in Docket No. 910081-EI which authorized FPL to utilize a specific accounting treatment in conjunction with Hurricane Andrew restoration costs. The Company had requested approval of this accounting treatment based on the Commission Rule dealing with the use of accumulated provision accounts, certain NARUC interpretations and the anticipated recoveries under FPL's insurance policies, in a letter to the Commission dated January 6,1993. The letter included an example of the accounting entries to record storm related costs and insurance proceeds under this accounting method (Attachment A to the Company's letter). A copy of the Company's request letter and the Commission's Order of approval are included in the **Appendix** to this study.

Attachment 2 has been prepared to demonstrate the accounting entries that would be made when self insurance is necessary. Examples are included for each of the three alternative

approaches for determining charges to the Reserve. The amounts used in these accounting entry examples are based, to the greatest extent possible, on the estimated Hurricane Andrew costs previously identified in Attachment 1.

Page 1 of **Attachment 2** includes the accounting entries for the actual restoration cost approach. As previously discussed, we believe this to be the appropriate approach for determining charges to the Reserve. The entries required with this approach are basically the same as those which will be made in conjunction with Hurricane Andrew based on the Commission's Order, the only exception being that with self insurance the actual restoration costs result in a negative balance in the Reserve.

Accounting entries for the actual restoration cost with a net book value adjustment approach are shown on page 2 of the Attachment. In this case a portion of the actual restoration cost is transferred to the plant accounts and, therefore, the negative balance in the Reserve is reduced.
While this lower negative balance in the Reserve gives the appearance that a storm had a lesser impact, as discussed earlier, this approach will ultimately result in higher customer rates.

Page 3 of the Attachment includes the accounting entries for the incremental cost approach. Of the three alternatives presented this approach, which charges non-incremental costs to maintenance expense and incremental costs to the Reserve, would result in the largest negative balance in the Reserve.

ATTACHMENTS

ALTERNATIVE APPROACHES FOR DETERMINING AMOUNT CHARGED TO THE STORM RESERVE
UNDER A SELF INSURANCE PROGRAM FOR T&D FACILITIES
(Hypothetical- Based on Hurricane Andrew Estimated Restoration Cost)
$ millions

	Actual Restoration Cost	Actual Restoration Cost w/Net Book Value Adjustment	Incremental Cost
(1) **Total T&D Restoration Costs (a)**	**$270**	**$270**	**$270**
(2) **Insurance Proceeds (b)**			
Proceeds	0	0	0
(3) **Net Book Value Adjustment (b)**			
Capital Additions @ Normal Cost		(51)	
Net Book Value of Retired Assets		9	
Total Net Book Value Adjustment		**(42)**	
(4) **Non-Incremental Cost Adjustment (b)**			
Straight-Time (S-T) Payroll:			
Total S-T Payroll			(25)
Less: Amount Capitalized (@normal %)			11
Non-Incremental Payroll (Operating)			(14)
Loading on Non-Incremental Payroll			(3)
Vehicle Charges (Non-Incremental)			(2)
Total Non-Incremental Cost Adjustment			**(19)**
(5) **Incremental Indirect Costs (b)**			
Lost Revenue			46
Catch-up Work			1
Back-fill Work			1
Total Incremental Indirect			**48**
Amount Charged to Reserve	**$270**	**$228**	**$299**

Notes (a) See pages 2 and 3 for examples of activities and related costs components which would be captured through a storm work order.
(b) See pages 4 - 6 for methodology and assumptions

Actual Restoration Costs

COSTS INCURRED AS THE RESULT OF A STORM TO RETURN PLANT AND EQUIPMENT TO ITS ORIGINAL OPERATING CONDITION, SAFELY RESTORE SERVICE TO CUSTOMERS, OR COSTS THAT ARE CLEARLY ATTRIBUTABLE TO THE STORM AND ARE REASONABLY QUANTIFIABLE

The following are examples of types of activities and related costs:

- o storm preparation
- o survey for damage assessment - (including engineering assessments)
- o direct repairs
- o costs of temporary housing for restoration crews and support personnel and their related subsistence costs
- o costs to staff and operate staging areas
- o costs incurred to operate centers for damage assessment, repairs and control
- o fuel and related costs for back-up generators
- o incremental costs incurred to meet storm related customer service needs
- o incremental cost incured to operate trouble call phone centers
- o special advertising and media costs
- o employee assistance

Costs will be captured in the accounting system by the following source groups:

Payroll

FPL employee payroll- regular, overtime, and temporary relieving pay.

Vehicle and Vehicle Equipment

FPL Owned and Leased - Charges for FPL owned or leased vehicles and equipment which are considered part of the Company's normal operating fleet. Expenses for operating and maintaining while being used in storm restoration work. Such costs include all costs normally included as a component of the Company's vehicle charge-out rate and expenses for repairing vehicles damaged while being used in storm restoration work.

Materials and Supplies Inventories

Material and supplies inventory costs directly related to storm restoration activities. Inventory issues (and return items) shall include, as appropriate, an adjustment to the stores loading rate to reflect the incremental costs of storeroom operations not charged directly to the storm restoration work orders.

Actual Restoration Costs - continued

Miscellaneous Cash Payments (Cash Voucher Source)

Contractor and Outside Services - electrical contractors, other utility crews, line clearing and debris removal, security, temporary employees and other professional or outside services incurred as a result of the storm.

Rental Vehicles and Equipment - rental expense including operating and maintenance costs to the extent paid for by FPL. Accident repair costs if the direct result of storm restoration activities.

Employee Owned Vehicle Usage - reimbursement at the Company's standard mileage rate.

Damage repairs to employee vehicles if damages were incurred as a result of restoration activities.

Crew Support Costs and Employee Related Expenses - hotel and lodging, catering services including food, water and employee meal reimbursements, transportation and miscellaneous temporary subsistence allowances. Miscellaneous travel and business related employee reimbursements.

Special Equipment & Facilities Rental - rental cost and the related costs of operating and maintaining communication equipment, office equipment, special use and heavy equipment, and costs related to the use of temporary facilities if incurred as a result of the storm or in the support of restoration activities.

Miscellaneous office supplies, courier/ messenger service, and data processing equipment rental, supplies and services.

Helicopters - rental/lease and operation costs if incurred as the result of the storm or storm restoration activities. Incremental operating costs of Company owned aircraft if incurred as the result of the storm or in support of restoration activities.

Advertising and media relations - safety and storm related public service advertising and media costs.

Costs resulting from injuries to personnel incurred as a result of restoration activities.

Miscellaneous Other Non-Cash Charges (Journal Voucher Charges)

Pension, Welfare, Taxes and Insurance - applied to the appropriate FPL payroll charges.

Appropriate Engineering Overhead costs applied - to the extent not included in the direct charges above.

Increase in uncollectible customer accounts receivable write-offs directly attributable to the storm.

Miscellaneous Journal Voucher charges - Employee overtime meal allowances paid through the payroll system, storm related expenses charged by corporate credit card and paid directly by the Company and, apprpriate corporate charge-backs.

(1) Total T&D Restoration Costs

Estimated based on actual costs incurred for Hurricane Andrew as of June 30, 1993.

(2) Insurance Proceeds

To the extent insurance becomes available in the future, proceeds would be applied to off-set the amount charged to the reserve.

(3) Net Book Value Adjustment

Capital Additions @ Normal Cost

Estimated installed costs under normal non-storm conditions. Costs are developed using the Company's normal engineering and cost estimating systems and practices and the estimated/actual quantities of materials installed during the reconstruction. For purposes of this study the capital additions were estimated based on amounts recorded for Hurricane Andrew as of June 30, 1993.

Net Book Value of Retired Asset

Undepreciated value of retired asset (original cost less accumulated provision for depreciation). Computed using normal Company practices for determining original costs and net book value of retired assets. For purposes of this study net book value was estimated based on retirements recorded for Hurricane Andrew as of June 30, 1993 and an assumed fifty percent depreciated value.

(4) Non-Incremental Cost Adjustment

Total Straight-Time Payroll

Payroll charged to the storm work order for regular hours worked (i.e.excludes charges for overtime hours and temporary relieving pay). Amount applicable to T&D is computed based on the overall ratio of S-T payroll to Total payroll charged to the storm work order for all functions, multiplied times the total of T&D payroll charged to the storm work order. To the extent available the actual straight-time payroll charged to T&D storm work orders would be used.

Less: Amount Capitalized (@ normal %)

Total T&D S-T payroll (from above) multiplied by the percentage of T&D S-T payroll normally charged to capital projects under non-storm conditions. For purposes of this study the year-to-date period immediately preceding the storm (January- July 1992) was use as a period representative of non-storm conditions.

Non-Incremental Payroll (Operating)

Total Straight Time Payroll less Amount Capitalized (from above)

Loadings on Non-Incremental Payroll

Non-Incremental Payroll (Operating) from above, multiplied by the appropriate pension, welfare, taxes and insurance loading rates applicable to regular payroll. The components of pension, welfare, taxes and insurance are the same components normally used in computing the Company's payroll loading rates.

Vehicle Charges (Non-Incremental)

Total T&D Vehicle charges included in the storm work order, multiplied by the overall ratio of regular payroll hours to total payroll hours charged to the storm work order for all functions (*). This product was then multiplied by the percentage of T&D Vehicle charges normally charged, under non-storm conditions, to operating expense. For purposes of this study the year-to-date period immediately preceding the storm (January- July 1992) was used as a period representative of non-storm conditions. (*) To the extent available for future storms the actual ratio applicable to only T&D work would be used.

(5) Incremental Indirect Costs

Lost Revenue

Estimated KWH not sold as a result of the storm outages, multiplied by the retail system average base rate (non-clause) revenue per kwh. For purposes of this study the period used to determine the average revenue/Kwh was the twelve month period ended 12/31/92. The estimate of kw hours not sold was obtained from the Company's January 15,1993 response to the FPSC's October 20, 1992, Hurricane Andrew data request, Question No. 9, which was computed based on the number of customers without power each day between August 24, 1992 and December 28, 1992. (Estimated 1,083,000 mwh not sold x $42.97 = 46.5 million.)

Catch-up Work

Estimated at $1 million. Data for Hurricane Andrew not available.

Back-fill Work

Estimated at $1 million. Data for Hurricane Andrew not available.

ACCOUNTING FOR STORM DAMAGE
SUMMARY OF ACCOUNTING ENTRIES
($ Million)

EXAMPLE: Actual Restoration Cost Approach

(BB) Beginning balance before storm.
(1) Record costs incurred from storm (assume $270).
(2) Record insurance proceeds (assume $0).
(3) Transfer amount from Storm Fund to cover costs incurred in excess of insurance recovery (limited to BB).
(4) Retire cost of property removed (assume $18 cost).
(5) Capitalize new additions at normal cost estimate (assume $51).
(6) Transfer unrecovered costs to the Reserve.
(7) Apply Reserve to offset the retirement in the Depreciation Reserve and credit Plant-in-Service in an amount necessary to reduce the costs of the new asset to equal the original cost of the retired asset.
(EB) Ending balance

Cash (Acct. 131)

DR	CR
(2) 0	(1) 270
(3) 74	
(EB) 196 (b)	

Deferred Debit-Storm Costs and Recoveries (Acct. 186)

DR	CR
(1) 270	(2) 0
	(3) 74
	(5) 51
	(6) 145
(EB) 0	

Plant-In-Service (Acct. 101)

DR	CR
(BB) 18	
(5) 51	(4) 18
	(7) 33
(EB) 18 (c)	

Depreciation Reserve (Acct. 108)

DR	CR
4) 18	(BB) 9
	(7) 18
	(EB) 9

Storm Fund/Deferred Tax-Assets (Accts. 128/190) (a)

DR	CR
(BB) 74	(3) 74
(EB) 0	

Reserve-Accumulated Provision for Property Insurance Reserve (Acct. 228.1)

DR	CR
	(BB) 74
(3) 74	
(6) 145	
(7) 51	
(EB) 196 (d)	

NOTES

(a) Combined for ease of presentation only.
(b) To be temporarily funded through the line of credit.
(c) To be recovered through future depreciation expense.
(d) To remain in the reserve pending future disposition under Rule No. 25-6.014.

ACCOUNTING FOR STORM DAMAGE
SUMMARY OF ACCOUNTING ENTRIES
($ Million)

EXAMPLE: **Actual Restoration Cost with Net Book Value Adjustment Approach**

(BB) Beginning balance before storm.
(1) Record costs incurred from storm (assume $270).
(2) Record insurance proceeds (assume $0).
(3) Transfer amount from Storm Fund to cover costs incurred in excess of insurance recovery (limited to BB).
(4) Retire cost of property removed (assume $18 cost).
(5) Capitalize new additions at normal cost estimate (assume $51).
(6) Record deficiency from retirement to storm costs.
(7) Transfer unrecovered costs to the Reserve.
(EB) Ending Balance

Cash (Acct. 131)

DR	CR
(2) 0	(1) 270
(3) 74	
(EB) 196 (b)	

Deferred Debit-Storm Costs and Recoveries (Acct. 186)

DR	CR
(1) 270	(2) 0
(6) 9	(3) 74
	(5) 51
	(7) 154
(EB) 0	

Plant-In-Service (Acct. 101)

DR	CR
(BB) 18	
(5) 51	(4) 18
(EB) 51 (c)	

Depreciation Reserve (Acct. 108)

DR	CR
	(BB) 9
(4) 18	(6) 9
	(EB) 0

Storm Fund/Deferred Tax-Assets (Accts. 128/190) (a)

DR	CR
(BB) 74	
	(3) 74
(EB) 0	

Reserve-Accumulated Provision for Property Insurance (Acct. 228.1)

DR	CR
	(BB) 74
(3) 74	
(7) 154	
	(EB) 154 (d)

NOTES
(a) Combined for ease of presentation only.
(b) To be temporarily funded through the line of credit.
(c) To be recovered through future depreciation expense.
(d) To remain in the reserve pending future disposition under Rule No. 25-6.014.

ACCOUNTING FOR STORM DAMAGE
SUMMARY OF ACCOUNTING ENTRIES
($ Million)

EXAMPLE: Incremental Cost Approach

(BB) Beginning balance before storm.
(1) Record costs incurred from storm (assume $270).
(2) Record insurance proceeds (assume $0).
(3) Transfer amount from Storm Fund to cover costs incurred in excess of insurance recovery (limited to BB).
(4) Retire cost of property removed (assume $18 cost).
(5) Capitalize new additions at normal cost estimate (assume $51).
(6) Record non-incremental cost adjustment as maintenance expense.
(7) Record lost revenue, catch-up and backfill adjustment as a credit to maintenance expense.
(8) Transfer unrecovered costs to the Reserve.
(9) Apply reserve to offset the retirement in the Depreciation Reserve and credit Plant-In-Service in an amount necessary to reduce the costs of the new asset to equal the original cost of the retired asset.
(EB) Ending Balance

Cash (Acct. 131)

DR	CR
(2) 0	(1) 270
(3) 74	
(EB) 196 (b)	

Deferred Debit-Storm Costs and Recoveries (Acct. 186)

DR	CR
(1) 270	(2) 0
(7) 48	(3) 74
	(5) 51
	(6) 19
	(8) 174
(EB) 0	

Plant-In-Service (Acct. 101)

DR	CR
(BB) 18	
(5) 51	(4) 18
	(9) 33
(EB) 18 (c)	

Depreciation Reserve (Acct. 108)

DR	CR
	(BB) 9
(4) 18	(9) 18
	(EB) 9

Maintenance Expense

DR	CR
(6) 19	(7) 48
(EB) 29	

Reserve-Accumulated Provision for Property Insurance (Acct. 228.1)

DR	CR
(3) 74	(BB) 74
(8) 174	
(9) 51	
	(EB) 225 (d)

Storm Fund/Deferred Tax Assets (Accts. 128/190) (a)

DR	CR
(BB) 74	(3) 74
(EB) 0	

NOTES (a) Combined for ease of presentation only.
(b) To be temporarily funded through the line of credit.
(c) To be recovered through future depreciation expense.
(d) To remain in the reserve pending future disposition under Rule No. 25-6.014.

Estimating Average Hurricane Losses Chargeable to the Storm Reserve Over the Long Term Under the Self Insurance Program

Mr. Hoffman's direct testimony of April 19,1993 discussed FPL's methodology of estimating average annual T&D damages chargeable to the Storm Reserve. That methodology is reviewed below.

During the 94 years between 1899 and 1992 a total of 155 hurricanes struck the continental United States. The distribution of those hurricanes by category at time of landfall is shown on the table below.

	Category of Hurricane					
	I	II	III	IV	V	All
Hurricane Landfalls	60	34	44	15	2	155
Percentage	39%	22%	28	10%	1%	100%

Florida landfalls by hurricanes during that period totalled 55. From that information, the annual probability landfall in Florida by category of hurricane can be calculated by multiplying the percentage breakdown for each category by 55 and dividing by the number of years (94). For example, the annual probability of a Florida landfall by a category III hurricane is 28% (or 44 divided by 155) of 55 divided by 94 or 0.1661 as shown in the next table.

	Annual Probability of Hurricane Landfall in Florida By Category					
Category	I	II	III	IV	V	All
Probability	0.2265	0.1283	0.1661	0.0566	0.0076	0.5851

Dr. Grey of Colorado State University has published an index of the relative potential for damage for each category of hurricane. The index is called the Hurricane Damage Potential Index or HDP. That index may be combined with the probabilities above to develop an annual expected hurricane damage index value as shown in the next table.

Category	(A) HDP Index Value	(B) Annual Probability	(A) * (B) Expected Damage in HDP Units
I	1	.2265	0.226
II	4	.1283	0.513
III	9	.1661	1.495
IV	16	.0566	0.906
V	25	.0076	0.189
Cumulative Totals		.5851	3.329

Thus, in total, the state of Florida could expect an average value of 3.329 HDP units of damage to T&D facilities annually.

Damages incurred as a result of Hurricane Andrew were used to calibrate the HDP index value in terms of dollars of damage to T&D facilities. Andrew was a category IV hurricane with an index value of 16. Actual damage to T&D facilities was $270 million. In addition, $8 million in deductibles for damages to insured non-T&D facilities would have been incurred assuming current policy provisions had applied to Hurricane Andrew. Total damages that could be recoverable through the Storm Reserve were thus $270 plus $8 or $278 million. Therefore, each unit of damage, expressed in terms of the index, is $278 million divided by the index value for a category 4 storm (16) or $17.4 million.

Future average annual T&D damage for the entire state from hurricanes should thus be 3.329 times $17.4 million or $57.8 million. FPL owns 35% of all T&D facilities located within Florida, and would expect to incur a like proportion of all hurricane damages to T&D facilities within the state. Thus, FPL should expect to incur an average of 35% of the annual expected damage to T&D in Florida or approximately $20.3 million per year.

Evaluating an Appropriate Annual Accrual Amount

Introduction

FPL has utilized a Monte Carlo Simulation Model to study the problem of determining the proper annual contribution to the Storm Reserve. The model was designed to simulate future hurricane landfalls in Florida and charges against the Storm Reserve. The resulting balance was tracked through the simulation process for a period of 33 years. This process was repeated for a total of 500 iterations for each of several alternative contribution levels.

All damage estimates and Storm Reserve balances used in the simulation were expressed in 1992 dollars, and a real rate of return of .20% (net of inflation) was applied to Storm Reserve balances for each simulation year.

This analysis does not consider the potential for future purchase of insurance coverage for T&D facilities. The availability and price of such coverage has been severely constrained since the Andrew experience. Insurance markets may eventually settle to the point where it is once again possible to obtain policies for reasonable premiums.

FPL Storm Reserve Study

An analysis was conducted for the FPL Storm Reserve. In this study, the initial reserve balance was set to $74 million, and a total study period of 33 simulated years was used. The 33 year period is adequate to illustrate the behavior that could be expected with each of the several annual contribution levels considered, and allows simulated Storm Reserve charges to be compared against the hypothesized results.

A total of four alternative administrative policies were evaluated by means of these simulations. Two input variables were used to differentiate each of the administrative policies evaluated in this analysis. The annual accrual amount was the first study variable. Another necessary part of administrative policy for the Storm Reserve, and the second study variable, is the response to be taken in the event that the Storm Reserve is depleted. One possible response, studied as Policy I, is merely to continue annual accruals in the belief that the Storm Reserve will eventually "overcome" past losses. An alternative response is to schedule supplemental payments in addition to normal accruals whenever Storm Reserve balances are depleted. Such payments could be used to bring the Storm Reserve back to any desired target. This alternative response is evaluated with policies II, III, and IV. In the simulation process supplemental payments were scheduled over a five year time period, beginning the first year after the simulated loss occurred. The target balance for which payments in addition to annual accruals were scheduled was set at $74 million, an amount sufficient to cover FPL's portion of a moderate (Category III-IV) hurricane striking randomly along Florida's coastline.

The four alternative administrative policies examined by simulation were:

Policy I - Annual accrual equal to FPL's expected annual loss from future hurricane damage ($20.3 million). No additional action taken in the event that future losses exceed the Storm Reserve.

Policy II - Annual accrual equal to FPL's expected annual loss from future hurricane damage ($20.3 million). In the event that future losses exceed the Storm Reserve the annual accrual would continue and additional payments sufficient to return the Storm Reserve to the targeted $74 million would be scheduled over a 5-year time horizon with no consideration of annual accruals.

Policy III - Annual accrual equal to $7.1 million. In the event that future losses exceed the Storm Reserve the accrual would continue and additional payments sufficient to return the Storm Reserve to the targeted $74 million would be scheduled over a 5-year time horizon with no consideration of annual accruals. The selection of $7.1 million for the annual accrual was based on consideration of

fairness to stockholders as well as ratepayers as it is the amount currently provided in rates for payment of insurance premiums for T&D coverage as well as accruals to the Storm Reserve.

Policy IV - No annual accrual. In the event that future losses exceed the Storm Reserve payments sufficient to return the Storm Reserve to the targeted $74 million would be scheduled over a 5-year time horizon.

Each policy was simulated for 500 iterations. The simulated damages were assessed against the Storm Reserve in the year after the hurricane landfall to mimic the actual delay that occurs in assessing and repairing actual damages. Each iteration was terminated after completing a simulation of 33 years duration and the results were tabulated.

A number of variables were tracked during each iteration. These variables enabled the performance of each alternative policy to be evaluated according to several criteria. The criteria of interest were:

1) The future annual probability that the Storm Reserve will be solvent. A Storm Reserve without a positive balance is unlikely to fulfill any useful purpose. The probability that the Storm Reserve will be solvent was calculated for each future year in the 33 years simulated. For each year "n", this probability is equal to the percentage of the 500 iterations for which the Storm Reserve balance was positive. Annual probabilities for each alternative administrative policy are shown on Chart V, attached. The probability of reserve solvency for year 33 for each policy is presented on the table below.

2) The relative stability of future Storm Reserve balances. Extreme reserve balances, whether positive or negative would mean that the administrative policy was either collecting too much or too little relative to actual losses. Extreme Reserve balances might require future changes to the administrative policy for the Reserve. If future Storm Reserve balances reach too high a level, then corrective action such as refunds to customers and/or termination of annual accruals may be required. Such action would mean that past customers had paid a disproportionate amount for hurricane losses. Similarly, balances could decline to a point in the future where the Storm Reserve could become a debit balance to be recovered from customers rather than a credit balance to offset potential losses. The measure of relative stability of future Storm Reserve balances used in this study was the standard deviation of Storm Reserve balances in year 33.

3) The portion of annual revenues required by the Storm Reserve was used to indicate the relative burden imposed by the each policy alternative. The portion of annual revenues is expressed as a percentage, based on the sum of all accruals to the Storm Reserve including regular annual accruals and, if applicable, any additional accruals scheduled whenever the Storm Reserve became insolvent. The maximum expected burden, defined as the percent of gross revenue required to support the fund for year 33 for 95% of all simulations for each respective policy , is shown in the table below. The probability for

each year of the 33 year period is shown in graphical form in Chart VI, attached. The expected value for each year is considerably less than the maximum value shown on the chart. These 95% values are intended to demonstrate the level of burden associated with relatively severe losses as opposed to average or expected losses.

Simulation results are presented in both table and chart format. The tables below summarize the results by providing values for year 33 for each of the three variables of interest.

Statistics for Alternative Policies in Year 33			
Policy	Probability of Reserve Solvency	Standard Deviation of Balance	Maximum (95% Confidence Level) of All Charges as a Percent of Revenues
I	0.65	$364	0.4%
II	0.95	$171	1.6%
III	0.81	$140	1.6%
IV	0.63	$ 82	1.6%

Discussion of Results

Policy I suffers in several regards. It has the highest "Standard Deviation of Balance" indicating that future Storm Reserve performance is more uncertain than any of the alternatives, and that the viability of this alternative is weakest. The relatively high potential for large positive or negative balances increases the risk of a significant inter-generational wealth transfer if this alternative were adopted. Further, the probability that the reserve will be solvent is lower than that of all other alternatives. This performance reflects the lack of any planned corrective action when and if cumulative annual losses exceed long run expected averages. Average payments as a percent of revenues is lower than other alternatives, but this is merely a reflection of the Storm Reserve's inability to cover losses if they are larger than the expected long run average and does not reflect a cost savings.

Policy II has the highest probability of remaining solvent. However, this strength is gained at the expense of a built in bias for transfer of wealth from current customers to future customers. As illustrated in Chart II, the expected Storm Reserve balance grows over time. While this may, on the surface, appear to be desirable, it actually represents a transfer of wealth from customers of one generation to the next. Analysis shows that total payments under this policy would be expected to exceed total losses by approximately 31% during the first 33 years. Overpayment in early years results in a fund buildup that explains why average payments as a percent of revenue declines in later years under this alternative.

Policy III provides performance that compares reasonably well to that of Policy II with regard to

future solvency, and uncertainty about future balances is reduced from Policy I and II. This policy also avoids the wealth transfer bias associated with the constant growth in expected future Storm Reserve balances exhibited by Policy II.

Policy IV amounts to a "pay-as-you-go" policy. In effect, the target balance ($74 million) would serve as a cushion to absorb cumulative losses until depleted, at which time supplemental (as opposed to annual contribution) payments would be scheduled to bring the Storm Reserve back to the target level. This policy illustrates that the amount chosen for annual accrual can be relatively arbitrary so long as it is within a range low enough so as not to result in unbounded growth in expected future Storm Reserve balances, and if it is combined with a mechanism to address insolvency.

The charts attached provide a more detailed analysis of some of the performance indicators. The first four charts address the distribution of future Storm Reserve balances for each alternative administrative policy. Each of these four charts shows the expected future Storm Reserve balance as well as a 90% confidence interval for future balances. These charts offer the best indication of the risk of inter-generational wealth transfers incurred with the selection of each alternative policy.

Uncertainties about the future balance of the Storm Reserve is indicated by the "spread" in the range of possible values within the 90% confidence band shown on each chart. This risk is measured directly by the standard deviation of the balance and, as shown on the table, Policy I results in the highest risk of this type.

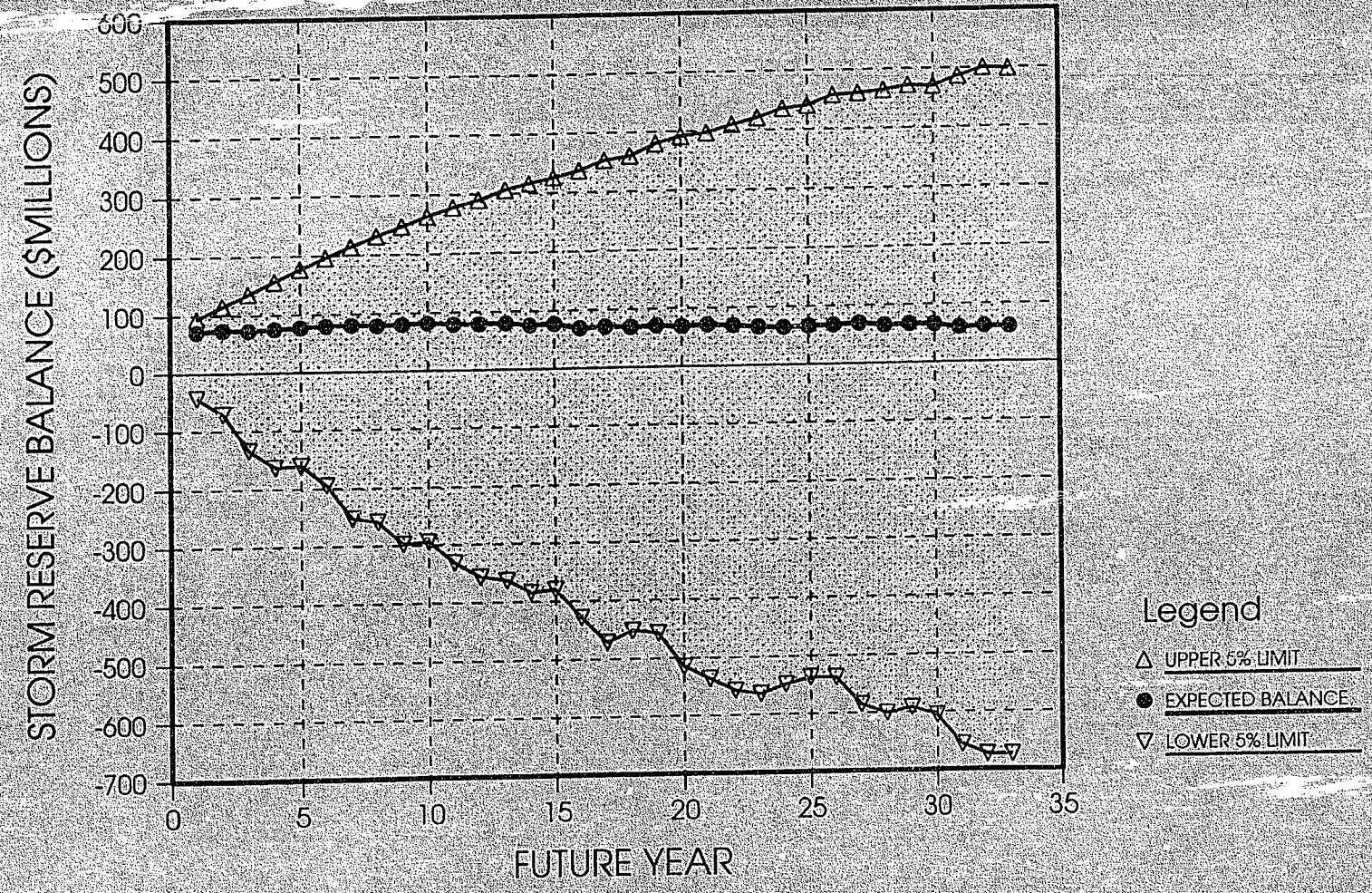
Bias is a systematic risk that current customers will be called upon to pay an amount higher or lower than their fair share of costs associated with hurricane damage. Any consistent trend in the expected balance of the Storm Reserve is an indication of this type of risk. The only policy that exhibits this form of risk is Policy II. Policy II exhibits a tendency to accumulate ever increasing balances indicating that customers would tend to pay more than their fair share of costs. Storm Reserves under Policy II exhibit a positive bias (they grow) because total accruals will exceed total debits by an expected ratio of 1.31 to 1.

The fifth chart, labelled "Probability of Storm Reserve Solvency", plots the percentage of simulation iterations for which Storm Reserve balances were above zero in each future year. This chart is designed to facilitate comparison of the alternative administrative policies in terms of their potential for maintenance of the Storm Reserve's ability to cover future losses. Note that performance of Policies II and III dominate Policy I in that the probability that the Storm Reserve would remain solvent is greater in each future year for those policies than it is for Policy I. This reflects the fact that Policy I does not have any mechanism to facilitate Storm Reserve balance recovery in the event of catastrophic loss. Policy IV's performance in this regard is somewhat below Policy I in earlier years, but their performances cross in or near year 33.

The sixth chart, labelled "All charges as a Percent of Total Revenue" illustrates that none of the policies examined would, with a 95% confidence, require payments in excess of about 1.6% of annual revenue in any future year. Clearly this would indicate that no policy considered in this analysis should be excluded from consideration for fear that it could unduly burden customers if severe losses occur.

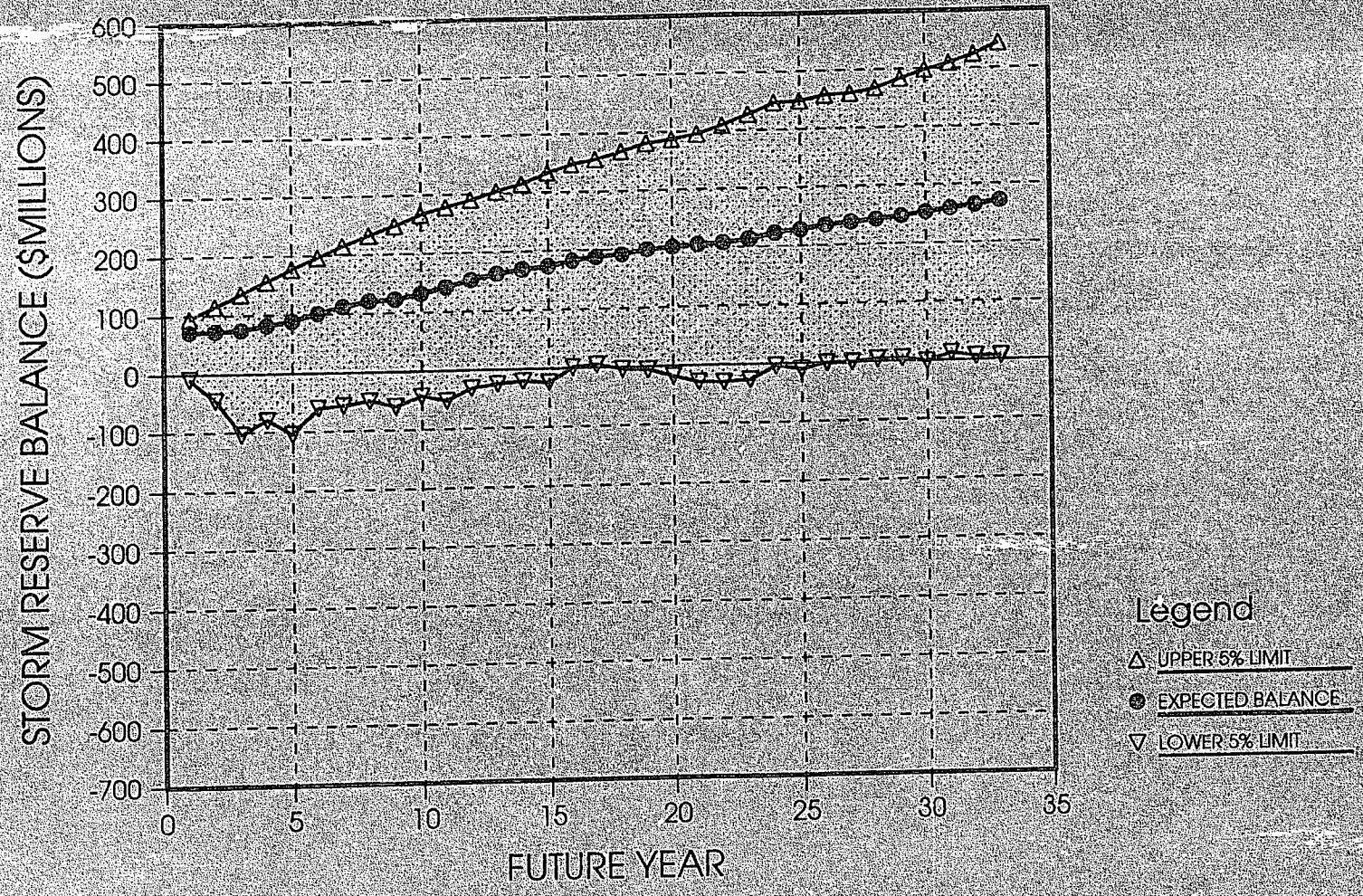
Attachment 3
Chart 1

RANGE OF FUTURE STORM RESERVE BALANCES
WITH ADMINISTRATIVE POLICY I
USING CONSTANT 1992 DOLLARS



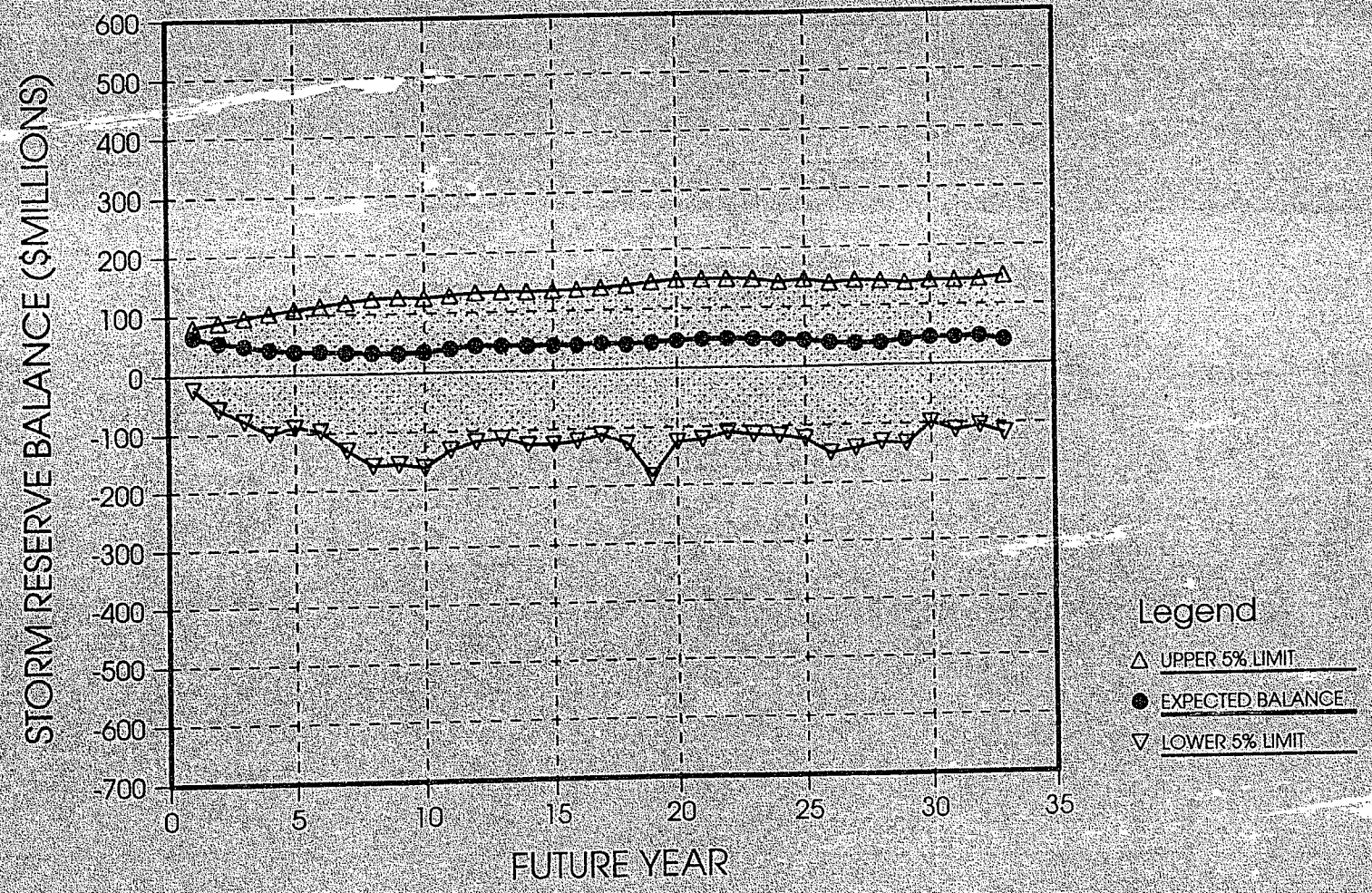
Attachment 3
Chart II

RANGE OF FUTURE STORM RESERVE BALANCES
WITH ADMINISTRATIVE POLICY II
USING CONSTANT 1992 DOLLARS



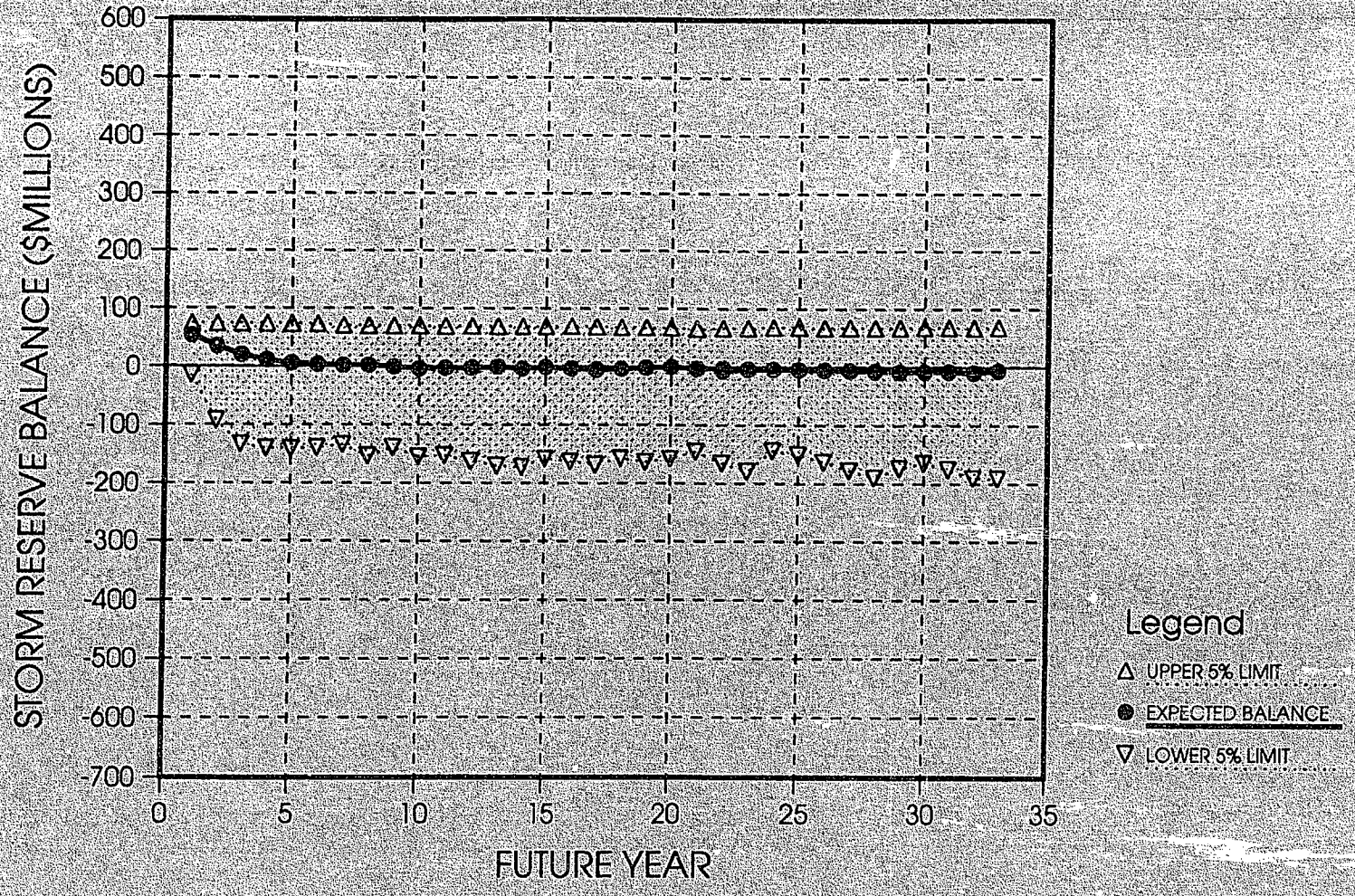
Attachment 3
Chart III

RANGE OF FUTURE STORM RESERVE BALANCES
WITH ADMINISTRATIVE POLICY III
USING CONSTANT 1992 DOLLARS



Attachment 3
Chart IV

RANGE OF FUTURE STORM RESERVE BALANCES
WITH ADMINISTRATIVE POLICY IV
USING CONSTANT 1992 DOLLARS

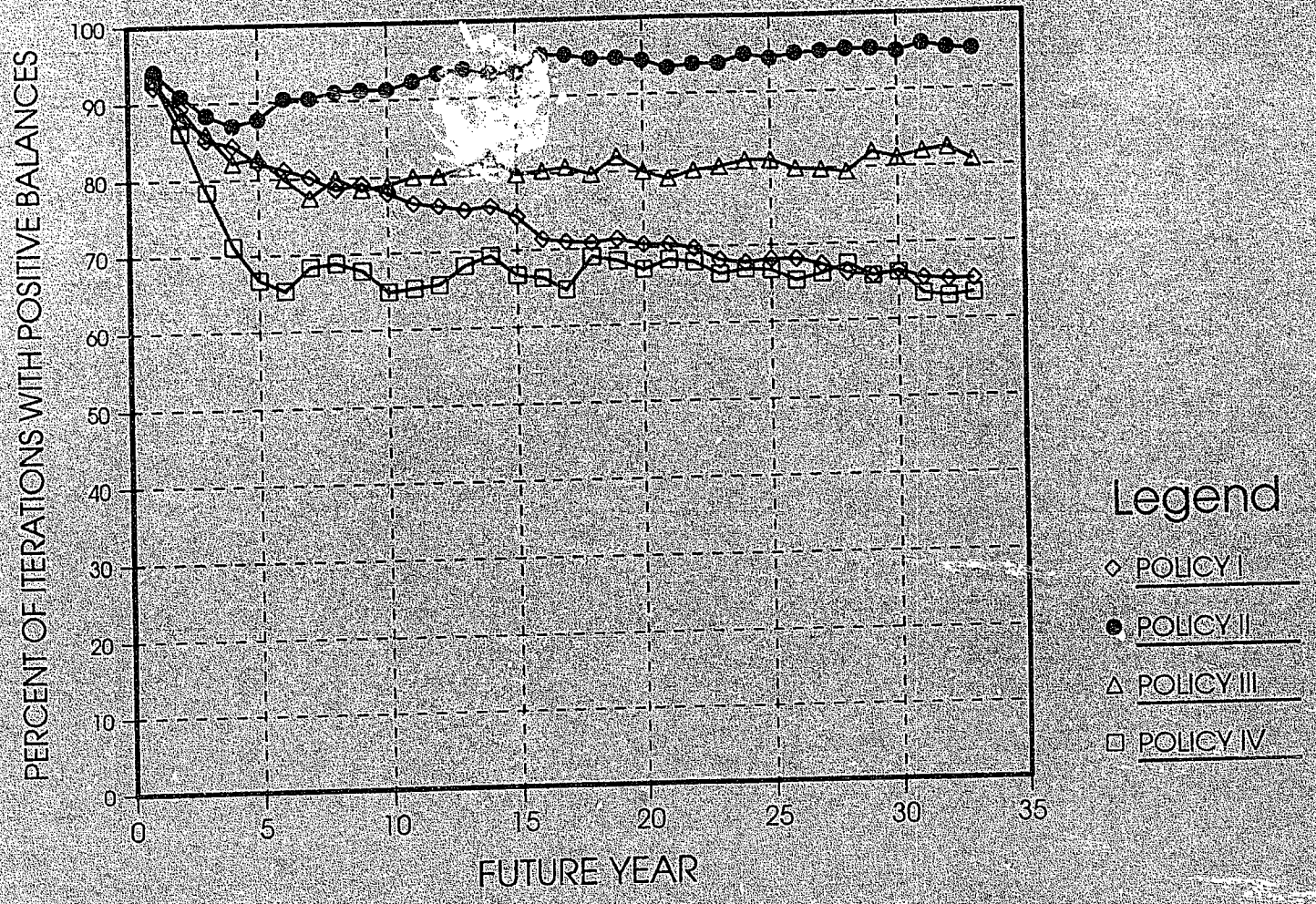


Attachment 3
Chart V

PROBABILITY OF STORM RESERVE SOLVENCY

UNDER EACH ALTERNATIVE ADMINISTRATIVE POLICY

FOR EACH FUTURE YEAR 1 THROUGH 33

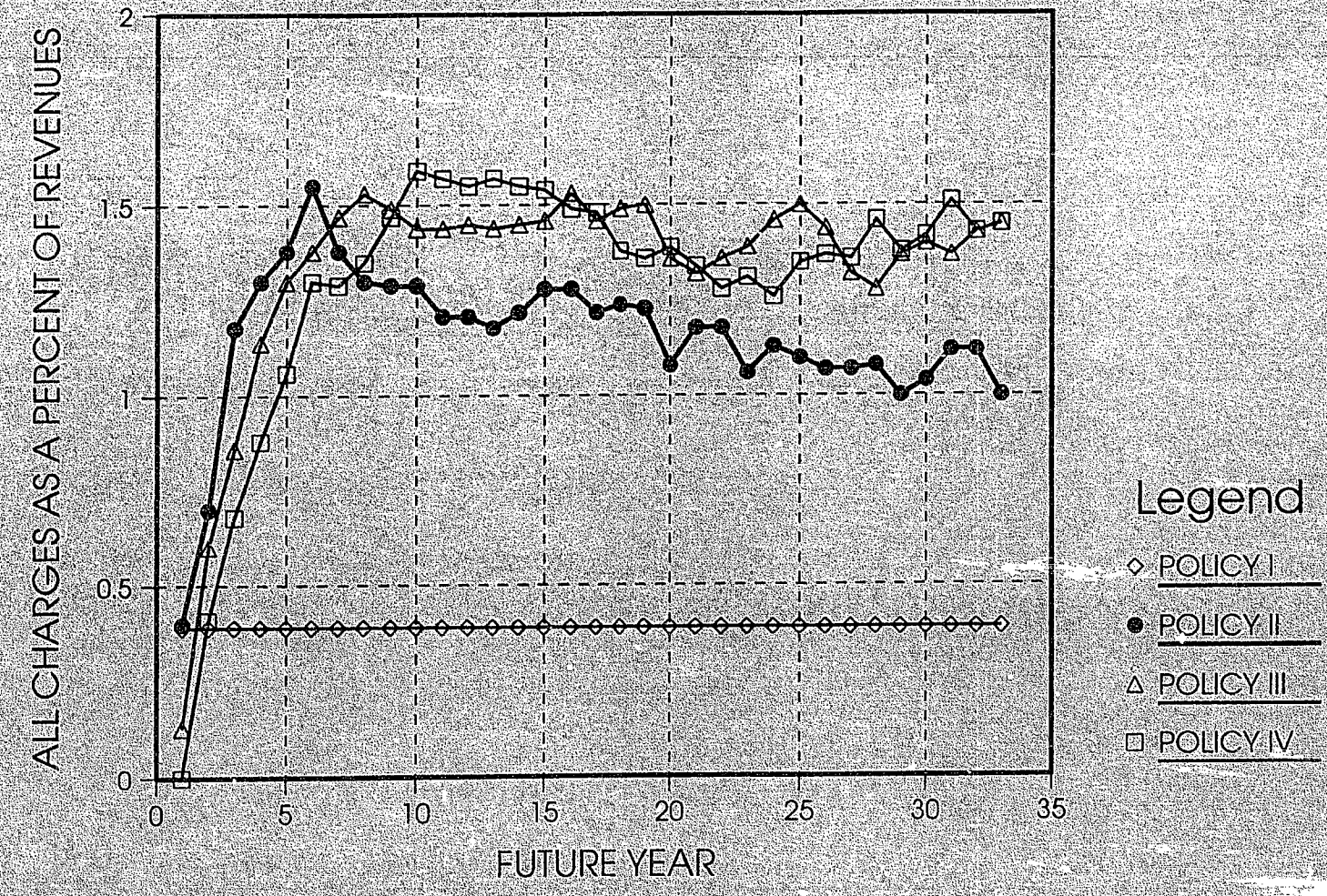


Attachment 3
Chart VI

ALL CHARGES AS A PERCENT OF TOTAL REVENUES

MAXIMUM AMOUNTS AT 95% CONFIDENCE LEVEL

UNDER EACH ALTERNATIVE ADMINISTRATIVE POLICY



APPENDIX

Table of Contents

- Letter From FPL to FPSC Requesting Approval for Accounting for Damages Caused by Hurricane Andrew and Order No. PSC - 93 - 0211 - FOF - EI Approving Accounting Treatment

- Letter Dated July 30, 1993 and Report Providing The Accounting For Hurricane Andrew Damage and Restoration Costs Incurred as of June 30, 1993 and The Disposition of Insurance Proceeds Received

P.O. Box 029100, Miami, FL 33102

FPL

January 6, 1993

Mr. Timothy Devlin
Director of Auditing and Finance
Division of Auditing and Financial Analysis
Florida Public Service Commission
101 East Gaines Street
Tallahassee, Florida 32399-0872

Re: Accounting for Damages Caused by Hurricane Andrew

Dear Mr. Devlin:

On August 24, 1992, Hurricane Andrew struck South Florida resulting in extensive damage to Florida Power & Light Company's (FPL) transmission and distribution facilities and to the buildings and equipment at the Cutler and Turkey Point power plants. Despite the extensive damage caused by Hurricane Andrew, the cost of reconstruction is not expected to have an adverse effect on future earnings, since FPL has insurance coverage of $350 million on transmission and distribution facilities and more than $6 billion on power plants. In addition, the Florida Public Service Commission (FPSC) recognized the need to provide for such losses and allowed FPL to accrue for storm losses. Therefore, FPL had over $90 million in its Storm and Property Insurance Reserve to cover insurance deductibles and uninsured storm losses.

Even though the reconstruction effort and the determination of the amounts to be capitalized and expensed have not been finalized, we are requesting your concurrence with our proposed accounting treatment for these costs. Our proposed accounting treatment for the reconstruction costs is based on Commission Rule 25-6.0143 Florida Administrative Code, Use of Accumulated Provision Accounts 228.1, 228.2, and 228.4 and Interpretation Nos. 26-EG and 67-EG of the National Association of Regulatory Utility Commissioners, Interpretations of the Uniform System of Accounts for Electric and Gas Utilities, revised July, 1987.

Replacements, Retirements and Removal Costs

The cost of replacements of units of property will be charged to the appropriate plant accounts at the normal or "fair" cost and any amounts in excess of the normal or "fair" cost will be treated as abnormal maintenance expense. In addition, removal costs will be recorded at normal or "fair" cost with any excess considered maintenance. This accounting treatment is supported by Interpretation No. 26-EG:

Question:
Considerable damage has been done to utility property by storms. It has become necessary in some instances to go to great expense to replace individual units of property. If the total cost of installing the new plant is charged to plant, a very high unit price results. Is it permissible under such circumstances to charge a normal or "fair" cost to plant and to charge the remaining cost to maintenance?
Answer:
Each case should be considered on its merits and presented to the Commission. It is recognized under the conditions cited that the abnormal expenditure is due to the necessity of restoring the property to operating condition without delay and as such a part of the cost is chargeable to maintenance.

Retirements of damaged property will be recorded in the normal manner as prescribed by the FPSC's Uniform System of Accounts.

Reimbursements from Insurance Carriers and the Storm Fund

The amount withdrawn from the Storm Fund and charged to Account No. 228.1, Accumulated Provision for Property Insurance, will be sufficient, when added to the insurance recoveries, to cover all storm losses. This accounting treatment is supported by Commission Rule 25-6.0143, Section (4)(b):

> If a utility elects to use any of the above listed accumulated provision accounts, each and every loss or cost which is covered by the account shall be charged to that account and shall not be charged directly to expenses. Charges shall be made to accumulated provision accounts regardless of the balance in those accounts.

Since all storm losses will be covered in this manner, it is appropriate that all charges to other accounts be offset. Storm Fund withdrawals will first be used to offset amounts considered maintenance expense. However, when combined with insurance recoveries all maintenance expense as well as all charges to capital accounts will be offset. The premature retirements charged to the Depreciation Reserve will be offset together with the associated net removal cost and, the Plant-in-Service account will be credited in the amount necessary to reduce the cost of the new asset to equal the cost of the replaced asset. This accounting treatment is supported by Interpretation No. 67-EG:

Question:
Under arrangements with another party, sometimes the United States Government, a utility company agrees, or is obliged, to remove, relocate, rearrange, reroute, or otherwise make changes in utility property, other than for the purpose of rendering utility service to the other party, for which the utility is reimbursed for all or a portion of the costs incurred. What is the proper accounting for such property changes and the reimbursements received from the other parties?
Answer:

> The cost of plant retirements should be accounted for in accordance with the rules applicable thereto. The cost of new plant should be included in the appropriate plant accounts at actual cost of construction. The reimbursement received shall be accounted for (a) by crediting operation and maintenance expenses to the extent of actual expenses occasioned by the plant changes and (b) crediting the remainder to the reserve for depreciation, unless contractual terms definitely characterize residual or specific amounts as applicable to the cost of replacement. In the latter event, appropriate credits should be entered in the plant accounts.

FPL carries replacement value insurance coverage. Under this policy the insurance carrier first reimburses for the depreciated value of the property loss. When the property is replaced, the insurance carrier will reimburse for the replacement cost less the amount already paid for the depreciated value.

Attachment A provides an example of these accounting entries which are necessary to accurately record capital costs associated with the storm and to clear the storm account. I believe that the accounting treatment proposed appropriately recognizes the unusual circumstances involved in the restoration process and will effectively accomplish the following results: (1) damaged property will be retired and the new replacement will be recorded recognizing a 1993 vintage year; (2) the balances in the Plant-in-Service and Depreciation Reserve accounts will be restored to the pre-storm amounts; and (3) FPL's rate base will not be changed due to storm losses and the restoration effort unless the uninsured losses exceed the balance in Account No. 228.1, Accumulated Provision for Property Insurance.

It is imperative that FPL receive an indication of your concurrence with this proposed accounting treatment or your comments as soon as possible. At the present time we plan to close the storm work order to the appropriate accounts in March 1993. While some charges may be based on estimates this timing is necessary to facilitate the completion of depreciation studies the are required by the FPSC in Order No. PSC-92-1303-FOF-EI.

If you have any questions regarding this proposed accounting, please call me at (305) 552-4327 or Ed Hoffman at (305) 552-4071.

Sincerely,

K. M. Davis
Vice President and Controller

cc: Joseph D. Jenkins
William G. Walker, III

Attachment A

Example - Entries To Record Storm Related Costs and Clear Storm Account While Leaving Rate Base Unaffected

(BB) Beginning Balance before storm
(1) Record costs incurred from Storm (assume $4,520)
(2) Record insurance proceeds (assume $4,320)
(3) Transfer amount from Storm Fund to cover costs incurred in excess of insurance recovery (assume $200)
(4) Retire cost of property removed (assume $700)
(5) Record cost of removal at normal cost estimate (assume $20)
(6) Capitalize new additions at normal cost estimate (assume $2,500)
(7) Record as maintenance expense all costs incurred in excess of normal capital costs and removal costs ($4,520-$2,500-$20=$2,000)
(8) Apply Storm Fund withdrawal to offset charges to maintenance expense ($200)
(9) Apply insurance proceeds to offset removal costs ($20)
(10) Apply insurance proceeds to offset the retirement in the Depreciation Reserve ($700) and credit Plant-In-Service in an amount necessary to reduce the costs of the new asset to equal the original cost of the retired asset ($2,500-$700=$1,800)
(11) Apply insurance proceeds to offset remaining maintenance expense ($2,000-$200=$1,800)

Cash

(2) 4,320	(1) 4,520
(3) 200	
0	

Deferred Debit-Storm Costs and Recoveries (Acct. 186)

(1) 4,520	(2) 4,320
(8) 200	(3) 200
(9) 20	(5) 20
(10) 2,500	(6) 2,500
(11) 1,800	(7) 2,000
0	

Plant-In-Service (Acct. 101)

(BB) 10,000	
(6) 2,500	(4) 700
	(10) 1,800
10,000	

Depreciation Reserve (Acct 108)

	(BB) 6,000
(4) 700	(9) 20
(5) 20	(10) 700
	6,000

Maintenance Expense (a)

(7) 2,000	(8) 200
	(11) 1,800
0	

Accumulated Provision for Property Insurance

	(BB) 900
(3) 200	
	700

Storm Fund/Deferred Tax-Assets (b)

(BB) 900	
	(3) 200
700	

NOTES
(a) Charges depicted to maintenance expense account may be transacted on books through offset within the deferred debit account thereby reducing number of entries required.
(b) Combined for ease of presentation only

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Request for approval of Change in Depreciation Rates for Martin and Turkey Point Generating Site, to become effective 1-1-91, by Florida Power and Light Company.	DOCKET NO. 900794-EI
In Re: Request for change in Depreciation Rates for Putnam and St. Johns River Power Park generating stations by Florida Power and Light Company.	DOCKET NO. 901001-EI
In Re: 1991 Depreciation Study for Florida Power and Light Company.	DOCKET NO. 910081-EI ORDER NO. PSC-93-0211-FOF-EI ISSUED: 02/10/93

The following Commissioners participated in the disposition of this matter:

J. TERRY DEASON, Chairman
THOMAS M. BEARD
LUIS J. LAUREDO

ORDER GRANTING PARTIAL WAIVER AND APPROVING ACCOUNTING TREATMENT

BY THE COMMISSION:

On November 17, 1992, this Commission entered Order No. PSC-92-1306-FOF-EI, approving depreciation and dismantlement rates for Florida Power and Light Company (FPL). Also, in that Order the Commission required FPL to file an updated comprehensive depreciation study by June 1993 with an effective date of January 1, 1993. The new study is an effort by the Commission to recognize any catastrophic effects of Hurricane Andrew on FPL's operations and plant. Subsequently, on November 30, 1992, FPL filed a request that the Commission waive the June 1993 comprehensive depreciation study deadline.

FPL argues that the June 1993 deadline is impractical and unrealistic due to 1) the current valuation of the effects of Hurricane Andrew and 2) the time and personnel it needs to prepare a comprehensive study. FPL's request provided two alternative filing schedules for the Commission's consideration.

DOCUMENT NUMBER-DATE
01581 FEB 10 93
FPSC-RECORDS/REPORTING

FPL characterized these alternative schedules as "accelerated" since a company normally has four years to file a comprehensive study and, according to FPL, the alternatives will result in studies for all functions in about two years. The first alternative offered by FPL is the filing of a transmission distribution and general study by December 1993 with an effective date of January 1, 1994; Nuclear Plants by December 1993, with an effective date of January 1, 1994; and Fossil Plants (depreciation and dismantlement) by December 1994, with an effective date of January 1, 1995. The second alternative calls for a complete comprehensive study covering all functions of plant to be filed by December 1994, with an effective date of January 1, 1995.

Our Staff suggests another alternative, a December 1993 filing date with a January 1, 1994 implementation of the depreciation study covering production, transmission, distribution and general plant. Dismantlement studies and decommissioning studies would be deferred until December 1994 with a January 1, 1995 implementation date. This would allow a comprehensive review of depreciation parameters for all categories of plant at the same time while allowing the review of extraordinary removal costs (fossil dismantlement and nuclear decommissioning) at a later time.

FPL at the agenda conference agreed with Staff's alternative and we are inclined to agree and find that its approval is in the public interest.

ACCOUNTING TREATMENT

Also in connection with the effects of Hurricane Andrew, FPL has requested approval of accounting treatment to record cost of removal and the cost of new plant at a normal or "fair" cost and to charge the remaining excess cost to maintenance expense.

FPL indicates that due to the necessity of restoring property damaged by Hurricane Andrew without delay, abnormal expenditures have been incurred. As an example, employees may have been working overtime to restore overhead lines. Under normal circumstances, no overtime pay would be incurred. Therefore, the difference between the straight-time pay and overtime pay would be considered "abnormal" and be charged to maintenance expense.

We agree with our Staff that FPL's request should be granted. We also agree that the abnormal cost charged to maintenance expense should be offset first by any insurance proceeds received. We further agree with FPL that the remaining insurance proceeds should then be applied to adjust the plant accounts so that the value of the replacement plant is equal to the gross book value of the

replaced plant prior to the damages caused by Hurricane Andrew. In addition we are requiring that FPL maintain adequate records so that a review of the appropriateness of the cost considered "normal" may be made by the Staff.

In connection with the accounting treatment, we are requiring that FPL provide a report by August 1, 1993 detailing the costs incurred and the disposition of insurance proceeds and the monies obtained from FPL's storm damage fund through the period ending June 30, 1993. Thereafter, we will expect by December 31, 1993 a comprehensive report outlining both the costs described in the August 1st report and any subsequent additional costs incurred through December 1, 1993.

In consideration of the foregoing, it is

ORDERED by the Florida Public Service Commission that the request for waiver filed by Florida Power and Light Company is granted as modified in the body of this Order. It is further

ORDERED that Florida Power and Light Company's request for accounting treatment as described in the body of this Order is approved. It is further

ORDERED that Florida Power and Light Company shall file with this Commission a report by August 1, 1993 detailing the costs incurred and the disposition of insurance proceeds and monies obtained from its storm damage fund through June 30, 1993, and by December 31, 1993 another report outlining the costs described in the August report and any subsequent additional costs incurred. It is further

ORDERED that these dockets shall be closed.

By ORDER of the Florida Public Service Commission this 10th day of FebruaRY, 1993.

STEVE TRIBBLE, Director
Division of Records and Reporting

(S E A L)

MRC:bmi

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.59(4), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Director, Division of Records and Reporting within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water or sewer utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Civil Procedure. The notice of appeal must be in the form specified in Rule 9.900 (a), Florida Rules of Appellate Procedure.

P.O. Box 029100, Miami, FL 33102

FPL

July 30, 1993

Mr. Steve Tribble
Director of Records & Reporting
Florida Public Service Commission
101 East Gaines Street
Fletcher Building
Tallahassee, Florida 32399-0865

Dear Mr. Tribble,

In Order No. PSC-93-0211-FOF-EI issued in Docket Nos. 900794-EI, 901001-EI and 910081-EI dated February 10, 1993, the Commission approved, among other things, Florida Power & Light Company's (the Company) accounting treatment for Hurricane Andrew restoration costs and insurance proceeds. Also in this Order, the Commission required the Company to file a report by August 1, 1993, detailing the costs incurred and the disposition of insurance proceeds and monies obtained from the Storm Damage Fund through June 30, 1993, and by December 31, 1993 another report outlining the costs described in the August report and any subsequent additional costs incurred. This letter and Attachment 1 are in response to the Commission's request for the August report.

The accounting treatment approved by the Commission allows the Company to record the cost of removal and the cost of new plant at a normal or "fair" cost and to charge the remaining (abnormal) cost to maintenance expense. The abnormal cost charged to maintenance expense is to be offset first by any insurance proceeds received and the remaining insurance proceeds are to be applied to adjust the plant accounts so that the value of the replacement plant is equal to the gross book value of the replaced plant prior to the damages caused by Hurricane Andrew. This accounting treatment reflects the economics of the replacement cost insurance coverage and will result in no adverse effect on the Company's rate base or depreciation expense.

This report is preliminary from the standpoint that all costs for damages have not yet been incurred or recognized and additional insurance proceeds will be received. Although a significant amount of work remains to be completed, the major costs that have not yet been quantified relate to the long term potential damage to underground lines in the storm surge area and the cost to repair or replace inventory at the Turkey Point Plant. Through June 30, 1993 we have identified costs totaling $358.5 million related to damages caused by Hurricane Andrew. Insurance negotiations commenced immediately after the storm and are still proceeding. We have received a total of $250 million in advances from our insurers, $220 million under the policy covering non-nuclear property and $30 million for the nuclear property coverage. In addition, $21 million has been removed from the Storm Damage Fund which represents the deductible amounts related to the insurance policies. We are unable to predict when all hurricane related work will be completed or when a final insurance settlement will be obtained. Our estimate of the total damages resulting from Hurricane Andrew has not changed. We continue to estimate damage to the Transmission and Distribution system at $270 million and total damage at $415 million.

The costs associated with damages caused by Hurricane Andrew were captured in a manner that would facilitate insurance recovery. FPL utilized its work order system to capture the majority of these costs. Therefore, in Attachment 1 the costs have been identified in a manner consistent with the way these costs were recorded and processed on the Company's books and records. Some costs have not been identified because they are not covered under the insurance policies in a direct fashion and/or are difficult to quantify (e.g., lost revenues and overtime required by employees to "catch-up" on their normal job requirements after their storm assignment ended). Page 1 of Attachment 1 shows the costs incurred by source of the charge. Page 2 provides the amount of these costs that have been charged to plant accounts and the portion that is non-capital (considered to be maintenance). Page 3 further explains the amounts charged to Plant-in-Service and the Accumulated Provision for Depreciation. Page 4 lists the insurance proceeds received and the amount withdrawn from the Storm Damage Fund and discusses the disposition of these funds.

If you have any questions regarding this report please direct them to me at (305) 552-4332.

Sincerely,

Anne M. Grealy

Anne M. Grealy
Director Regulatory Affairs

attachment

cc: Mary Bane
K. M. Davis
Timothy Devlin
Beth Salak
W. G. Walker, III

FLORIDA POWER & LIGHT COMPANY
HURRICANE ANDREW DAMAGE AND RESTORATION COSTS
SUMMARY OF CHARGES BY SOURCE
Amounts Recorded At June 30, 1993

	(1) Total Costs	(2) Payroll	(3) Vehicle	(4) Materials & Supplies	(5) Misc.
Repair of Facilities (a)					
Production	$85,646,189	$10,097,108	$352,764	$29,968,252	$45,228,065
Substation	8,396,188	1,663,798	232,479	5,113,703	1,386,208
Transmission Lines	24,658,535	4,359,932	396,933	4,869,579	15,032,091
Distribution	221,801,463	56,992,040	5,424,039	33,911,559	125,473,825
General Plant	4,944,351	887,716	49,963	23,981	3,982,691
Other Storm Related Costs					
Support Costs (b)	9,749,550	2,500,046	87,571	20,680	7,141,253
Employee Assistance (c)	1,297,992		1,676	38,287	1,258,029
Provision for Uncollectible Accounts (d)	2,000,000				2,000,000
Total	$358,494,268	$76,500,640	$6,545,425	$73,946,041	$201,502,162
Insurance Recoveries (to date)	(250,000,000)				
Storm Fund Withdrawal	(21,000,000)				
Total Net of Insurance	$87,494,268				

(a) Repair of Facilities - Includes costs for personnel assigned to plant sites, service centers, area headquarters, command and control centers, and staging areas and for activities such as storm preparation, damage assessment and direct repairs. Also includes costs of temporary housing and related subsistence costs for construction crews and support personnel, and costs incurred to operate centers for damage assessment, repairs and control.

(b) Support Costs- Includes costs incurred as a result of the storm but not directly in the restoration of service. Includes costs for activities such as media relations, public service advertising, procurement and other storm related activities performed by locations other than those engaged in the direct repair and restoration of service.

(c) Employee Assistance- Non payroll costs incurred to assist FPL employees who were significantly affected by the storm to allow them to return to work and to focus on those activities necessary to the restoration of service to our customers.

(d) Provision for Uncollectible Accounts- Estimated accrual for write-off of uncollectible customer accounts receivable resulting from the inability to locate customers and the impact on economic conditions following the storm.

Columns:

1 Costs recorded as of 06/30/93. Does not include payroll loadings for pension & welfare, taxes and insurance which are recoverable as a fixed percentage under the provisions of the insurance policies.
2 FPL direct labor - regular and overtime pay
3 FPL vehicle use charges
4 FPL inventory - net issues
5 Cash and Journal voucher sources. Includes charges such as payments to contractors and foreign (other) utilities , food and lodging, transportation, equipment and vehicle rental.

FLORIDA POWER & LIGHT COMPANY
HURRICANE ANDREW DAMAGE AND RESTORATION COSTS
SUMMARY OF AMOUNTS RECORDED TO CAPITAL & NON CAPITAL ACCOUNTS
Amounts Recorded At June 30, 1993

	(1)	(2)	(3)	(4)
	Total Costs	Net Plant In Service	CWIP	Non-Capital
Repair of Facilities				
Production	$85,646,189	$15,741,406	$2,784,516	$67,120,267
Substation	8,396,188	1,006,251	18,076	7,371,861
Transmission	24,658,535	9,900,480	2,433,340	12,324,715
Distribution	221,801,463	46,086,785		175,714,678
General Plant	4,944,351	1,397,267	610,937	2,936,147
Other Storm Related Costs				
Support Costs	9,749,550			9,749,550
Employee Assistance	1,297,992			1,297,992
Provision for Uncollectible Accounts	2,000,000			2,000,000
Sub-total	$358,494,268	$74,132,189	$5,846,869	$278,515,210
Insurance Recoveries	(250,000,000)	(73,010,948)	(8,759)	(176,980,293)
Storm Fund Withdrawals	(21,000,000)			(21,000,000)
Total Net of Insurance	$87,494,268	$1,121,241	$5,838,110	$80,534,917

Columns:

(1) Sum of columns 2, 3 & 4. Amounts and classifications are preliminary
(2) Amounts classified as Plant in Service (account 101/106) and Accumulated Provision for Depreciation (account 108). See Attachment 1 page 3 for additional detail.
(3) Construction Work In Progress net of contractor retentions. Amount shown as insurance recovery is preliminary. Additional amounts will be recorded as jobs are transferred to plant in service status.
(4) Amount recorded in Deferred Debit Account 186 - includes normal and abnormal maintenance costs and amounts pending transfer to capital accounts.

FLORIDA POWER & LIGHT COMPANY
HURRICANE ANDREW DAMAGE AND RESTORATION COSTS
SUMMARY OF AMOUNTS TRANSFERRED TO PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
Amounts Recorded at June 30, 1993

(a) PLANT IN SERVICE

	(1) Account 101/106 Additions	(2) Retire-ments	(3) Insurance Recoveries	(4) Net Account 101/106 (1)+(2)+(3)
Production	$14,108,953	($4,234,953)	($10,496,302)	($622,302)
Substation	929,631	(351,036)	(542,458)	36,137
Transmission Lines	7,956,175	(2,689,484)	(5,406,524)	(139,833)
Distribution	39,939,420	(14,445,690)	(25,002,258)	491,472
General Plant	1,297,259	(469,713)	(834,994)	(7,448)
Total	$64,231,438	($22,190,876)	($42,282,536)	($241,974)

(b) ACCUMULATED PROVISION FOR DEPRECIATION

	(1) Removal Costs	(2) Salvage	(3) Retire-ments	(4) Insurance Recoveries	(5) Net Account 108 (4)+(5)
Production	$1,671,449	($38,996)	$4,234,953	($4,769,619)	$1,097,787
Substation	76,620		351,036	(438,293)	(10,637)
Transmission Lines	1,944,433	(128)	2,689,484	(4,413,631)	220,158
Distribution	6,334,042	(186,677)	14,445,690	(20,537,148)	55,907
General Plant	100,008		469,713	(569,721)	0
Total	$10,126,552	($225,801)	$22,190,876	($30,728,412)	$1,363,215

(a)+(b) NET PLANT IN SERVICE

	(1) Net Account 101/106	(2) Net Account 108	(3) Net (1)+(2)
Production	($622,302)	$1,097,787	$475,485
Substation	36,137	(10,637)	25,500
Transmission Lines	(139,833)	220,158	80,325
Distribution	491,472	55,907	547,379
General Plant	(7,448)	0	(7,448)
Total	($241,974)	$1,363,215	$1,121,241

Note:
In accordance with the accounting treatment approved by the Commission, capital additions and removal are based on "normal" non-storm costs. Insurance proceeds are applied to offset removal, salvage and retirements recorded in the Accumulated Provision for Depreciation accounts. In addition, insurance proceeds are applied to reduce the Plant-in-Service account in the amount necessary to reduce the cost of the new asset to equal the cost of the replaced asset. The balances, net of insurance recoveries, recorded in Plant-in-Service and Accumulated Provision for Depreciation as of June 30, 1993, are primarily the result of timing differences in processing and recording the individual components of additions, removal, salvage, retirements and insurance proceeds and will be subsequently adjusted so that the balance in Plant-in-Service and Accumulated Provision for Depreciation accounts are restored to the amounts that existed prior to the storm.

FLORIDA POWER & LIGHT COMPANY
HURRICANE ANDREW INSURANCE RECOVERIES
AND STORM FUND WITHDRAWALS
Amounts Recorded at June 30, 1993

$ MILLION

Date	Arkwrite Mutual Insurance Company	Nuclear Mutual Limited	Storm Damage Fund Withdrawals	Total Recoveries
Sep-92	$20	$10	$21	$51
Oct-92	80	10		90
Nov-92	58			58
Dec-92		10		10
Jan-93	40			40
May-93	22			22
Total to Date	$220	$30	$21	$271

Note:
Insurance advances and Storm Damage Fund withdrawals when received were used to off-set (credit) the storm related cost recorded in Miscellaneous Deferred Debit - Account 186. Beginning in March 1993 a portion of the insurance proceeds were transferred to Plant in Service and Accumulated Provision for Depreciation accounts to off-set the corresponding amounts recorded as additions, retirements, removal and salvage. In accordance with the accounting treatment approved by the Commission, insurance proceeds are credited to the Accumulated Provision for Depreciation for an amount equal to the cost of removal less salvage, plus the value of the asset retired. Insurance proceeds are also credited to Plant-In-Service in an amount necessary to reduce the cost of the new asset to the original cost of the asset retired. As additional amounts are placed in service and removal, salvage and retirements recorded, additional insurance proceeds will be transferred from Account 186 and credited to the appropriate capital accounts.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 930987-EI

TRANSMISSION AND DISTRIBUTION INSURANCE REPLACEMENT

TAMPA ELECTRIC COMPANY
SEPTEMBER 23, 1994

DOCUMENT NUMBER-DATE
09822 SEP 23 94
FPSC-RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 930987-EI

TRANSMISSION AND DISTRIBUTION
INSURANCE REPLACEMENT

TAMPA ELECTRIC COMPANY
SEPTEMBER 23, 1994

TAMPA ELECTRIC COMPANY
EVALUATION OF STORM DAMAGE RESERVE REQUIREMENTS AS ORDERED BY THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 930987-EI, ORDER NO. PSC-94-0337-FOF-EI

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE
I	Executive Summary	1
II	Background and Requirements of Commission Order	3
III	Appropriate Amount of the Annual Accrual	4
IV	Appropriate Target Reserve Balance	5
V	Best Estimate of Exposure from Storm Related Transmission and Distribution System Damage	6
VI	Types of Expenses to be Charged to the Reserve	8
VII	Efforts to Purchase Insurance to Cover T&D Lines	12
VIII	Evaluation of Alternatives to Replace Self Insurance	14
IX	Requested Actions by the FPSC	15

APPENDIX A — Anistics/EQE (Independent Consultants) Report

APPENDIX B — Tampa Electric Company Efforts to Obtain Insurance

APPENDIX C — Florida Public Service Commission Order No. PSC-94-0337-FOF-EI

APPENDIX D — Map Depicting Hurricane Landfalls in Florida, Florida Trend, September 1994.

SECTION I

EXECUTIVE SUMMARY

Tampa Electric Company (Tampa Electric or the company) has a total net investment of $196 million in transmission and distribution (T&D) lines with a replacement cost of $1.098 billion. This property, which is exposed to a significant risk of damage in severe storms, can no longer be cost-effectively insured. As a result this Commission has ordered Tampa Electric to establish a storm damage reserve with annual accrual of $4 million beginning in 1994.

The Commission provided, however, that the amount of this accrual would be reviewed after a detailed study was filed by the company. Consequently, this Commission in Order No. PSC-94-0337-FOF-EI, Docket No. 930987-EI, dated March 25, 1994, directed Tampa Electric to prepare a study to review the appropriate annual amount to be accrued to the T&D storm damage reserve and the appropriate amount of the reserve. The Commission's order is attached as Appendix C.

The company engaged the assistance of EQE International, an independent engineering and software company which specializes in windstorm and earthquake assessments, and Anistics, an independent computer model and actuarial services firm. The purpose of these engagements was to assess loss potentials and provide an estimate of a prudent level of annual reserve accrual.

The recommendation provided by Anistics is that Tampa Electric make an annual reserve accrual of $4.2 million and that the reserve balance should build to at least $54.7 million. Taking into account circumstances, and the "deductible" of $3.5 million, Tampa Electric recommends that its current annual reserve accrual should be continued at $4 million and that an ultimate reserve target of $55 million be found to be appropriate.

The joint report provided by Anistics and by EQE is attached to this document as Appendix A.

The storm damage reserve would be charged with all costs directly associated with storm damage and related restoration activities. The reserve would not be used for storms causing less than $3.5 million of damage. This "deductible" approach is consistent with the company's prior coverage under traditional insurance for transmission and distribution lines. If the company were to actually experience storm damage significantly in excess of the reserve balance at any given point in time, a petition requesting approved regulatory treatment to recover the costs in excess of the then-existing reserve in a timely manner would be filed with the Commission.

In summary, the company believes that its current annual accrual for storm damage expense of $4 million is reasonable and should be maintained until such time as the target reserve of $55 million is achieved.

SECTION II

BACKGROUND AND REQUIREMENTS OF COMMISSION ORDER

On February 3, 1994, the Commission voted to allow Tampa Electric to implement a self-insurance program for storm damage to its T&D lines. This decision was memorialized in Order Number PSC-94-0337-FOF-EI dated March 25, 1994. This order requires Tampa Electric to file a study no later than September 23, 1994, detailing the following:

1) the appropriate amount of the annual accrual;
2) the appropriate target reserve balance;
3) the best estimate of its exposure from storm related transmission and distribution system damage;
4) what types of expenses it intends to charge to the reserve;
5) its efforts to purchase insurance to cover this exposure;
6) its evaluation of other alternatives to replace the self-insurance plan approved in this docket.

SECTION III

APPROPRIATE AMOUNT OF THE ANNUAL ACCRUAL

The appropriate amount of the annual accrual was estimated by Anistics to be $4.2 million annually not taking into account a "deductible" of $3.5 million. Anistics utilized information provided by EQE which resulted from modelling storms of various intensities moving along a selected storm track. This track represents a storm striking Tampa directly, moving from west to east. Anistics utilized this information to estimate an individual loss severity distribution.

Anistics defined a range of possible loss to fall between $4.2 million and $12.6 million. This corresponds to a reliability factor of 90 to 95 percent of annual loss, respectively. (See Appendix A, page 5) As a result, their recommendation is that Tampa Electric accrue $4.2 million annually not considering the $3.5 million deductible. Anistics indicated that there was a 10% chance that reserves would be inadequate during the first year if accrued at the minimum level of $4.2 million per year. (See Appendix A, Page 7) Assuming no losses above the deductible, a reserve base of $12.6 million would be reached in the third year and the chances of an inadequacy in the reserve would drop to a 5% probability.

SECTION IV

APPROPRIATE TARGET RESERVE BALANCE

Development of a target reserve balance attempts to answer the question of "how high is high enough" with a reasonable degree of confidence.

The anticipated probable loss event is expected to occur ter times in one hundred years with a loss expectancy of not more than $4.2 million per occurrence. However, there is a 10% probability that the anticipated probable loss will be exceeded, with the probable maximum loss estimated at $54.7 million (See Appendix A, Page 3). There is a 98% confidence level that the probable maximum loss will not be exceeded more than two times in one hundred years (See Appendix A, Page 3).

Tampa Electric has, therefore, concluded that the estimated probable maximum loss of $55 million is a reasonable reserve balance.

SECTION V

BEST ESTIMATE OF EXPOSURE FROM STORM RELATED TRANSMISSION AND DISTRIBUTION SYSTEM DAMAGE

A damage assessment of the Tampa Electric transmission and distribution system has been performed for the hurricane wind hazard. Several storm scenarios have been analyzed. The most severe storm that can reasonably be expected is a storm of inland intensity 3 on the Saffir-Simpson scale approaching the Tampa area from the west-southwest. The best estimate of exposure from storm related transmission and distribution system damage, therefore, is a storm striking Tampa directly, moving along a selected storm track from west to east (See Appendix A, Page 5). EQE International scientists and engineers modeled storms of various intensities moving along this track.

Based on information provided by EQE, Anistics has estimated an individual loss severity distribution. From this distribution they have defined the "Anticipated Probable Loss" range of $4.16 million to $12.57 million corresponding with the 90th to 95th percentiles of annual loss, respectively (See Appendix A, Page 5). The "Maximum Foreseeable Loss" range has been estimated at $54.73 million to $182.32 million corresponding to the 99th percentile with a 1% probability of loss exceeding this upper boundary (See Appendix A, Page 5).

The EQE model considered storms which developed an intensity of hurricane categories 3, 4, and 5 with the most likely estimate of exposure causing damage at the hurricane category 3 level. The Tampa area has not been subjected to any truly severe storms of category 4 or 5 levels over the past 100 years (See Appendix D, Page 1). Both of these storm categories could cause 100% damage to the Tampa Electric T&D system should a direct hit occur. Storms with a magnitude of category 4 are not expected to strike the Tampa area more than once in seven hundred years with category 5 storms not expected more than once in two thousand years (See Appendix A, Page 6). The probability of occurrence of these most severe storms reduces the likely exposure to an acceptable level.

The best estimate of exposure to Tampa Electric's T&D system is a category 3 storm with the probability of a landfall once every hundred years (See Appendix A, Page 6). A landfalling category 3 storm creates the defined maximum foreseeable loss exposure to Tampa Electric.

SECTION VI

TYPES OF EXPENSES TO BE CHARGED TO THE RESERVE

The company proposes to use a replacement cost approach for determining the appropriate amounts to be charged to the Storm Damage Reserve. This approach is consistent with the company's prior coverage under traditional insurance for transmission and distribution lines. The replacement cost approach assumes that the total cost of restoration and related activities will be charged against the Storm Damage Reserve. This method would restore the company to its pre-damage condition. The plant accounts would reflect the book value of the replaced plant prior to the damages caused by the storm. Charges to the reserve would be limited to storms causing at least $3.5 million in damage which is consistent with the $3.5 million deductible in our policy when we were able to purchase traditional insurance for transmission and distribution lines.

Actual direct damage and those activities directly associated with storm damage and restoration would be charged to the reserve. Direct costs would include payroll, transportation, materials and supplies and other services necessary to locate and repair or replace damaged property. Payroll costs would include labor charges for those employees directly involved in the actual repair activities as well as those in supporting function (i.e. customer service, engineering, storerooms, transportation).

The following list contains examples of the types of costs the company proposes to charge to the Storm Damage Reserve:

I. Actual Repair Activities:

a. Labor Costs - including overtime or premium pay for employees dedicated to repair activities such as line crews, storeroom, engineering, and transportation personnel; payroll loading for associated taxes, administrative, and employee benefits.

b. Material and Supplies - all materials and supplies utilized for the temporary or permanent repair or replacement of facilities. This would include a standard loading factor to cover the administration of M&S inventories.

c. Cost of preparing, operating and staffing temporary staging facilities for material and supplies distribution.

d. Outside Services - including reimbursement costs to other utilities and payments to subcontractors dedicated to restoration activities.

e. Transportation Costs - including operating costs, fuel expense and repairs and maintenance of company fleet and/or rented vehicles.

II. Costs Directly Associated with Storm Damage and Restoration Activities:

a. Damage Assessment Costs - including surveys, helicopter line patrol, and operation of assessment and control facilities.

b. Cost associated with the rental and/or operation and maintenance of any equipment used in direct support of restoration activities such as communication equipment, office equipment, computer equipment, etc.

c. Costs associated with injuries and damages to personnel and/or their property as a direct result of restoration activities.

d. Costs of temporary housing for restoration crews and support personnel and their related subsistence costs.

e. Storm Preparation - including information costs and training for company employees.

f. Costs of customer service personnel, phone center personnel and other division personnel dedicated to customer service needs, and locating and prioritizing areas of damage.

g. Special advertising and media costs associated with customer information, public education and/or safety.

h. Special employee assistance - including cost of cash advances, housing and/or subsistence for employees and families to expedite their return to work.

i. Identifiable bad debt and revenue write-offs due to storm damage.

j. Any other costs directly related to storm damage and restoration activities.

SECTION VII

EFFORTS TO PURCHASE INSURANCE TO COVER T&D LINES

During the Commission's investigation into the approved ROE level for Tampa Electric, the staff requested a late filed deposition exhibit which documented the company's efforts to obtain insurance coverage for its T&D lines. That document which was filed on January 20, 1994 is attached to this document as Appendix B. Tampa Electric has continued to monitor the current market to seek cost effective insurance coverage for T&D exposures from storm damage perils. Insurers who have been approached include: Industrial Risks Insurers, who previously provided T&D coverage to Tampa Electric before canceling and withdrawing from this market; Arkwright Boston, another potential market prior to 1993; and Lloyd's of London, which previously made available some coverage limits at the annual premium asking price of 30% of policy limits. The company instructed the property insurance brokers in May 1993 to research every potential market in an attempt to transfer the risk exposure. The search did not produce any markets that would continue writing T&D risk exposures in 1994.

Utilities working jointly with the brokerage firm of Marsh & McLennon attempted to develop a group captive market by pooling risks at lower levels and reinsuring catastrophic exposures into the reinsurance market.

Tampa Electric was an active participant in the formation of this potential market resource for T&D insurance. The company participated in development of the concept and education of potential pool members to attract a sufficient number of companies that would provide a base large enough to establish a spread of risk which would appeal to re-insurance markets. In addition, Tampa Electric agreed to provide leadership on the Board of Directors for the group captive insurance company. Efforts to establish this base captive insurer collapsed due to an insufficient response from the utility industry.

All of the efforts described above have produced no viable T&D storm damage insurance alternatives. Tampa Electric has and will continue to monitor the insurance market and to proactively seek cost effective insurance to cover these risks; should these efforts produce a more cost-effective alternative than accrual to an unfunded reserve, Tampa Electric will act to pursue the lower cost alternative, including the discontinuance of the storm damage accrual, if appropriate.

SECTION VIII

EVALUATION OF ALTERNATIVES TO REPLACE SELF INSURANCE

Alternatives to T&D insurance outside the traditional marketplace are very limited. The efforts to establish a group captive insurance pool with limited risk transfer has been previously discussed in section VII. The most viable known alternative pending the development of new markets is "self-insurance." Tampa Electric can self-insure the risk exposure by accruing a reserve to cover expected losses up to a statistically projected probable maximum loss range. The downside of this approach is the occurrence of multiple maximum estimated loss events before an adequate reserve can be established. Additionally, the probability exists, albeit very small, that a loss greater than the maximum foreseeable loss event could occur, exposing Tampa Electric and neighboring utilities to 100% of total replacement value. Accordingly, Tampa Electric also seeks the Commission's approval to utilize deferral accounting and amortize over an appropriate period as determined by the Commission any amounts in excess of the reserve balance should such occur.

SECTION IX

REQUESTED ACTIONS BY THE COMMISSION

As a result of the findings of this report, Tampa Electric requests the Commission to find and so order that:

1. The appropriate maximum level of Tampa Electric's unfunded storm damage reserve should be $55 million.

2. The appropriate annual expense accrual to Tampa Electric's unfunded storm damage reserve is $4 million.

3. The storm damage charges that should be made to Tampa Electric's unfunded storm damage reserve are the actual costs including but not limited to those costs described in Section VI of this report which exceed $3.5 million.

4. Should the actual storm damage costs incurred at any time exceed the accrued level of the reserve, Tampa Electric will defer these costs and request appropriate Commission approval to amortize them over a future period.

5. This docket should be closed and Tampa Electric should implement the findings of this report except for (a) the circumstances described in item four above or (b) the securing by Tampa Electric of a more cost effective means

of insuring against storm damage losses. The next regular review of the appropriate level of Tampa Electric's storm damage reserve should be in its next full base rate revenue requirements proceeding before this Commission.

APPENDIX A

REPORT OF INDEPENDENT CONSULTANTS