Florida Power
CORPORATION

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November 5, 1993

Mr. Steven C. Tribble, Director
Division of Records & Reporting
Florida Public Service Commission
101 East Gaines Street
Tallahassee, FL 32399-0870

Re: Docket No. 930444-EI

Dear Mr. Tribble:

Enclosed herewith for filing with the Commission in the subject docket are fifteen copies of the Direct Testimony of Karl H. Wieland, on behalf of Florida Power Corporation.

Please acknowledge your receipt of the above filing on the enclosed copy of this letter and return to the undersigned. Thank you for your assistance.

Very truly yours,

James A. McGee

JAM/ams
Enclosure

cc: Parties of record

FLORIDA POWER CORPORATION

DOCKET NO. 930444-EI

DIRECT TESTIMONY OF KARL H. WIELAND

Q. Please state your name and business address.

A. My name is Karl H. Wieland. My business address is Post Office Box 14042, St. Petersburg, Florida 33733.

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

A. I am employed by Florida Power Corporation as Director of Business Planning.

Q. Please state your educational background and professional experience.

A. I received a Bachelor of Science degree in Electrical Engineering from the University of South Florida in 1968 and a Master's Degree in Engineering Administration, also from the University of South Florida, in 1975. I have also attended the Management Development Program at Georgia State University and the Public Utility Financial Seminar sponsored by the Irving Trust Company in New York. I am a registered Professional Engineer in the state of Florida and I have been employed by Florida Power Corporation on a full time basis since 1972. During the first seven years of my career, I worked as a Transmission Planning Engineer in the System Planning Department and as an Economic Research Analyst in the Economic Research Department. I became Manager of Generation Planning in 1979, Manager of Economic

Research in 1983, and Director of Business Planning in 1990. My current responsibilities include financial planning and forecasting, financial analysis of projects and proposals, cost benefit analyses, fuel adjustment filings and the preparation of customer, energy, and demand forecasts.

Q. Would you briefly describe your duties and responsibilities as Director of Business Planning as they relate to load forecasting?

A. As Director of Business Planning, I am responsible for the corporate customer, energy sales and demand forecast. This forecast is used within Business Planning and by other Florida Power departments as the basis for the Corporate Budget, the five-year Business Forecast, Facility Planning, and other studies.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present to the Commission the Company's proposal for revenue decoupling. The Company agreed to file a revenue decoupling proposal during it's recent rate case, Docket No. 910890-EI. The Company's proposal was filed in April, 1993. My testimony addresses three issues. First, I present a summary of the Company's proposal as filed. Second, I discuss risk and price volatility issues that arise f om revenue decoupling. Third, I present an analysis of how these risks and price volatility issues can be expected to affect customers using historical analysis as a basis and offer specific risk

mitigation measures which should be added to the Company's original revenue decoupling proposal.

Q. Would you please summarize the Company's original proposal.

A. Yes. The Company's original proposal is attached to my testimony as Exhibit No. ____ (KHW-1). The salient features of the proposal are as follows:

Revenue decoupling will be applied only to residential revenues.

The original proposal calls for a three year test beginning in November, 1993. We suggest changing the start date to January, 1994.

The Company proposes to use the so called Revenue Per Customer (RPC) methodology. The 1993 revenue per customer target of $612 per customer is based on Commission approved 1993 test year data for residential revenues, customers, and sales. The proposal escalates the use per customer figure of 12,578 kWh/customer by 1.5% annually in order to reflect expected growth. The RPC target would escalate proportionally.

Q. What are the benefits obtained with revenue decoupling?

A. Revenue decoupling has two inherent benefits. First, decoupling removes the controversy and uncertainty that surrounds the load forecast that is used to set rates for a projected test year during a rate

case. Second, decoupling is a mechanism that removes a utility's disincentive to conserve energy (kilowatthours). When revenues and sales are decoupled, a reduction in kilowatt-hour sales whether due to weather, the economy, or conservation, no longer reduces revenues and therefore income. As a result, the disincentive that naturally exists with normal rate making practice is removed.

Q. Please discuss how decoupling shifts revenue risk from the Company to the Customer.

A. With most decoupling mechanisms, actual billed revenues are trued-up to a pre-determined target revenue amount. In FPC's proposal, the target revenue amount is determined by multiplying the number of actual customers times the RPC figure of $612, adjusted for use per customer growth. Because of that true-up, decoupling causes revenues to be more stable and predictable. On the other hand, rates to the customer have to change to reflect the amortization of over- or under-recoveries in the true-up account.

Q. What are the main sources of that risk?

A. There are three primary factors that influence kilowatt-hour use per customer. One is weather, a second is economic conditions, and a third is conservation. I have attached a paper written by the Regulatory Assistance Project that addresses decoupling risks and price volatility as Exhibit No. ____ (KHW-2). This paper presents a good summary of this issue.

Q. Have you estimated how significant these risks might be with Florida Power's Decoupling Proposal?

A. Yes I have. While it is impossible to predict with certainty what will occur in the future, much can be learned from an analysis which examines the Company's revenues from a historical perspective assuming the Company's decoupling proposal had been in effect. I have analyzed both the economic risks as well as the weather related risks and their effect on customer rates.

Q. How did you analyze the economic risks?

A. In order to analyze the economic risk, I have prepared an analysis which calculated over-or under-recoveries that would have occurred had the Company instituted its residential revenue decoupling proposal following its 1987 rate settlement. This analysis, which is attached as Exhibit No. ____ (KHW-3) to my testimony, indicates that revenue decoupling would have resulted in refunds to the customer of $12 million in 1988 and increasing to nearly $50 million by 1992.

Q. What would have caused these large refunds?

A. The refunds would have been the result of actual use per customer growth rates between 1987 and 1992 being significantly higher than the 1.5% per year proposed by the Company. Billed revenues would have exceeded the target by $12 to $50 million per year. Economic risk is shifted from the Company to the customer whenever economic

factors result in an actual use per customer growth rate which is higher or lower than the 1.5% contained in the Company's proposal.

Q. What do you conclude from this analysis?

A. There are two conclusions to be drawn from this analysis. First, the size of the over- and under-recoveries which arise from the difference in the estimated versus actual growth rate in use per customer can be significant. Second, if economic growth is higher or lower than estimated for one year, it is extremely probable that the difference will continue to be in the same direction for several years because economic or business cycles tend to last several years. As a result, the true-up is not likely to average out over a short period of time. Since no one can accurately predict the future, there is risk that even during a three year trial period, significant over or under recoveries will result from changes in the economy. As a result, we believe that it is desirable to mitigate those risks. I will offer a proposal that will do that later in my testimony.

Q. Have you also addressed and analyzed the risks due to weather?

A. Yes I have. I have analyzed the impact of weather (defined by heating and cooling degree days) on residential use per customer for 1982-1992. The maximum impact of weather is plus or minus 300 kilowatt hours per custome or slightly less than 3%. The maximum revenue impact in any given year was $12 million. The average absolute change in kilowatt hour per customer is only 133 kWh per customer over the

eleven year period and the average absolute revenue change was only $5.5 million dollars. This data is presented in graphical form in Exhibit No. ____ (KHW-4), page 1 of 2.

Q. How would the shift of risks from the Company to the customer have effected rates?

A. An analysis of price volatility due to decoupling is presented in Exhibit No. ____ (KHW-4), page 2 of 2. This exhibit clearly indicates that rate changes due to factors other than decoupling, such as changes in base rates, fuel adjustment, and energy conservation cost recovery, are significantly larger than weather-related changes due to decoupling. The average absolute change in price without decoupling is 3.4%, while with decoupling it changes to 3.2%. During this time period, decoupling would actually have reduced price volatility for customers because of the favorable interaction between decoupling true-up amounts and other rate changes. This result is consistent with a similar finding in a study of California's decoupling methodology. While there can be no assurance that the same result will occur in the future, it is worth noting that in any case, the net effect of decoupling on price volatility due to weather is small.

Q. What do you conclude from this analysis?

A. I conclude that weather risks are significantly different from economic risks for two reasons. First, unlike the economy, weather tends to balance out from year to year. As a result, one would not expect any

significant net over or under-recoveries due to weather over a period of several years. Second, since weather-related price changes due to decoupling interact with other price changes, the net price change that the customer perceives is not significant. I conclude from this that the benefits of revenue stability gained by the Company far outweigh the potential for small increases in price volatility seen by the customer. A third consideration is that much of the weather variation occurs within a calendar year. In other words, a mild winter might be offset by an above average or hot summer and vice versa. Because of that, the Company receives the benefits of revenue stability during the course of the year without any affect on the customer's rate.

Q. Are their ways to mitigate risk shifting and price volatility associated with revenue decoupling?

A. Yes. Many of these are discussed in Exhibit No. ____ (KHW-2) to my testimony. Some of the possible risk mitigation strategies include limiting the amount of the true-up so as not to cause the Company to exceed its authorized return on equity limit, capping the true-up to either a dollar amount or a percentage, extending true-up balance amortization to two years instead of one, and specifically adjusting revenue targets due to weather, the economy, and other factors using statistical recoupling methods.

Q. Based on your analysis of how your proposal would have affected Florida Power's customers, are you proposing any mitigation strategies?

A. Yes I am. The Company's proposal should be modified to include two strategies for mitigating risk. The first is to cap the true-up if the true-up would cause the Company's ROE (as computed in monthly surveillance reports) to fall outside its authorized range of return on equity. If trueing up revenues to the revenue target would cause the Company to exceed the upper band of its allowed ROE, then the true-up amount would be limited to ensure that the upper band would not be exceeded. To maintain symmetry, the same proposal should work when the Company falls below its authorized ROE because of a refund of revenues. In other words, if the Company's actual revenues were higher than the target, yet a refund of that over collection would cause the Company's ROE to fall below its ROE range, then the true-up should be limited to an amount which keeps the ROE within the allowed range. At most, however, the amount of the true-up should be reduced to zero, it should never be reversed in order to keep the Company's ROE within its allowed limits.

A second and equally important risk mitigation strategy is to modify the kilowatt hour per customer growth rate of 1.5% for changes in economic conditions. The Company's proposed use per customer growth rate of 1.5% is based on the assumed growth in personal income as shown in Exhibit No. ____ (KHW-5) to my testimony. Historical analysis of the relationship between personal income and kilowatt hour use per customer for the periods 1982-1992 indicates that for every dollar change in personal income there is a corresponding

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PROPOSAL FOR REVENUE DECOUPLING

Background

In Florida Power's recent rate case, Docket No. 910890-EI, the Legal Environmental Assistance Foundation (LEAF) filed testimony by Dr. John Stutz recommending that Florida Power adopt, at least on a experimental basis, a revenue decoupling mechanism. In rebuttal testimony filed by Mr. Karl Wieland, Florida Power agreed to submit a decoupling proposal to the Commission within 60 days after the rate case. Both LEAF and the Company suggested that the proposal could be experimental and would be in place no longer than three years or until the next base rate case, whichever occurred first. In its rate order (Order No. PSC-92-1197-FOF-EI), the Commission stated that "FPC will not be required to implement a decoupling mechanism at this time", and added that "the Commission will conduct a more thorough evaluation after the Company's proposal has been received".

General Description of Revenue Decoupling

Under normal ratemaking practice, the regulator sets the amount of revenue that a utility should collect based on the level of rate base, return on investment, and operating expenses that it finds appropriate. In simple terms, the amount of revenue to be collected is then divided by the kilowatt-hours expected to be sold during the test year to arrive at a rate in cents per kilowatt-hour. Once new rates are implemented, the actual revenue collected by the utility will depend on actual sales. If actual sales are higher than the level on which rates are set, the utility will have higher revenues and therefore higher earnings. Conversely, should sales be lower, the utility's revenues will be lower and so will its income. Since revenues and, therefore, income increase with sales, there is a clear incentive for a utility to maximize the number of kilowatt-hours sold after rates are fixed. The purpose of a decoupling mechanism is to break this linkage between sales and revenues.

With decoupling, a utility will collect exactly the amount of revenues that are allowed by the regulator. This is accomplished by trueing up the difference between the allowed revenues and the revenues actually collected during a period and then adjusting rates in a subsequent period up or down in order to collect or refund the difference. This insures that over time, only the actual allowed revenues are collected, no more and no less. In short, under normal ratemaking practice, rates are fixed while revenues and therefore income varies with sales. With decoupling, the revenues are predetermined, and rates are adjusted in order to insure that the company collects the authorized revenues.

Revenue decoupling is not a new concept. It has been practiced by the Florida Commission for a number of years in mechanisms such as the Fuel Adjustment clause, the Energy Conservation Cost Recovery clause, and more recently, the Capacity Cost Recovery clause. These mechanisms have a true-up or balancing account which is used to adjust rates in future periods to insure that the proper revenues are collected. The major difference is that in the above clauses, the revenues collected are trued up to match the authorized or approved expenses. In base rate decoupling mechanisms, the collected revenues are trued up not against expenses but against the allowed revenues. The concept of revenue decoupling is also inherent in base rate proceedings. The effect of a base rate case is to decouple revenues from sales by resetting rates to reflect current revenue requirements. Revenue decoupling mechanisms simply apply the basic regulatory concept of changing rates to match revenue requirements to the period between major rate cases.

The Case for Decoupling

The basic advantages of decoupling are two-fold. First of all, decoupling removes the controversy and uncertainty that surrounds the load forecast that is used to set rates for a projected test year. This was particularly true in Florida Power's most recent rate case where, because of economic conditions, the forecast submitted with the Company's original filing was replaced by an updated forecast. Had a decoupling mechanism been in place, an adjustment to the load forecast would not have been necessary because rates would have been changed automatically to reflect any shortfall or excess of sales. Decoupling gives the Commission

assurance that a utility will not collect more or less revenue than the Commission has authorized in its rate proceeding. This feature is particularly important when future test years are used to set rates.

A second, and equally important advantage of decoupling is that the mechanism removes a utility's disincentive to conserve kilowatt-hours. With decoupling in place, a reduction in kilowatt-hour sales, whether due to weather, the economy, or conservation, no longer reduces revenue and therefore income. As a result, the disincentive that naturally exists with normal rate making practice is removed. This is the reason that most conservation advocates endorse and propose decoupling.

Revenue Growth with Decoupling

Under traditional ratemaking, a utility's revenues after the test year will grow at the same rate as sales. Expenses, or revenue requirements, increase with inflation, growth in customers, and other external factors such as new governmentally imposed costs, tax changes, changes in interest rates, etc. The utility's achieved ROE will rise or fall after the test year depending on whether revenues grow faster or slower than expenses. A new rate case will be initiated when the achieved ROE falls outside the established zone.

Since decoupling breaks the link between sales and revenue, some alternative mechanism must be put in place in order to grow revenues in the years following a test year and establish a revenue target against which actual revenues are trued up. If a utility is not to be worse off with decoupling, revenue growth should be no less than it is when sales determine revenues. Absent a way to increase revenues, earnings attrition would be severe, and the frequency of rate cases would increase. It should be noted that revenue increases do not imply rate increases. In the long run, rates will increase only if costs (i.e. revenue requirements) increase at a greater rate than sales, conversely, rates will decrease if sales growth exceeds growth in revenue requirements. Ideally, a revenue growth mechanism will grow revenues in some relation to the growth in revenue requirements so that a utility's achieved ROE remains within its allowed range of reasonableness and the frequency of rate cases is reduced.

Decoupling Mechanisms

A common feature among the various decoupling mechanisms is that an allowed level of revenues (the Revenue Target) is established and the difference between allowed revenues and revenues actually collected is trued-up by means of a balancing account, and rates are adjusted in a future period in order to collect the deferred revenues. The difference between the two major types of decoupling mechanisms currently in use is how the revenue target is established in periods following a test year. These two types of decoupling mechanisms are:

1. The Electric Rate Adjustment Mechanism (ERAM), the term first used in California for its attrition-linked decoupling mechanism, a variation of which was more recently adopted in New York.

2. The Revenue Per Customer (RPC) decoupling mechanism, which is practiced in Washington state, as well as Massachusetts and Maine.

ERAM

ERAM has been in place for the longest period of time. It was initially established in California in order to eliminate the load forecast uncertainty surrounding future test years. It has also proven to be an effective tool for removing the disincentive towards conservation and as a result has been kept by the California Commission despite several challenges to it. The method of computing the revenue target with ERAM is quite simple: During a general rate case, which is mandated every three years, a utility's test year revenue requirement becomes the amount of revenue to be collected for that year. Rates are then set based on the allowed revenue and the expected level of sales. The difference between sales actually collected and the allowed amount is trued-up with a balancing account and collected in a future period by adjusting rates upward or downward depending on whether the sales variance is negative or positive. In order to establish the revenue target for years following the test year, the Commission holds annual "attrition" hearings which establish, in a simple and abbreviated manner, new levels of rate base, O&M and cost of capital, which in turn determine the revenue target for the year following the test year. New York's ERAM variation also has an annual "attrition adjustment" which

increases the revenue target to account for cost increases caused by inflation and customer growth.

RPC

The RPC method of decoupling revenues from sales was first proposed in Washington state. The ERAM mechanism was inappropriate because the Washington Commission still uses historic test years to establish rates. The concept of RPC is quite simple. Rather than establish a rate in cents per kWh (or per kW) by dividing sales into revenue requirements as is normally done, a revenue per customer amount is established by dividing revenue requirements by the number of customers in the test year. The difference between achieved revenues and the target revenue (number of customers times revenue per customer) is trued up by raising or lowering rates in a subsequent period as it is with the ERAM method. To make revenue growth under RPC comparable to growth achieved with normal ratemaking, the revenue per customer amount is increased each year by the expected increase in use per customer. For example, a utility with 3% customer growth and 2% growth in use per customer will experience annual sales and revenue growth of 5% with traditional ratemaking. In order to achieve comparable revenue growth with RPC, the revenue per customer must be increased 2% annually, since customer growth is automatically provided for by the "per customer" approach.

The primary difference between the ERAM and the RPC decoupling mechanisms is that the former bases revenue increases on attrition-related costs while RPC produces revenue increases similar to those produced by sales growth.

Revenue Decoupling and Risk

Since decoupling removes some of the variability in revenues caused by weather and changes in the economy, it has the potential to reduce risk for a company. Should adoption of decoupling therefore lead to lower allowed equity returns to reflect this potentially lower risk? Not necessarily. First of all, decoupling only reduces the risk associated with revenues. Expenses are not trued up (as they are in the fuel adjustment, for example), so earnings volatility due to changes in expenses still exists. While there may be less variability in achieved returns,

they are not guaranteed. Furthermore, earnings or ROE certainly do not increase with decoupling. Second, achieved earnings over time will greatly depend on how well the revenue growth adjustment that is put in place functions. If a utility experiences less revenue growth with decoupling than it does with fixed rates, ROE declines more rapidly and financial risk increases. The only reasonable course of action is to let the market decide how a utility's risk is changing over time. Cost of capital studies which take into account achieved earnings and ROE volatility will in due time reflect the impact of decoupling on risk and are a far better way to determine whether a change in authorized ROE is called for. Pre-determining a change in authorized ROE based on guesswork and no factual information would be inappropriate.

Florida Power's Proposal

Florida Power proposes that an RPC decoupling mechanism be applied to residential revenues (excluding other operating revenues) for a period of three years beginning in November, 1993.

1993 REVENUE TARGET

The 1993 revenue target is calculated by dividing authorized test year revenues by the expected average number of customers. For Florida Power, the revenue per customer figure is $612 per customer per year based on the 1993 allowed revenue of $656,540,000 and the average annual residential customer count for 1993 of 1,072,774.

In order to more closely match target revenues with seasonal variations in sales, a monthly revenue target is computed based on the factors shown in Table 1, attached. In December of each year, the final annual revenue target is computed using average annual customers in order to eliminate any inaccuracies that may have been produced by the monthly factors.

REVENUE GROWTH ADJUSTMENT

The revenue growth adjustment mechanism for RPC is intended to provide revenue growth comparable to growth achieved with normal ratemaking. The RPC revenue target grows by the same percentage as customers. However, customer growth is less than sales growth because

sales growth is a function of both customer growth as well as growth in use per customer. In order for the RPC mechanism to produce revenue growth in a manner consistent with that produced by kilowatt-hour sales, it is necessary to add a "use per customer" growth factor to the revenue per customer calculation. This is accomplished by multiplying the revenue per customer figure by a growth factor which reflects the expected annual increase in use per customer. For Florida Power Corporation this growth factor should be 1.5 percent per year. This figure is based on the Company's current forecast of residential kilowatt-hour sales growth and matches the use per customer growth of 1.5% which has been experienced in the previous five years (see the attached Table 2, taken from the Company's current Ten-Year Site Plan). Customer growth rates, which are expected to average approximately 3% per year, together with a use per customer growth rate of 1.5% will produce a revenue growth of 4.5% annually.

BALANCING ACCOUNT

The Company will collect revenues based on rates approved by the Commission in its final rate order. For residential service (RS-1), base rates are $8.85 per customer per month plus 4.02 cents per kWh. The difference between the monthly revenue target and actual revenues will be added to a balancing or true-up account. Appropriate deferred revenue accounting will be used on the Company's books to reflect the accrual. The balancing account will accrue interest at the same 30-day commercial paper rate specified in Rule 25-6.109(4), F.A.C., and used for fuel, conservation, and capacity cost recovery balancing accounts. The balancing account will be amortized over a period of twelve months beginning April 1 of the subsequent year so that the number of rate changes is not increased. Residential rates will increase or decrease by a true-up factor depending on whether the Company has undercollected or overcollected revenues during the prior calendar year. The true-up factor will be only applied to the residential rate since decoupling only applies to that rate class.

EFFECT ON RATES

The Company's base rates will remain the same throughout the decoupling trial period unless changed by a rate case. The Company's total rates will change in conjunction with changes in its fuel, capacity, and conservation cost recovery factors and the true-up mechanism for the

revenue balancing account. The revenue balancing account true-up will either increase or decrease residential rates depending on whether the balance is positive or negative. In general, if growth in use per customer is higher than the revenue growth adjustment percentage, then the true-up will be negative and total rates will decrease. Conversely, if use per customer growth is lower than the revenue growth adjustment, then the true-up will be positive and rates will increase. Since there is no true-up to actual expenses, the Company's return on investment and therefore its profitability will be a function of whether it's total expenses rise faster or slower than its total revenues.

Conclusion

Florida Power believes its proposal is a reasonable way for both the Commission and the Company to gain some practical experience with revenue decoupling. The proposed decoupling mechanism is clearly not intended to be a substitute for base rate cases because, in the short run, a utility's expenses are not directly linked to sales and will increase or decrease independent of revenues. Base rate cases will be necessary when the Company's achieved ROE falls outside its allowed range. The mechanism only stabilizes revenues, it does not increase rates to match expenses. As a result, decoupling will not guarantee an achieved return on equity.

A decoupling mechanism places some additional risk on both the customer and the Company. The increase in customer risk stems from the fact that changes in weather and other factors that cause variances from authorized revenues will be reflected in rates, by way of the true-up mechanism, rather than in earnings. The risk to the Company lies in the revenue growth adjustment factor, which may not produce a growth in revenues that compares favorably with revenue growth when coupled to sales. Florida Power does believe, however, that both risks are small and manageable. The intent of a decoupling trial is to gain some working knowledge which will enable the Commission to make a more informed decision on whether to continue or expand the concept.

4/27/93

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Revenue Decoupling Proposal

Monthly Revenue Calculation Under RPC

(a)	(b)	(c)	(d)	(e)	(f)
	Residential Customers	Residential Base Revenues	Monthly Revenue Per Customer	Levelized Monthly Revenue (b) x (d)	Monthly Revenue Adjustment Factor (c) / (e)
Jan-93	1,076,470	$56,619,000	$51	$54,900,000	1.0313
Feb-93	1,081,345	$54,526,000	$51	$55,149,000	0.9887
Mar-93	1,083,519	$48,750,000	$51	$55,259,000	0.8822
Apr-93	1,076,312	$45,351,000	$51	$54,893,000	0.8262
May-93	1,061,991	$44,791,000	$51	$54,162,000	0.8270
Jun-93	1,058,180	$55,359,000	$51	$53,968,000	1.0258
Jul-93	1,059,066	$64,140,000	$51	$54,012,000	1.1875
Aug-93	1,060,705	$66,416,000	$51	$54,096,000	1.2277
Sep-93	1,064,025	$67,650,000	$51	$54,265,000	1.2467
Oct-93	1,070,592	$57,300,000	$51	$54,600,000	1.0495
Nov-93	1,084,547	$46,876,000	$51	$55,312,000	0.8475
Dec-93	1,096,528	$48,762,000	$51	$55,924,000	0.8719
Average/Total	1,072,774	$656,540,000		$656,540,000	
Revenue Per Customer		$612			

Revenues Recorded on a Monthly Basis under RPC:

(g)	(h)	(i)	(j)	(k)
	Residential Customers	Monthly Revenue Per Customer	Monthly Revenue Adjustment Factor	Monthly Revenue Recorded (h) x (i) x (j)
Jan-93	1,076,470	$51	1.0313	$56,619,000
Feb-93	1,081,345	$51	0.9887	$54,526,000
Mar-93	1,083,519	$51	0.8822	$48,750,000
Apr-93	1,076,312	$51	0.8262	$45,350,000
May-93	1,061,991	$51	0.8270	$44,791,000
Jun-93	1,058,180	$51	1.0258	$55,359,000
Jul-93	1,059,066	$51	1.1875	$64,140,000
Aug-93	1,060,705	$51	1.2277	$66,416,000
Sep-93	1,064,025	$51	1.2467	$67,650,000
Oct-93	1,070,592	$51	1.0495	$57,300,000
Nov-93	1,084,547	$51	0.8475	$46,876,000
Dec-93	1,096,528	$51	0.8719	$48,761,000
Average/Total	1,072,774			$656,538,000

FLORIDA POWER CORPORATION

HISTORY AND FORECAST OF ENERGY CONSUMPTION AND NUMBER OF CUSTOMERS BY CUSTOMER CLASS
(AS OF 12/31/92)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	RURAL AND RESIDENTIAL					COMMERCIAL		
YEAR	FPC POPULATION	MEMBERS PER HOUSEHOLD	GWH	AVERAGE # OF CUST	AVERAGE KWH/ CUST	GWH	AVERAGE # OF CUST	AVERAGE KWH/ CUST
1983	1948274	2.53	8010	771047	10388	4119	81249	50696
1984	2018937	2.51	8554	804093	10638	4548	86803	52395
1985	2095103	2.50	9175	838671	10940	5107	91817	55622
1986	2162572	2.48	9819	872441	11255	5573	96843	57547
1987	2236354	2.46	10319	908640	11357	6016	102657	58603
1988	2302453	2.45	11066	941440	11754	6479	106899	60609
1989	2404525	2.46	11787	977448	12059	6990	111079	62928
1990	2492186	2.47	12416	1007806	12320	7329	113595	64519
1991	2537012	2.46	12624	1029901	12257	7489	114657	65318
1992	2575067	2.45	12826	1050077	12214	7544	116727	64630
1993	2621418	2.44	13572	1085806	12499	7863	121323	64810
1994	2673847	2.42	14162	1115236	12699	8358	124980	66875
1995	2732671	2.41	14737	1147687	12841	8795	128994	68166
1996	2795519	2.40	15320	1178336	13001	9212	132788	69374
1997	2857026	2.39	15854	1207002	13135	9590	136282	70369
1998	2917043	2.39	16301	1234348	13206	9930	139660	71101
1999	2975420	2.38	16729	1261313	13263	10257	142988	71733
2000	3031948	2.38	17130	1287614	13304	10576	146234	72322
2001	3086835	2.38	17509	1313327	13332	10887	149409	72867
2002	3140129	2.37	17901	1338559	13373	11202	152523	73445

DECOUPLING: RISKS AND PRICE VOLATILITY

Reconciling utility profitability with Integrated Resource Planning (IRP) is a policy issue that will likely be addressed by regulators in all states. The most recent emphasis on this issue comes in the Energy Policy Act of 1992, where Section 111 (a) (8) requires state regulatory authorities to consider the adoption of IRP and set rates

> such that the utility's investment in and expenditures for energy conservation, energy efficiency resources and other demand-side management measures are at least as profitable, giving appropriate consideration to income lost from reduced sales due to investments in and expenditures for conservation and efficiency, as its investment in and expenditures for the construction of new generation, transmission and distribution equipment.
>
> 16 U.S.C.A. §2621(d)(8)

A similar provision has been adopted for gas utilities in Section 115 of the Act.

There are only two general approaches[1] to meeting this test: lost revenue adjustments and decoupling mechanisms. Briefly, lost revenue adjustments attempt to determine the effect of utility-sponsored demand-side management programs on the utility's net revenue (or profit). Future electric rates are then adjusted to restore any lost revenue to the utility. Decoupling mechanisms, on the other hand, work to make a utility's net revenue independent of its sales level. Thus, decoupling mechanisms capture not only the effect of utility-sponsored demand-side management on profit, but also the effect of sales variations from other sources, including customer-installed efficiency measures, effects of improved rate design, weather variations and business cycles.

Our earlier paper entitled *Decoupling v. Lost Revenues: Regulatory Considerations* (Electricity Journal, November 1992) describes some of the major differences between the two approaches. That paper generally concludes that decoupling is easier to administer and more effective than lost revenue adjustments.

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[1] Shared savings arrangements and other bonus DSM incentives by themselves do not make up for revenues lost from energy conservation.

FPSC Docket No. 930444-EI
FPC Witness: K. H. WIELAND
Exhibit No. _____, (KHW-2)
Page 1 of 15

This paper describes some of the more common concerns raised by decoupling and suggests potential solutions.

The concerns fall into three general categories:[2]

1) Decoupling shifts weather and business cycle risks from the utility to customers.

2) The potential price changes resulting from decoupling are too great.[3]

3) Decoupling removes a utility's incentive to promote the economic development of its service area and/or to attract new customers.

We will discuss each concern as well as a number of related questions including:

* Does decoupling shift risks?

* Is a shift in risk desirable if consumers are compensated for the risk?

* Is it necessary that decoupling shift risks?

* What options are available to modify decoupling plans to shift less risk?

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[2] Some utilities have been concerned that if they are owed a significant amount of money due to decoupling, regulators will refuse to provide it. While we will not discuss this risk here, the concern provides another reason to minimize any deferred balances which is the thrust of this paper.

[3]We use the term "price" in this paper in the context of price volatility, the changes that customers see in their bills from month to month or year to year. When discussing volatility, both the total price (bill) for electric service and the rate paid per kWh or per kW are equally relevant. However, it is important to keep in mind that the objective of IRP is to reduce electric bills, as supply sources are replaced with less expensive demand-side management. Decoupling is aimed at making that objective a reality.

* What effect does decoupling have upon a utility's incentives to attract new customers or keep existing customers?

We conclude that while the existing decoupling mechanisms shift weather and economic risks from the utility to customers, this is not, *per se*, undesirable. The desirability of shifting risks is a policy decision where the main question is balancing the somewhat greater volatility customers face in electric rates against the lower overall rate level due to a lower cost of capital for the utility.

We also conclude that the risk allocation issue can be separated from the core question of whether to decouple profits from sales. Relatively simple decoupling mechanisms can be designed to shift as much or as little risk as is desired.

Finally, if weather and economic risks are shifted to consumers, utility earnings will be more stable and the long-term average electricity price will be reduced, although the year-to-year price volatility may be increased. If the expected price volatility for a particular utility is too great, there are a series of possible modifications that can be used to limit the amount of volatility without undermining the effectiveness of decoupling.

Framework for assessing volatility

Volatility of electric prices can cause some problems for customers. For some customers, including most residential and commercial customers, it is probably the unpredictability of electricity bills and the consequent difficulty in budgeting that causes concern. For others, particularly for manufacturers, the volatility in electric rates may cause concern in planning for incremental production. But while a particular decoupling mechanism may produce some volatility, it will also have beneficial effects, for example, lower overall resource costs and lower cost of capital to the utility.

The decision of whether to shift some. all or none of the weather- or business-cycle risks is a judgement each commission should address. The question should be addressed in an orderly, and thoughtful manner.

We suggest using the following framework:

Answer the core question of whether profits and sales should be coupled.

Analyze a simple decoupling mechanism which allows risks to be shifted.

With weather-business cycle volatility shifted to customer, assess the maximum annual price change.

If the maximum price change is too great, consider simple methods to reduce volatility, including adjustments that shift only part of the weather or business cycle risks.

Taking into account the effectiveness of various options and beginning with the simplest measures first, we suggest analyzing the possible modifications to the decoupling mechanisms in the following sequence:

A. Two year averaging of decoupling accruals

B. Weather adjustments

C. Economic adjustments

1. Customer growth

2. General business adjustments

3. Adjustments based one or a few key industries

After each step, particularly after step A, a commission should stop and assess the remaining price volatility. Because each adjustment adds to the complexity of the mechanism, we suggest proceeding only if the commission believes the remaining price volatility is too great.

Weather and business cycle risks

Both weather and business cycles cause sales, and hence revenue and earnings levels, to fluctuate. Often the term volatility is used to describe this effect.

Earnings volatility in turn is one of the factors that determines a utility's cost of capital[4]. The more volatile a utility's earnings, the higher its cost of capital.

Because utility rates include a rate of return based on the company's cost of capital, customers of utilities without decoupling mechanisms pay for increased utility volatility through higher, although more stable, electricity prices.

Thus, the question is not who pays but how the payments are made. Do customers take the weather risk in the form of a small amount of price volatility or in the form of higher utility rates of return?

Decoupling plans in place in Washington, Maine, New York, and California shift weather and to varying degrees economic risks away from the utility to customers.

The shift in risk was a deliberate decision on the part of regulators. For example, the Washington Commission stated:

> Commission staff and WICFUR both accurately note that the decoupling mechanism is broad; it not only insulates the company from deviations in sales caused by conservation efforts, but also from deviations in sales caused by other factors, for example, temperature and customer-initiated conservation. The Commission views this as a virtue, not a drawback, of the decoupling mechanism.
>
> Docket Nos. UE-901183-T and UE-901184-P, April 1, 1991.

Similarly, the Maine Commission stated:

> Under existing rate of return regulation, risks faced by the utility such as variation in profit due to weather or economic cycles are reflected in the utility's cost of capital. If the utility is no longer subject to profit variation due to weather and economic cycles, the cost of capital should be less.

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[4] More formally, where a utility's earnings are relatively volatile, its common stock price will generally be lower and more volatile. The standard methods of setting a utility's allowed cost of capital rely heavily on the market performance of the utility's common stock.

Since weather and the economy are not within the control of the utility, there are practical limits to the amount of efficiencies that can be squeezed out by the utility in response to these factors. For these reasons, requiring the utilities to remain exposed to these risks does not really save the ratepayer any money in either capital costs or significant management efficiencies. The issue is who pays for the costs of these risks.

Docket No. 90-085, May 7, 1991.

In essence, the decisions are based on two factors. The first is that no important regulatory purpose is served by placing these risks on the utility. Risk might be thought of as a finite resource. There is only so much risk that regulators will place on utilities. Does it make sense to place weather risks on the utility even though it has no ability to change the weather and usually only a limited capability to respond to its effects? Would it not be better instead to put utilities at risk for the consequences of their own actions, for example, power plant performance, purchased power practices, customer service, or other areas where increased exposure to risk may produce better performance?

The second reason is quite simply a conclusion that customers are better off with lower rates due to lower utility capital costs, albeit at the cost of increased price volatility. For example, data for Central Maine Power Company (CMP) suggests that shifting weather and economic risks to customers produces price increases or decreases which could run as high as two to three percent in a year with extreme conditions. Meanwhile, one analyst estimates that CMP's reduced earnings volatility has lowered the utility's cost of equity capital by 100 basis points.[5] This translates into a permanent price decrease of about one percent.

Several arguments have been advanced in support of leaving the current level of weather and economic risks with the utility. These are:

* We should maintain the status quo for its own sake. This reduces the need for rate changes, particularly increases, which will not be well received by customers.

* Utilities may not control the weather or the economy, but they do have some control over the effect of both on their sales and

[5] Direct testimony of Steven Hill in Docket No. 90-085.

revenues. For example, a utility could intensify its marketing in sectors which are relatively insensitive to weather and economic conditions while not encouraging sales in more risky sectors.[6]

* A third argument is that customers are particularly ill equipped to shoulder the economic risk. Customers are already directly subject to these risks; residential customers see the risk as lower incomes or unemployment while most business customers see their own earnings rise and fall with the economy. Decoupling increases customers' exposure.

Each of these points is valid, though their importance varies considerably from state to state and utility to utility. This suggests a need for a careful utility-specific assessment of price volatility.

Assessing price volatility

The amount of potential price volatility depends on many factors, including the characteristics of a utility's customer base, the degree of weather and business cycle fluctuation, and the utility's rate design. Some utilities will be more sensitive to changes in weather or economic conditions than others. Quantifying the maximum price swings that a particular decoupling plan will produce is a simple task that should be performed.

Historical data comparing sales, weather and economic conditions can reveal the maximum and average amount of volatility. Alternatively, most utilities use short-term sales forecasting models which explicitly adjust for weather and economic conditions. The forecasting equations provide a direct measure of potential price volatility. Whatever method is used, the maximum exposure should be identified. If the maximum exposure is acceptable, it is unnecessary to make any special effort to adjust the decoupling mechanism.

Is the price volatility too high?

After looking at the likely range of price swings under decoupling, the next step is to compare these to the price swings that would result under traditional

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[6] While this discussion is, in theory, correct, utilities do not appear to discourage new sales in risky markets.

regulation. For example, decoupling will generally result in symmetric price changes due to economic cycles. Expansionary periods produce a rebate; recessions produce a surcharge. Under traditional regulation, these cycles influence the timing of rate cases. A recession, for example, is likely to induce a rate case. Economic expansion, on the other hand, directly benefits customers under traditional regulation only if the commission initiates a rate decrease. Such a decrease or rebate occurs automatically with decoupling.

If a commission were to conclude that the maximum price swings are still too great there are several steps to take. We describe four such adjustments below:

Averaging

A simple first step to take is to reflect accruals in rates based on a two-year rolling average. This reduces volatility by averaging periods of over- and under-collection without violating current accounting rules[7]. It is also possible to extend the period beyond two years if the utility and regulators are willing to forego the benefits of reporting revenues and hence earnings in a fashion that is consistent with a decoupling plan. Under current accounting rules, where a utility will receive (or refund) a shortfall (surplus) in revenues within two years, it is allowed to reflect that revenue in earnings immediately. But under SEC rules, if the recovery of revenue undercollection/overcollection takes more than two years, then the revenue must be booked when it is received, not when it is accrued. This means that if sales are low in a given year, earnings will also be low, though earnings will be higher at some future time when the cash is received.

If, after multiyear averaging, regulators still believe that level of price volatility is too great they should consider the next three adjustments.

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[7] Under current accounting rules, where a utility will receive (or refund) a shortfall (surplus) in revenues within two years, it is allowed to reflect that revenue in earnings immediately.

Averaging

There are a number of specific approaches one could take to implement an averaging approach. For example:

- Every six months adjust rates to reflect the prior six months of accruals, amortized over the next 18 months. Once this approach has been in place for a while, rates will reflect the four most recent six month periods.

- Adjust rates annually with each year's activity collected or recovered over the next twelve months. However, where rate changes become too large, lengthen the period using a first-in-first-out (FIFO) accounting approach. The effect of FIFO is to treat each dollar received as offsetting the oldest dollar in the deferred revenue account. This allows extending the averaging period to the maximum extent without violating the accounting rules.

Weather

Without decoupling, weather-related risks are on the company -- when the weather is mild sales and earnings are low and vice versa. With decoupling 100% of the weather-related risks are shifted from the company to the customers. Earnings volatility is traded for price volatility. It is possible to develop a fairly simple weather adjusted decoupling mechanism that shifts all or part of the weather-related risk back to the company.

For example, weather normalization techniques are already familiar to many regulators. Where regulators, utilities and other parties have developed acceptable weather normalization methods, the same techniques can be used to "normalize" actual revenues. Price changes occur under decoupling when there is a difference between actual and allowed revenues. Weather normalizing actual revenues will eliminate differences between actual and allowed revenues caused by weather. In this fashion, it is possible to develop a decoupling plan that assigns weather-related risk to the utility.

Simpler methods are available for states that have not developed agreed upon weather normalization procedures. For example, a utility might estimate that each additional degree day results in 100 megawatt hours of added sales.

Other parties might differ with this estimate. Reasonable people might find that the range is somewhere between 80 and 120 megawatt hours of sales for each additional degree day. To get the exact number might prove to be difficult and contentious. A precise derivation of weather impacts would also needlessly complicate what could and should remain a simple process.

The controversy associated with trying to obtain a precise estimate can be avoided by realizing that it is not necessary to shift 100% of the weather-related risk back to the company to address price volatility concerns. Regulators might reasonably decide to implement a weather adjustment that is based on, say, 50 megawatt hours per degree day. In this fashion about half of the weather-related risk is shifted from customers back to the company. The purpose of the adjustment is to reduce price volatility to an acceptable level, not to obtain some scientific correlation between degree-days and electricity sales.

Economy

Under traditional regulation, a utility's earnings are also at risk if economic conditions cause sales to change. Under an ERAM-style decoupling mechanism, such as that used in California and New York, this risk is fully shifted to customers.

The revenue-per-customer decoupling mechanism used in Washington and Maine (see sidebar re: Revenue-Per-Customer) inherently shifts some, but not all, of the economic risks to customers. Not all of the economic risks were shifted because customer growth, like sales growth, is influenced by economic conditions. It is likely that customer growth is less susceptible to economic changes than sales growth and hence only a portion of the economic-related risk would be shifted to customers.

Revenue Per Customer Decoupling

Under traditional regulation, a utility's revenue requirement, as determined at the end of a rate case, is divided by the test year level of utility sales to set rates. The revenue ultimately received by the utility is a simple function of the total number of sales it makes times the rates. Many state utility regulators have now recognized that earning revenue solely through sales is at direct odds with economically desirable utility investment in energy conservation.

Revenue per customer decoupling (RPC Decoupling) severs a utility's allowed revenue from its kWh and kW sales. With RPC Decoupling, rates are set in the traditional fashion; but the revenue the utility ultimately gets to keep is determined by counting customers rather than relying upon sales. RPC Decoupling divides the rate case-determined revenue requirement by the test-year number of customers to set an allowed revenue per customer amount. This amount is then multiplied by the number of customers the utility actually served in the rate period, to determine the total revenue the utility is allowed to keep. The difference between the revenue the utility is allowed to keep and the revenue the utility actually took in is reconciled and then rolled into rates for the next period. The reconciled amount can be positive or negative and is equally likely to be either if the customer calculation and count has been done fairly.

The degree of the risk shifted depends in part on how customers are counted. For example, one result of a poor economy is that vacancy rates, both residential and commercial, tend to increase. This means that many houses may be vacant and commercial space not actively occupied. Under the way utilities in Maine and Washington count customers, these vacant buildings count as customers unless they disconnect from the grid and terminate service. In most situations the buildings remain connected so lights can be turned on when a real estate broker shows the property or to keep pipes from freezing.[8]

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[8] It appears that during the recent and ongoing recession CMP has experienced a substantial net increase in these "zero-use customers." They can be identified from bill frequency data.

If regulators wished to reduce the potential for price changes by shifting more of the economic-related risks to the utility than is currently the case it could require that the definition of customers be changed so that zero-use customers, i.e. customers with between zero and 100 kilowatt hours per month, are not counted as customers.

An alternative approach would be to normalize for general economic conditions in much the same manner as for weather. One important determinant of a utility's sales forecast, particularly its near-term sales forecast, is the level of economic activity in the service area. The utility might believe that each 1% change in gross state product resulted in a 100,000 megawatt-hour change in sales. Again, other parties might differ and provide a range around this estimate. But if a commission wanted to limit price volatility, it could adopt a simple economic adjustment similar in approach to the weather adjustment described earlier.

A third alternative might be developed if a utility's service area were heavily dependent on one, or a few, major industries. Here, the adjustment would be developed based on some measure of the economic activity of those industries.

The Mechanics of Weather and Economic Adjustments

It is quite simple to modify a decoupling mechanism to remove the effects of weather and/or the economy on sales. Decoupling mechanisms operate by allowing a utility to book and ultimately collect deferred revenues where

Deferred Revenues = Allowed Revenues - Actual Revenues

Two options are available to remove weather and/or economic effect on profit. They differ in form, not substance.

1) Deferred Revenues = Allowed Revenues - Adjusted Actual Revenues

   Where Adjusted Actual Revenues are the revenues which would have been collected if weather and/or the economy had been normal.

2) Deferred Revenues = Adjusted Allowed Revenues - Actual Revenues

   Where Adjusted Allowed Revenues are the revenues which would have been allowed if the actual weather and/or the economy had been used instead of normal.

Weather, the Economy, and Loads

Load forecasters have long been aware of the effect of weather and the economy on electricity sales. Reviewing load forecasts is a convenient way to analyze the sensitivity of a given utility's sales to weather and the economy. One utility we are familiar with serves as a good example. In its short-term load forecast this utility uses a statistical (econometric) approach to estimate use per customer for both residential and commercial customers. For residential customers, it finds several statistically valid predictors: per capita income, the penetration of electric space heat, heating degree days, the price of electricity, and historic usage levels. A quick review of the forecasting equation shows that the addition of 100 heating degree days above normal causes use per residential customer to rise by about 35 kWh. If there are 500,000 customers, this translates into 17,500 megawatt-hours. The forecasts for the commercial and industrial sectors provide similar information on weather for those sectors. (Typically, there is little or no relationship between industrial sales and the weather.)

The impact of economic activity can also be obtained from the econometric forecasts. For the same utility, the equation shows that each one percent increase in per capita income causes use per residential customer to rise by two-tenths of one percent. To identify the impact of abnormal economic conditions however is a bit more complicated than the weather adjustment because normal or expected economic conditions may be less well defined. Forecasting expected economic conditions is an ordinary part of the ratesetting process in states using future-test-year approaches, but it may be entirely absent in historical-test-year states.

Once the effects of weather and the economy on sales are established, the next step is to determine the effect of these sales variations on utility profits. The effect of sales variation on utility revenue can be developed using a conventional utility revenue model. The effect of sales variations on costs are developed using the same approach to marginal (or variable) costs used elsewhere in the decoupling adjustment.

Utility's incentives to promote desirable sales

Another concern has been that decoupling might diminish a utility's incentive to make economically efficient sales of electricity. The concern is that we should not take away the current incentive to sell more because some of those sales may be desirable. A closely related concern is that decoupling may eliminate the utility's incentive to engage in economic development activities. With respect to the latter concern, the design of the decoupling plan will dictate the extent to which the short-term incentive to promote economic development is reduced. For example, the revenue-per-customer approach can continue to reward economic development activities, especially if new customers are highly efficient. The ERAM-type mechanism in use in California and New York can also be adjusted to take account of new customer additions.

Turning to the question of promoting economically efficient sales, in the absence of decoupling, Traditional regulation provides strong incentives to increase sales. A primary, but not the only, incentive is the short-term profit associated with increased sales.[9] This incentive is entirely blind to whether the additional sales are economically efficient or inefficient. All sales add to profit. All conservation hurts profits. Decoupling, on the other hand, is sales neutral. Neither additional sales nor additional conservation affect the utility's income.

The short-term profit incentive is not the only incentive utilities face. Utilities generally believe it is in their interest to have low rates, a high market share, and a strong, economically healthy service territory. Each of these goals is furthered when a utility pursues economically efficient new sales.[10] The incentive effects of any single program cannot be viewed in isolation.

The choice, then, is between the traditional system with serious perverse incentives against efficiency including energy conservation, and decoupling where the incentives operate in the right direction. If a commission were seriously concerned that additional incentives were necessary for economically efficient new sales (or, for that matter, cost effective DSM or for low cost power generation) thoughtfully structured and targeted incentive mechanisms can be designed. Regulators have been careful to construct DSM incentive plans that reward only superior performance in acquiring cost-effective DSM. Penalties often result if

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[9] The incentive is short term for two reasons. First, in the short term, utilities typically have adequate capacity available to meet additional demands, so that rates typically exceed short-term marginal costs. This may not be true in the long run as new capacity costs force marginal costs higher. Second, utilities only receive additional profits until the time of the next rate case.

[10] The utilities that have instituted decoupling appear to be no less vigorous in their desire to have new businesses locate in their service territory.

utilities acquire too little cost-effective DSM or any amount of non-cost-effective DSM. Rejecting decoupling leaves the utility with the traditional incentive to increase all sales indiscriminately, without regard to their economic effects.

David Moskovitz, Cheryl Harrington and Tom Austin - June 1993

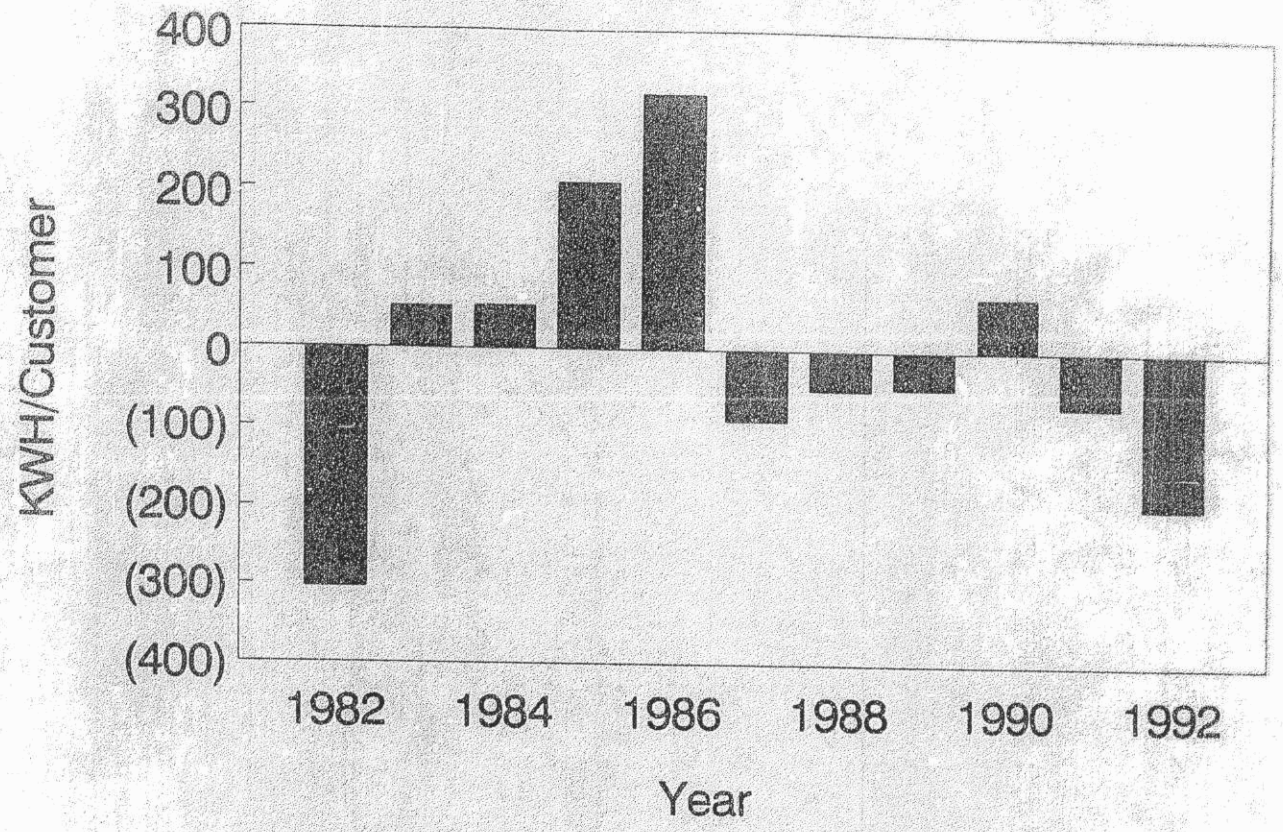
FLORIDA POWER CORPORATION

Hypothetical Calculation of the Impact of Revenue Decoupling for the Historical Period 1988 - 1992

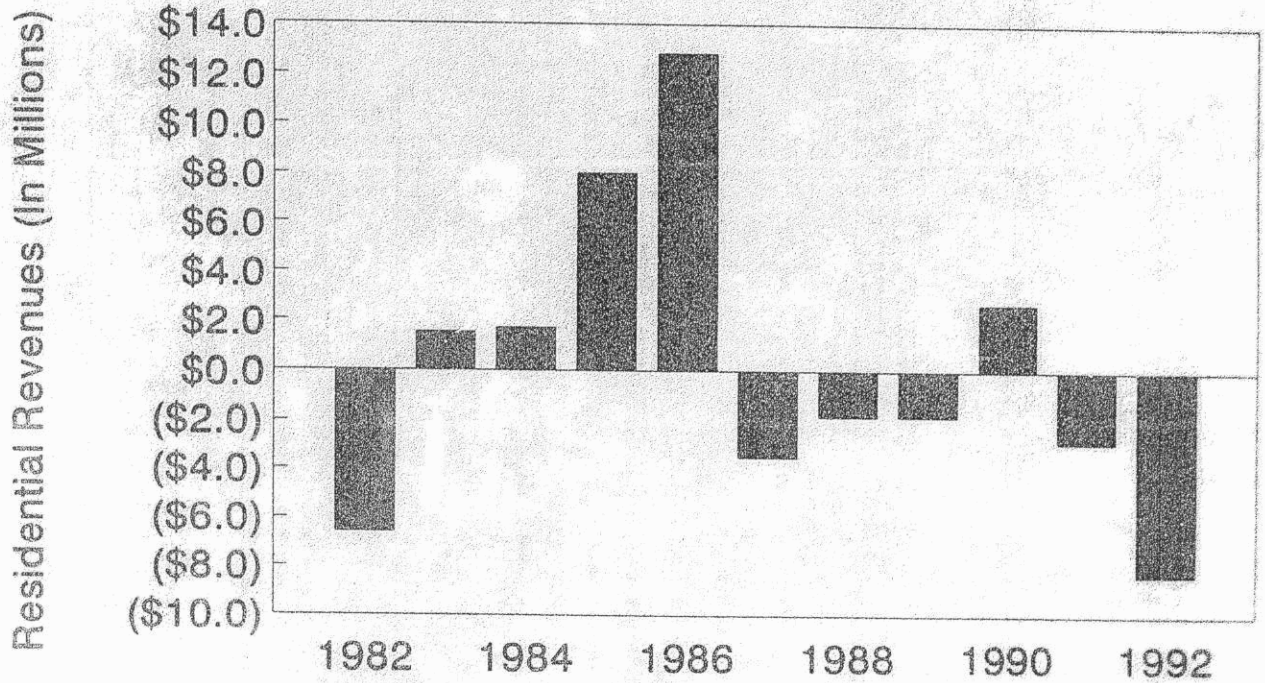
1987 Rate Case		
Residential - Present Base Revenue	$518,942,000	(Docket No. 870220-EI, MFR E-17C, Page 1 of 22)
Retail FAC Revision	(3,736,000)	(Docket No. 870220-EI, Cost of Service Study No. 001, Page 9-2, Line 3)
Adjusted Present Base Revenue	515,206,000	
Rate Reduction Factor	13.95%	(FPSC Order No. 18627, Docket No. 870220-EI, Page 3)
Revenue Reduction Amount	(71,871,237)	
Allowed 1987 Base Revenue	$443,334,763	
Average No. of Customers	903,688	(Docket No. 870220-EI, MFR E-19A, Page 3 of 3)
Allowed Revenue Per Customer	**$491**	

	1987 Test Year	1988	1989	1990	1991	1992
Test Year Allowed Revenue Per Customer	$491					
Test Year Plus 1.5% Growth in Use Per Customer		$498	$505	$513	$521	$529
Actual Average No. of Customers		941,439	977,448	1,007,806	1,029,901	1,050,077
Residential Base Revenues Allowed per RPC		$468,836,622	$493,611,240	$517,004,478	$536,578,421	$555,490,733
Actual Residential Base Revenues		480,984,768	522,487,198	551,206,312	571,918,969	604,414,278
Surcharge / (Refund)		($12,148,146)	($28,875,958)	($34,201,834)	($35,340,548)	($48,923,545)

Florida Power Corporation
Weather Impact on Resid Use/Customer

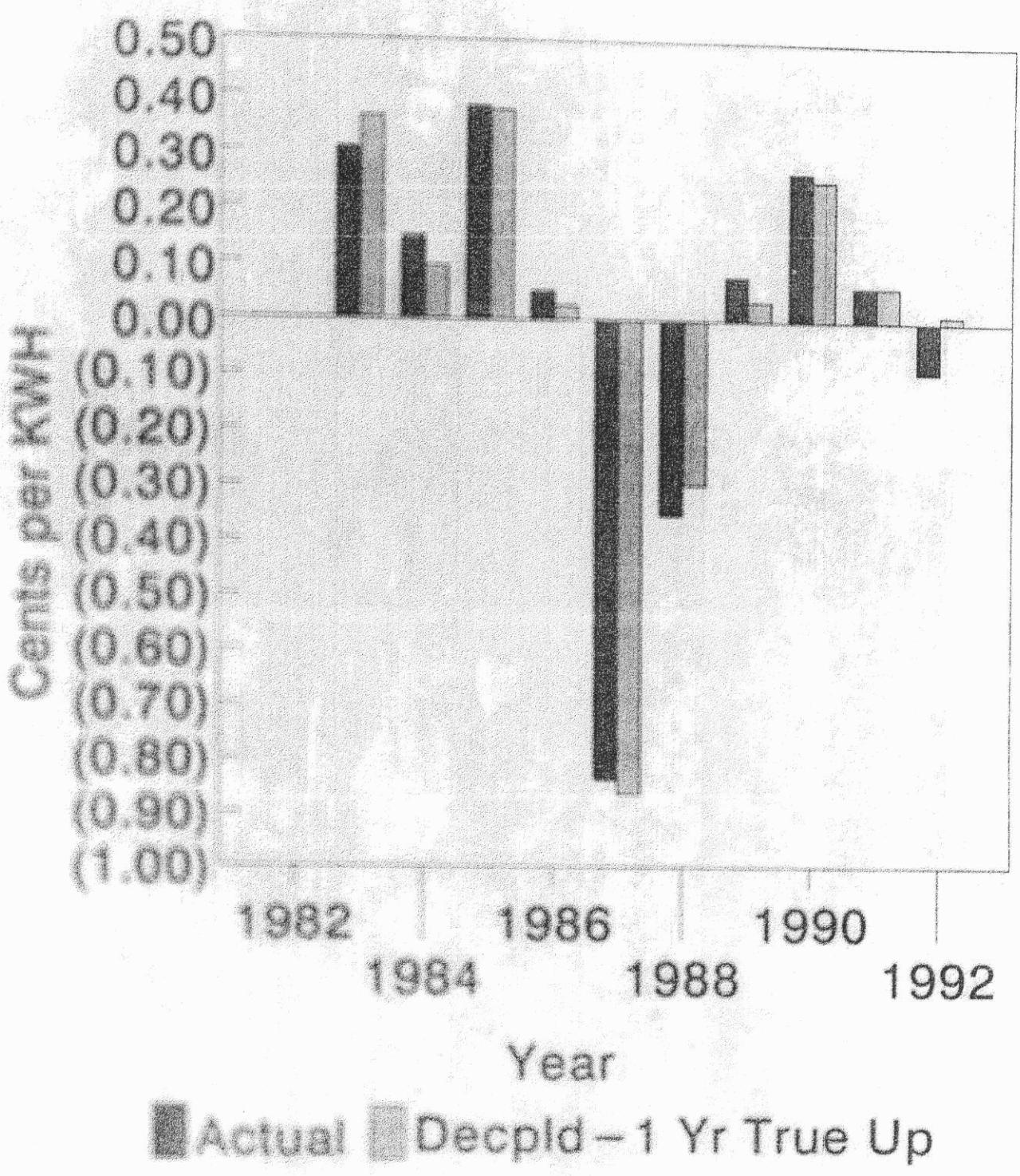


Weather Impact on Residential Revenues



FPSC Docket No. 9300444-EI
FPC Witness: K. H. WIELAND
Exhibit No. _____, (KHW-4)
Page 1 of 2

Florida Power Corporation
Residential Rate Change



FPSC Docket No. 930444-EI
FPC Witness: K. H. WIELAND
Exhibit No. _____, (KHW-4)
Page 2 of 2

PROPOSED ADJUSTMENT TO RPC FOR CHANGES IN ECONOMIC CONDITIONS

YEAR	ANNUAL KWH/CUSTOMER	ANNUAL $/CUSTOMER	PERSONAL INCOME
1993	12,578	612	224,097
1994	12,767	620	235,629
1995	12,959	628	244,355
1996	13,153	635	251,884

Adjustment to KWH/Customer for Actual Income:

KWH/Customer (Adjusted) = KWH/Customer (Proposal) +

.0208 * (Actual Personal Income - Proposed personal income)

Notes: Actual computations will be done on a monthly basis.

The factor relating changes in personal income to KWH/customer, i.e. 0.0208 will be recomputed annually based on most recent 10 year data.

EXAMPLE:

Assume actual 1993 Real Personal Income will be 217,374 or 3% below the annual income in the Company's proposal.

KWH/Customer (Adjusted) = 12,578 - .0208(224,097 - 217,374)
= 12,578 - 140
= 12,438

The adjusted RPC figure is:
8.85 * 12 + .0402 * 12,438 = $606

The revenue target is the product of actual customers times $606

FPSC Docket No. 930444-EI
FPC Witness: K. H. WIELAND
Exhibit No. _____, (KHW-5)
Page 1 of 1

CERTIFICATE OF SERVICE

Docket No. 930444-EI

I HEREBY CERTIFY that a true copy of the Direct Testimony of Karl H. Wieland, on behalf of Florida Power Corporation, has been furnished to the following individuals by U.S. Mail this 5th day of November, 1993:

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application by Town and Country Utilities Company for acknowledgement of corporate reorganization, conversion to a limited liability corporation, and name change on Certificate Nos. 613-W and 543-S, in Charlotte and Lee Counties, to MSKP Town and Country Utility, LLC d/b/a Town & Country Utility.	DOCKET NO. 080242-WS ORDER NO. PSC-08-0481-FOF-WS ISSUED: July 23, 2008

ORDER ACKNOWLEDGING CORPORATE REORGANIZATION AND NAME CHANGE FROM TOWN AND COUNTRY UTILITIES COMPANY TO MSKP TOWN AND COUNTRY UTILITY, LLC D/B/A TOWN & COUNTRY UTILITY

BY THE COMMISSION:

On April 29, 2008, an application was filed on behalf of Town and Country Utilities Company (utility) for acknowledgement of the corporate reorganization and name change of the utility. The utility received its water certificate in 1999.[1] The wastewater certificate was issued in 2007.[2] The application was filed pursuant to Rule 25-30.039, Florida Administrative Code, which provides for changes in name only, with no change in the ownership or control of the utility or its assets.

Babcock Florida Company was the original owner of the utility. In 2006, the Commission approved the transfer of majority organizational control of Babcock Florida Company to MSKP III, Inc., and the merger of the two entities with Babcock Florida Company being the surviving entity.[3] Babcock Florida Company was wholly-owned by MSKP Southwest Florida Investment Partners, Inc., which was wholly-owned by MSKP Babcock Holdings, LLC. The reason given for the reorganization is to simplify the corporate structure, resulting in the utility being directly owned by MSKP Babcock Holdings, LLC., and to convert the utility to a limited liability company. The reason given for the name change is to reflect the change in direct ownership and to meet the requirement that a limited liability company include the designation "LLC" in its name. The utility's name has been changed to MSKP Town and Country Utility, LLC d/b/a Town & Country Utility.

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[1] Order No. PSC-99-2198-PAA-WU, issued November 8, 1999, in Docket No. 981288-WU, In re: Application for certificate to operate a water utility in Charlotte and Lee Counties, by Town and Country Utilities Company.

[2] Order No. PSC-07-0076-PAA-SU, issued January 29, 2007, in Docket No. 060602-SU, In re: Application for certificate to provide wastewater service in Lee and Charlotte Counties by Town and Country Utilities Company.

[3] Order No. PSC-06-0809-FOF-WU, issued October 2, 2006, in Docket No. 060520-WU, In re: Application for transfer of majority organizational control of Town and Country Utilities Company, holder of Certificate No. 613-W in Charlotte and Lee Counties, from Babcock Florida Company to MSKP III, Inc.

A statement is provided in the application by the president of MSKP Babcock Holdings, LLC., attesting that the reorganization and name change will not change the utility's ownership, control, or service provided to customers. The application includes documentation from the Florida Department of State, Division of Corporations, that the proposed limited liability company is registered in Florida as a foreign limited liability company effective May 19, 2008, and the registration of the fictitious name of Town & Country Utility is effective May 20, 2008. The application contains a copy of the proposed notice to be sent to customers informing them of the name change and the revised tariffs reflecting the name change. This order will serve as the utility's amended water and wastewater certificates and the order shall be retained by the utility.

Section 2.07(C)(2)(a) of the Administrative Procedures Manual grants the Director of the Division of Commission Clerk and Administrative Services, in coordination with the appropriate industry division and the Office of the General Counsel, authority to approve change of names and corporate reorganizations of regulated utilities, where no change of ownership or control or transfer of assets is involved.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the corporate reorganization and name change are in compliance with Rule 25-30.039, Florida Administrative Code, and hereby acknowledged and effective the date of this order. It is further

ORDERED that the name change on Certificate Nos. 613-W and 543-S from Town and Country Utilities Company to MSKP Town and Country Utility, LLC d/b/a Town & Country Utility is hereby acknowledged and approved. It is further

ORDERED that this Order will serve as the utility's amended water and wastewater certificates and this Order shall be retained by the utility. It is further

ORDERED that MSKP Town and Country Utility, LLC d/b/a Town & Country Utility's revised tariffs will be effective for services rendered on or after the stamped approval date.

ORDERED that MSKP Town and Country Utility, LLC d/b/a Town & Country Utility should send to all existing customers with the next the next billing cycle notice of its change of name. It is further

ORDERED that this Docket is hereby closed.

By ORDER of the Florida Public Service Commission this 23rd day of July, 2008.

ANN COLE
Commission Clerk

(S E A L)

ELS

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), 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 Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, 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 and/or wastewater utility by filing a notice of appeal with the Office of Commission Clerk, 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 Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

FLORIDA PUBLIC SERVICE COMMISSION

authorizes

MSKP Town and Country Utility, LLC d/b/a Town & Country Utility
pursuant to
Certificate Number 613-W

to provide water service in Charlotte and Lee Counties in accordance with the provisions of Chapter 367, Florida Statutes, and the Rules, Regulations, and Orders of this Commission in the territory described by the Orders of this Commission. This authorization shall remain in force and effect until superseded, suspended, cancelled or revoked by Order of this Commission.

Order Number	Date Issued	Docket Number	Filing Type
PSC-99-2198-PAA-WU	11/08/99	981288-WU	Original Certificate
PSC-06-0809-FOF-WU	10/02/06	060520-WU	Transfer of Majority Organizational Control
PSC-06-0808-FOF-WU	10/02/06	060536-WU	Transfer to Government
PSC-08-0481-FOF-WS	07/23/08	080242-WS	Name Change

FLORIDA PUBLIC SERVICE COMMISSION

authorizes

MSKP Town and Country Utility, LLC d/b/a Town & Country Utility
pursuant to
Certificate Number 543-S

to provide wastewater service in Charlotte and Lee Counties in accordance with the provisions of Chapter 367, Florida Statutes, and the Rules, Regulations, and Orders of this Commission in the territory described by the Orders of this Commission. This authorization shall remain in force and effect until superseded, suspended, cancelled or revoked by Order of this Commission.

Order Number	Date Issued	Docket Number	Filing Type
PSC-07-0076-PAA- SU	01-29-2007	060602-SU	Original Certificate
PSC-08-0481-FOF-WS	07/23/08	080242-WS	Name Change