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Steel Hector & Davis LLP 215 South Monroe, Suite 601 Taliahassee, Florida 32301-1804 850.222.2300 850.222.8410 Fax www.steelhector.com

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RECEIVED-FPSC

Charles A. Guyton 850.222.3423

By Hand Delivery

Blanca S. Bayó, Director Division of the Commission Clerk and Administrative Services Florida Public Service Commission 4075 Esplanade Way, Room 110 Tallahassee, FL 32399

Re: Conservation Cost Recovery Clause Docket No. 010002-EG

Dear Ms. Bayó:

STEEL

HECTOR

CDAVIS"

Enclosed for filing on behalf of Florida Power & Light Company are the original and ten (10) copies of Florida Power & Light Company's:

November 5, 2001

- 1) Amended Prehearing Statement; 13968-01
- 2) Amended Petition for Approval of its Revised Conservation Cost Recovery Factors; 139169-01
- 3) Supplemental Testimony and Exhibits of Dennis Reynolds; and 13970-01
- 4) Supplemental Testimony and Exhibits of L.E. Green. 13971-01

Also enclosed is a diskette containing a copy of Florida Power & Light Company's Amended Prehearing Statement. The diskette is a 3.5 inch high density diskette using Microsoft Word 97.

If you or your Staff have any questions regarding this filing, please contact me.

Very truly yours,

honles & Sugar

Charles A. Guyton



Miami West Palm Beach

cc: All Parties of Record

Enclosure

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 010002-EG FLORIDA POWER & LIGHT COMPANY

NOVEMBER 5, 2001

CONSERVATION COST RECOVERY FACTOR

PROJECTION JANUARY 2002 THROUGH DECEMBER 2002

TESTIMONY & EXHIBIT OF:

L.E. GREEN

DOCUMENT NUMBER-DATE

13971 NOV-55 FPSC-COMMISSION CLERK

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		TESTIMONY OF L. E. GREEN
4		DOCKET NOS. 010001-EI, 010002-EI
5		NOVEMBER 5, 2001
6		
7		
8	Q.	Please state your name and address.
9	A.	My name is Leonardo E. Green. My business address is 9250 West Flagler
10		Street, Miami, Florida 33174.
11		
12	Q.	By whom are you employed and what is your position?
13	A.	I am employed by Florida Power & Light Company (FPL) as a Load Forecast
14		Manager, in the Resource Assessment and Planning Business Unit.
15		
16	Q.	Have you previously testified in this docket?
17	А.	No, I have not.
18		
19	Q.	Please state your education and business experience.
20	A.	I received a Doctor of Philosophy Degree in Economics from the University of
21		Missouri-Columbia, Missouri, in 1983. I joined FPL in April of 1986 and in July
22		of 1991, I became Manager of Load Forecasting within the Resource Assessment
23		and Planning Business Unit. I am responsible for coordinating the entire

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1		economics and load forecasting effort for FPL. Prior to joining FPL, I worked
2		for Seminole Electric Cooperative as the Load Forecasting Supervisor in the
3		Rates and Corporate Planning Department. I have held several Assistant
4		Professorships of Economics and Statistics research and teaching positions with
5		the University of Missouri, Florida International University, NOVA University,
6		and the University of South Florida.
7		
8	Q.	What is the purpose of your testimony?
9	А.	The purpose of my testimony is to present and explain revisions to FPL's load
10		forecasts due to the events of September 11, 2001. The revised load forecast was
11		an input to POWERSYM, a model used to calculate the fuel budget for the period
12		January 2002 through December 2002.
13		
14	Q.	Have you prepared an exhibit in this proceeding?
15	A.	Yes. I am sponsoring Exhibit(LEG-1) which consists of four documents
16		included in Appendix I.
17		
18	Q.	What is the outlook for the national economy for the rest of 2001 and for
19		2002?
20	A.	At the beginning of October, Data Resources Inc. of Standard and Poors (DRI-
21		WEFA) stated that prior to September 11, 2001 the national economy was already
22		in a downward slide, but the terrorist attack will probably cause the tumble to
23		accelerate, likely pushing the U.S. economy into a recession. In its most recent

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U.S. Economic Review of October 2001, DRI-WEFA pronounced, "It no longer 1 2 seems possible for the U.S. economy to escape a recession...the question of whether the U.S. economy escapes a recession appears to have been settled by the 3 DRI-WEFA now expects both the third and 4 September 11 terrorist attacks." fourth quarters of 2001 to register declines in Gross Domestic Product (GDP), a 5 measure of total domestic output, and they project only a 1% real overall growth 6 7 for the entire year. Their forecast of a decline in third quarter GDP has recently been proved correct with the announcement of a 0.4% decline for the quarter. 8 9 Their outlook for year 2002 has the economy growing at a real rate of 1.3 %, starting out weak and then picking up strength in the latter part of the year in 10 11 response primarily to federal programs stimulus. Prior to September 11, 2001 the forecasted real growth in GDP for 2001 was 1.6 % and 2.6 % for 2002. 12

13

14 Q. Will Florida's economy be impacted by the national economy?

Yes. The terrorist attacks of September 11, 2001 strike at the heart of the state's A. 15 16 economy. The combined effects of the slowing US economy and the perceived risks of air travel will adversely affect Florida's economy. DRI-WEFA expects 17 international visitation to Florida from September to December of this year to be 18 50% lower than the same period last year, a result of the weakening global 19 economy and security fears. Domestic travel is also forecasted to be 30% less 20 than the same period last year, as fewer Americans will be willing to travel in the 21 coming months, both because of anxiety about flying and because of concern 22 about employment security and declining income. 23

1 The revision to the forecast for Florida made by DRI-WEFA shows that the 2 annual nominal growth rate in gross state product (GSP), the total output of the 3 state, will be lower in 2002 by approximately \$3.8 billion, or a loss of about 0.5% 4 of the total GSP.

5

Florida state revenue forecasters apparently share this view of Florida's economy
in 2002. They have estimated that the state's tax revenue will be \$1.3 billion less
than the originally estimated \$50 billion. Announced job cuts, the number of layoffs, the rise in the number of unemployment claims, low hotel occupancy rates,
and the reduced number of flights and tourist visitors are further evidence of the
contraction in the Florida's economy.

12

Q. Will FPL's service territory experience a similar downturn in economy as the rest of the state?

In all probability, it will be more severe than the state's downturn. It has been A. 15 observed historically that the three largest counties in FPL service territory have 16 experienced a larger impact of economic slowdowns relative to other major 17 counties in the state. For example, in past recessions unemployment rates have 18 been higher in Miami-Dade, Broward and Palm Beach Counties compared to 19 Duval, Hillsborough and Pinellas Counties, as shown in Appendix I, Page 1 of 4. 20 21 In addition, per capita income, another key economic indicator, has also declined significantly during recessions in the counties served by FPL relative to other 22 Florida counties as shown in Appendix I, Page 2 of 4. Therefore, I believe that 23

1

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this recent slowdown will have a greater impact on FPL's service territory relative to non- FPL service areas.

3

4 Q. Is the projected economic slowdown the basis for the revision to the FPL 5 sales forecast?

Yes. The expected and actual effects of the attacks of September 11, 2001 are A. 6 compelling enough to warrant a revision to the near term outlook of the state's 7 economy and the corresponding impact on the demand for electricity. 8 The original sales forecast used for the fuel, capacity and conservation clause filings in 9 August and September of 2001 was produced under the assumption that Florida's 10 economy was experiencing a mild slowdown in the year 2001, but then it would 11 12 rebound with good economic growth in the year 2002. Prior to September 11, Florida had been spared the worst of the national economic slowdown. Its lesser 13 reliance on manufacturing, higher reliance on tourism and a somewhat greater 14 reliance on international markets cushioned the effects of a weakening U.S. 15 Even though Florida's employment growth had slowed, it was still 16 economy. fairly strong compared to the rest of the nation, and Florida boasted of a low 17 unemployment rate of 4.2%. 18

19

The economic outlook has changed significantly since September 11, 2001. From an auspicious position, Florida's economy has become more vulnerable because the most impacted industries are relatively more vital to the Florida economy than most other states. These heavily impacted industries are tourism, air travel,

merchandise trade, airline services, and the cruise industry. Of course, the downturn in these industries will have spillover employment and income effects on the rest of sectors that encompass the Florida economy.

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Q. How does an economic recession affect the usage of electricity?

A. The growth in usage of electricity comes from the overall growth in per capita use 6 of electricity by all customers and the growth in the number of new customers. 7 Both per capita usage of electricity and growth of new customers are linked 8 directly to the performance of the local and national economy. 9 When the economy is booming, usage of electricity is up in all sectors: residential, 10 commercial, industrial and others. Furthermore, if the economy is strong there 11 12 will be new jobs that attract new customers, new households develop, and retirees coming from other states increase in numbers. 13 The reverse also holds, if the economy is performing poorly, customers are more apprehensive as to how their 14 reduced income is spent, restricting their level of consumption of goods and 15 16 services. Electricity demand and sales begin to slacken when income falls. Job 17 contractions reduce the number of new customers coming to the state seeking 18 employment opportunities. New household formations are postponed.

19

Appendix I, Page 3 of 4 shows the effect of the last three national recessions on Florida's Per Capita Income, the customer growth in FPL's service territory, and the changes in electricity use per customer. The recession years are highlighted and they correspond to the years of 1974-1975, 1982, and 1990-1992. In all three

recessions, Florida's Real Per Capita Income growth and growth in electricity use 1 per customer in FPL's service area are negative. This data supports my earlier 2 observation that as customers' personal incomes decline, the use of electricity per 3 customer also declines. This does not imply that growth in total use of electricity 4 5 will decline, since there is still growth in customers, even in recession years. In Appendix I, Page 3 of 4, it can also be seen that with each recession year, the 6 absolute growth in the number of customers drops significantly from the year 7 prior to the recession to the year following the recession. The smaller growth in 8 9 the number of customers results in a lower growth in sales of electricity than 10 would be expected if there was no contraction in the economy.

11

12 Q. What is the impact of a recession on FPL's outlook on electricity sales?

Appendix I, Page 4 of 4 shows FPL's revisions in the level of projected sales and A. 13 customers for 2001 and 2002. FPL produced a new outlook for energy sales by 14 changing the economic assumptions utilized in its forecasting models. FPL made 15 use of the more recent economic outlook for the State of Florida produced by 16 DRI-WEFA that incorporated the revision resulting from the events of September 17 11. The new projected use of electricity per customer was slightly higher than the 18 2001 estimated value, but it was 2.5 % lower that the forecast produced with 19 economic assumptions prior to September 11. So even DRI-WEFA's economic 20 forecast resulting in slightly higher per customer usage appears conservative 21 given the actual declines in usage experienced in prior recessions. 22

23

1 Customer growth outlook has changed from 85,643 to 65,000 new customers in 2 2002. The recession outlook has resulted in a reduction in forecasted growth of approximately 20,000 less new customers in 2002. In order to forecast customer 3 growth, FPL models depend on population projections obtained from the Bureau 4 5 of Economic and Business Research of the University of Florida (BEBR). 6 However, BEBR has not updated the population projections as a result of the 7 terrorist attacks of September 11. Therefore, FPL's projection of customer 8 growth is based upon growth in customers during prior recessions.

9

The decline in the growth of the number of customers from the year prior to a 10 11 recession to the year following a recession can be seen on Appendix I, Page 3 of 12 4. In the three recessions since 1972, FPL has seen a significant decline in the growth of customers from the year prior to the recession to the year following the 13 recession. In the 1974/75 recession, FPL experienced a decline in the growth of 14 customers of almost 64 thousand (1973 versus 1976). In the 1982 recession, FPL 15 16 experienced a decline in the growth of customers of roughly 29 thousand (1981 versus 1983). In the 1990/91/92 recession, FPL experienced a decline in the 17 18 growth of customers of approximately 36 thousand (1989 versus 1993). A simple average of the decline in growth from those three prior recessions would suggests 19 that FPL might anticipate a reduction in the growth of customers due to recession 20 21 of 43 thousand. However, two of those three recessions were longer term, and this recession is forecast to be relatively shorter. In addition, assuming a 22 customer growth reduction of 43,000 would have reduced FPL's customer growth 23

1	to 49,000, a lower level than FPL has experienced in any year since 1972,
2	including the low year of growth in 1992 following Hurricane Andrew. So, it was
3	considered prudent to take a more conservative approach. FPL projected that it
4	would lose approximately 27,000 customers from the year prior to the recession
5	(2000) to the year following the recession (2002). This is close to but lower than
6	the decline in customer growth experienced during the 1982 recession, and it
7	leaves 2002 customer growth at 65,000 customers, which is about the average
8	new customer growth seen for most of the decade of the 1990s.
9	

The combination of the revised use per customer multiplied by the new projection of customers results in a projected level of sales of 100,158 gWh in 2002, a 1.7 % growth over 2001 as shown on Page 4 of Appendix I. This level of sales is 2.9% lower than the forecast used in the fuel, capacity, and conservation clause filings in August and September of 2001.

- 15
- 16

Q. Please summarize your testimony.

A. The change in Florida's economic look for 2002, brought on by the events of 17 September 11, 2001, warrants a revision to FPL's sales forecast. The 18 performance of Florida's economy determines electricity usage per customer and 19 the level of customer growth. The growth of both of these factors is forecast to 20 decline from the levels forecast prior to September 11, 2001, resulting in lower 21 forecast electricity sales in FPL's service territory. The revision in the sales and 22 customer forecast is in line with but more conservative than the observed 23

5	Q.	Does this conclude your testimony?
4		
3		the State of Florida legislative revenue estimating conference.
2		and reasonable. Furthermore, it is consistent with the most recent projections by
1		outcomes from previous recessions. FPL's revised sales forecast is well founded

6 A. Yes, it does.

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APPENDIX I FUEL COST RECOVERY FORECAST ASSUMPTIONS

LEG-1 DOCKET NO. 010001-EI EXHIBIT PAGES 1-4 NOVEMBER 5, 2001

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Unemployment Rates State of Florida and Selected Florida Counties

	1			<u></u>	<u></u>		County					
			- · · · ·			Hills-		Miami-		Palm		
Year	Florida	Brevard	Broward	Collier	Duvai	borough	Lee	Dade	Orange	Beach	Pinellas	Volusia
1980	5.9	5.4	4.1	6.3	4.7	5. 0	4.7	8.0	5.4	4.9	4.7	5. 6
1981	6.8	6.5	4.8	8.4	5.8	5.8	5.3	9.4	6.3	5.8	5.0	6.2
1982	8.2	7.0	6.7	12.0	6.8	7.9	7.9	10.0	6.8	7.6	6.3	7.0
1983	8.6	7.6	7.3	12.2	7.8	8.3	8.1	9.8	7.3	8.5	6.6	7.4
1984	6.3	5.1	5.0	8.4	5.6	5.3	5.3	7.8	5.4	6.3	4.4	5.2
1985	6.0	4.7	4.9	7.3	5.1	5.3	4.8	7.5	4.9	6.2	4.2	4.8
1986	5.7	6.0	4.5	5.9	5.4	5.7	4.2	6.7	4.7	5. 9	4.2	5.0
1987	5.3	5.5	4.2	4.9	5.4	5.1	3.8	5.8	4.7	5.4	4.2	4.7
1988	5.0	4.7	4.1	4.3	5.4	4.5	3.6	5.4	4.6	5. 0	4.4	4.5
1989	5.6	5.2	5.1	4.6	5. 8	4.9	3. 9	6.4	5.0	6.0	4.7	5.4
1990	6.0	5.3	5.6	5.4	5.2	4.7	3.8	7.8	5.4	7.0	4.5	5.0
1991	7.4	7.0	7.7	7.8	6.3	6.1	6.0	9.4	6.8	8.9	6.0	6.5
1992	8.3	7.9	8.5	9.5	6.8	7.1	7.4	10.5	7.4	10.3	6.6	7.6
1993	7.0	7.6	6.9	8.4	5.5	6.4	5.7	8.2	6.2	9.0	6.0	6.7
1994	6.6	7.4	6.5	8.2	4.9	5.2	4.9	8.4	5.7	8.8	5.0	6.2
1995	5.5	6.5	5.7	7.0	3.8	4.3	4.2	7.4	4.5	7.2	4.1	4.8
1996	5.1	5.4	5. 1	5. 8	3.8	3. 8	3. 8	7.3	3. 8	6.6	3.7	4.3
1997	4.8	4.6	4.9	5. 0	3.8	3.3	3.4	7.1	3.3	6.3	3.4	3. 9
1998	4.3	4.3	4.5	4.2	3.2	2.8	3. 0	6.4	3.0	5. 6	3.1	3.4
1999	3.9	3.9	4.1	3.7	3.1	2.6	2.6	5. 8	2.7	5. 0	2.7	3.1
2000	3.6	3.4	3.7	3.5	3.3	2.6	2.6	5.3	2.5	4.4	2.5	2.9

County's unemployment rate is greater than state

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GROWTH IN PER CAPITA INCOME

	[County					
			_			Hills-	_	Miami-	_	Palm		
Year	Florida	Brevard	Broward	Collier	Duval	borough	Lee	Dade	Orange	Beach	Pinellas	Volusia
1981	2.5%	3.9%	0.7%	3.8%	3.4%	3.3%	1.8%	1.0%	4.1%	6.5%	4.7%	1.5%
1982	-0.4%	-2.1%	-0.4%	-3.9%	1.5%	1.1%	-4.1%	-0.8%	2.1%	-0.7%	0.0%	-0.8%
1983	2.8%	2.1%	2.8%	4.5%	2.3%	3.3%	3.0%	1.4%	3.0%	5.6%	2.1%	3.5%
1984	5.0%	5.2%	6.2%	5.2%	7.6%	6.0%	4.4%	3.6%	5.6%	5.1%	5.2%	4.7%
1985	3.3%	2.5%	3.1%	3.0%	3.6%	3.4%	5.1%	2.2%	3.9%	5.2%	2.3%	3.5%
1986	2.4%	2.3%	0.1%	4.6%	2.1%	1.5%	3.0%	1.1%	2.3%	2.4%	3.1%	2.4%
1987	2.6%	2.7%	2.0%	7.6%	2.0%	2.8%	2.9%	2.9%	2.0%	4.8%	0.7%	1.3%
1988	3.1%	1.8%	3.0%	12.7%	1.1%	2.5%	4.1%	1.0%	3.0%	4.8%	2.0%	1.8%
1989	3.5%	4.0%	3.7%	1.5%	3.6%	3.2%	6.1%	2.0%	1.0%	4.3%	5.7%	1.7%
1990	i -0.4%	-0.8%	-2.3%	-2.0%	0.3%	1.8%	-2.0%	-0.9%	-0.8%	2.9%	-2.9%	-1.9%
1991	-1.7%	-3.4%	-2.2%	-1.9%	-1.7%	0.2%	-3.7%	-2.2%	-1.3%	2.0%	-2.4%	-3.4%
1992	-0.7%	-1.3%	0.7%	6.3%	0.8%	1.4%	0.8%	-8.3%	0.5%	-0.4%	0.9%	-0.6%
1993	2.3%	0.4%	-1.2%	3.3%	2.3%	1.4%	0.3%	11.8%	1.4%	-0.4%	3.7%	0.2%
1994	1.2%	-0.1%	0.1%	4.5%	2.3%	3.1%	1.8%	0.1%	0.6%	0.5%	0.0%	1.7%
1995	2.9%	2.4%	1.0%	1.1%	3.2%	4.3%	4.0%	1.8%	3.0%	3.4%	3.8%	3.3%
1996	2.5%	1.2%	1.3%	3.7%	2.2%	3.4%	1.0%	1.3%	2.7%	3.3%	2.9%	3.1%
1997	2.5%	0.3%	4.0%	6.2%	2.2%	3.5%	4.0%	0.9%	3.3%	-1.0%	4.7%	2.9%
1998	3.6%	2.7%	2.5%	1.1%	4.4%	4.6%	3.0%	3.6%	5.1%	3.6%	4.0%	2.2%
1999	1.3%	1.0%	0.2%	1.6%	2.0%	3.1%	0.3%	1.0%	4.7%	1.4%	3.2%	0.7%
2000	3.1%	1.4%	1.1%	2.4%	2.4%	2.5%	1.1%	1.6%	0.7%	1.6%	1.8%	1.0%

County's Growth in Per Capita Income is less than state

FLORIDA POWER & LIGHT COMPANY IMPACT OF ECONOMIC RECESSIONS ON DEMAND FOR ELECTRICITY (INCOME, CUSTOMERS GROWTH AND USE OF ELECTRICITY PER CUSTOMER)

	Florida Real Per	%		Absolute	%	Use Per Customer	%
	Capita Income		•				
Year	<u>(Chained \$1996)</u>	<u>Change</u>	<u>Customers</u>	<u>Change</u>	<u>Change</u>	<u>(KWH)</u>	<u>Change</u>
1972	15,440		1,446,114			21,782	
1973	16,323	5.7%	1,567,638	121,524	8.4%	22,445	3.0%
31974	15,957	-2.2%	Automation (1997) Automatic Content (1997) 71777 7 12 10 10 10 10 10 10 10 10 10 10 10 10 10	108,384		21,160	5.57%
1975	15,482	-3.0%	1,738,071	62,050	3.7%	21,375	₽ €0%
1976	15,858	2.4%	1,795,793	57,721	3.3%	21,225	-0.7%
1977	16,336	3.0%	1,875,821	80,028	4.5%	21,704	2.3%
1978	17,201	5.3%	1,967,352	91,531	4.9%	22,215	2.4%
1979	17,720	3.0%	2,074,327	106,975	5.4%	21,859	-1.6%
1980	18,119	2.3%	2,184,974	110,646	5.3%	22,174	1.4%
1981	18,574	2.5%	2,285,187	100,214	4.6%	21,890	-1.3%
1982	And a second sec	-0.4%	2,358,167	72,980	3.2%	21,429	21%
1983	19,021	2.8%	2,429,688	71,521	3.0%	21,608	0.8%
1984	19,977	5.0%	2,520,523	90,835	3.7%	21,086	-2.4%
1985	20,638	3.3%	2,617,556	97,033	3.8%	21,393	1.5%
1986	21,130	2.4%	2,723,555	105,999	4.0%	21,394	0.0%
1987	21,670	2.6%	2,840,207	116,651	4.3%	21,694	1.4%
1988	22,346	3.1%	2 ,9 53,663	113,457	4.0%	21,910	1.0%
1989	23,127	3.5%	3,064,436	110,773	3.8%	22,828	4.2%
1990	23,044	-0.4%		94,381.	**************************************		-1.5%
1991	22,662	-1.7% -	3,226,455	67,638	<u></u> 21%~		0.8%
1992	22,505	-0.7%	3,281,238	54,783	1.7%	22,277	-1.8%
1993	23,024	2.3%	3,355,794	74,556	2.3%	22,580	1.4%
1994	23,296	1.2%	3,422,187	66,393	2.0%	23,487	4.0%
1995	23,963	2.9%	3,488,796	66,609	1.9%	24,066	2.5%
1996	24,558	2.5%	3,550,747	61,951	1.8%	23,937	-0.5%
1997	25,184	2.5%	3,615,485	64,738	1.8%	24,022	0.4%
1998	26,095	3.6%	3,680,470	64,985	1.8%	25,177	4.8%
1999	26,442	1.3%	3,756,009	75,539	2.1%	24,350	-3.3%
2000	27,260	3.1%	3,848,350	92,341	2.5%	24,943	2.4%

Note: Shaded areas represent recession years.

Revised Load Forecast (Net Energy For Load & Customers)

							Revised				Revised		
	Net Energy		Revised			Absolute	Absolute		NEU		NEL/		
	for Load (NEL)	%	NEL	%		Customer	Customer		Customer	%	Customer	%	
Year	(gWh)	Change	(gWh)	Change	Difference	Growth	Growth	Difference	<u>kWh</u>	Change	kWh	Change	Difference
2001	99,704	3 9%	98,503	2.6%	-12%	86,760	86,606	-0.2%	25,337	1.6%	25,032	0 4%	-1.2%
2002	103,223	35%	100,158	1.7%	-3 0%	85,643	65,000	-24.1%	25,672	1 3%	25,039	0.0%	-2.5%

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