Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 1 Page 1 of 1

Q.

Currently, companies typically file hedging plans for the projected year in September of the current year. Companies also typically file the results of their hedging programs for the true-up year in April of the current year.

A. What comments does FPL have regarding the timing of reports on hedging activities?

B. Should the Commission determine the prudence of utility hedging plans for the projected year?

#### Α.

A. FPL believes that filing monthly hedging results as part of the submission of A-Schedules is a more appropriate approach than the current results filing in April of each year. The monthly approach would readily facilitate the on-going review of each IOU's hedging program. FPL believes that the risk management plan that is filed with the annual projection filing should address the hedging activities that will take place in the projected year for the year following the projection filing that would detail the hedging activities that will take place in 2009 projection filing that would detail the hedging activities that will take place in 2009 for the 2010 and beyond time frame. The current approach has the Commission essentially approving a hedging plan that for FPL has already been executed.

B. Yes. The Commission should determine the prudence of the utility hedging plans for hedging activity that will take place in the projected year as described in FPL's response to Part A.



DOCUMENT NUMBER DATE 0 1 9 4 0 HAR 14 8 FPSC-COMMISSION CLERK Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Interrogatory No. 2 Page 1 of 1

Q.

With this next set of questions, staff is seeking to understand the relationship of fuel procurement and hedging activities.

A. Does an electric utility's participation in financial hedging activities for residual oil and natural gas make it a more effective purchaser of residual oil and natural gas? Please explain.

B. Does an electric utility's participation in financial hedging provide it with information that allows it more accurate and timely price discovery and enhanced ability to evaluate specific deals and proposals from suppliers?

Α.

A. Given the way the market has evolved from an information availability standpoint, FPL does not believe that its financial hedging activities make it a more effective purchaser of residual fuel oil and natural gas. While constant communication with participants in the financial markets allows FPL to gain access to market data, the evolution and "ramp-up" of information that is available in the energy industry now certainly does not make participation in the financial markets crucial to properly evaluating proposals from physical suppliers. FPL is constantly communicating with physical suppliers and utilizing all market information available to effectively evaluate and execute physical supply transactions.

B. Please see response to Part A.

01940 MAR 14 8

FPSC-COMMISSION CLERK

Florida Power & Light Company Docket No. 080001-E1 03/04/08 Staff's Data Request Question No. 3 Page 1 of 1

Q.

Do the prices in Table 1 agree with the historical market prices used by FPL? If your response is no, please explain what the historical market prices are that are used by FPL.

А.

In order to make a proper comparison, we have made the following assumptions for questions 3 to 12:

1 All hedging is done 3 months earlier or 6 months earlier or 9 months earlier or 12 months earlier or 15 months earlier.

2. All hedges are executed equally across the duration i.e. equal daily volumes.

In general we agree with the prices FPL subscribes to a historical market database from LIM (Logical Information Machines), a leading price data vendor. As per the database records, there are a few discrepancies noted in the prices provided in Table 1 and the data from LIM. Please refer to attached spreadsheet for detailed data comparison.

For proper comparison, we extracted gas forward curves from our LIM database for the original set of dates documented by the PSC. All further analysis is done using the LIM data

However, these historical prices do not represent the execution prices of FPL's hedges in the past

	P30
	CURVE
DIFFERENCES	DATE
None None	6/24/1996
Different forward curve, but PSC's 07/26/1996 curve exactly matches LIM's 07/25/1996 curve	7/26/1996
Different forward curve, but PSC's 08/27/1996 curve exactly matches LIM's 08/26/1996 curve. Month	8/27/1996
11 price different (PSC price: \$2,209/mmbtu, LIM price: \$2,029/mmbtu)	
Different forward curve, but PSC's 09/25/1996 curve exactly matches LIM's 09/24/1996 curve	9/25/1996
Different forward curve, but PSC's 10/28/1996 curve exactly matches LIM's 10/25/1996 curve	10/28/1996
Different forward curve, but PSC's 11/22/1996 curve exactly matches LIM's 11/21/1996 curve	11/22/1996
Different forward curve, but PSC's 12/2/1996 curve exactly matches LIM's 12/2/1996 curve	12/26/1996
None None	1/27/1997
Month 4 price different (PSC Price: \$1 10/MMRtu 1 /M Price: \$1 01/MMRtu)	2/24/1997
Month + price different (PSC Price; \$1 97/MMPtu   IM Price; \$1.9 //MMPtu)	3/24/1007
Different forward autor but DSC 10 04/04/007 out a supplicit and the 04/04/04/007 out a	J/24/1007
Different forward curve, but PSC's 04/24/1997 curve exactly matches Livi's 04/23/1997 curve	4/24/1997 5/09/1007
None	0/20/1997
None	0/20/1997
None	1/29/1997
None	8/27/1997
Month 1 price different (PSC Price: \$2.346/MMBtu, LIM Price: \$3.346/MMBtu)	9/26/1997
None	10/29/1997
None	11/24/1997
Curves do not match, and nearby dated curves also do not match. Curve date is 1 day after	12/30/1997
settlement	
None	1/28/1998
None	2/25/1998
None	3/27/1998
None	4/28/1998
None	5/27/1998
None	6/26/1998
None	7/29/1998
None	8/27/1998
None	9/28/1998
None	10/28/1998
None	11/24/1998
None	12/29/1998
None	1/27/1999
None	2/24/1999
None	3/29/1999
None	4/28/1999
None	5/26/1999
None	6/28/1999
None	7/28/1999
Month 4 price different (PSC Price: \$3 124/MMBtu LIM Price: \$3 126/MMBtu) Month 5	8/27/1999 N
price different (PSC Price: \$3.144/MMBtu, 1 IM Price: \$3.145/MMBtu) Month 13 price	0.2171000 N
different (PSC Price: \$2.48/MMRhi) LIM Price: \$2.48/MMRhi)	

----

9/28/199	9	None
10/27/199	9	None
11/24/199	9	None
12/28/199	9	None
1/27/200	D	None
2/24/200	0	None
3/29/2000	)	None
4/26/2000	)	None
5/26/2000	)	None
6/28/2000		None
7/27/2000	)	None
8/29/2000	)	None
9/27/2000		None
10/27/2000		None
11/28/2000		None
12/27/2000	) Month 1 price different (PSC Price: \$9.978/MMBtu	I, LIM Price: \$9.98/MMBtu)
1/29/2001		None
2/26/2001		None
3/28/2001		None
4/26/2001		None
5/29/2001		None
6/27/2001		None
7/27/2001		None
8/29/2001		None
9/26/2001		None
10/29/2001		None
11/28/2001		None
12/27/2001		None
1/29/2002		None
2/26/2002		None
3/26/2002		None
4/26/2002		None
5/29/2002		None
6/26/2002	Quince do not motoh, and poprhy dated a	unes also do not match
7/29/2002	Curves do not match, and hearby dated c	None
8/28/2002		None
9/26/2002	Only	months 1 2 and 4 match
10/29/2002	Curve date	is 1 day after settlement
10/20/2002	Month 5 price different (PSC Price: \$4 514/MMBtu )	IM Price: \$4 517/MMBtu)
1/20/2002		None
2/26/2003		None
3/27/2003		None
A/28/2003		None
5/28/2003		None
6/26/2003		None
7/29/2003		None
8/27/2003		None
9/26/2003		None
10/29/2003		None
11/25/2003	Month 6 price different (PSC Price: \$4.615/MMBtu, LIM Price: \$4.62/MMB	Btu) Month 7
	price different (PSC Price: \$4 62/MMBtu, LIM Price: \$4.638/MMBtu)	Month 12 price
	different (PSC Price: \$5.001/MMBtu, LIM Price: \$4 841/MMBtu)	Month 13 price different
	(PSC Price: \$4.841/MMBtu, LIM Price: \$5 001/MMBtu	Curve date is 1 day after
	•	settlement

003 N	None
004 N	None
Month 18 price different (PSC Price: \$6.15/MMBtu, LIM Price: \$6.144/MM	/Btu)
Month 8 price different (PSC Price: \$6.82/MMBtu, LIM Price: \$6.792/MM	/Btu)
Month 4 price different (PSC Price: \$6 5/MMBtu   IM Price: \$6 501/MMBtu) Mon	nth 5
nrice different (PSC Price: \$6.772/MMBtu LIM Price: \$6.774/MMBtu) Month 6 c	price
different (See Price: \$6.041/MMBt), LIM Price: \$6.043/MMBt()) Month 7 price diffe	erent
(IPC) Price, 96, 90/MRbit, Like Price, 96, 00/MRbit, Month & price different (	PSC
(PSC FIGE 50 099/MMBDU, LIM FIGE 60.30 MMBDU Month 9 pilos different (PSC Pi	Price
Price: \$6.750/MMBLU, LIM Price: \$6.750/MMBLU Month & price and the original of the second sec	MBtu
	None
	None
04	None
104 N	vone
04 Cuve date is 1 day before settlem	nent
04 N	vone
05 N	√one
05 N	√one
05 N	√one
05 N	Vone
05 Month 14 price different (PSC Price: \$9.362/MMBtu, LIM Price: \$9.392/MMI	lBtu)
05 Curve date is 1 day after settlem	nent
05 N	√one
05 N	√one
05 curve date is 1 day before settlem	nent
ne Ni	lone
ne Ni	lone
Ne Ne	Vone
N	lone
Ne Ne	lone
curve date is 1 day before settlem	nent
	lone
No N	lone
	Jone
)/ Na	lone
)/ 	atch
// Curves do not match, and nearby dated curves also do not ma	aton
Curves do not match, and nearby dated curves also do not mat	lono
)/ 	lono
)7 	1011Ġ
7 ING	lone
17 NG	lone
7 NG	ione
7 NO	ione
7 No. 1	ione
7 No.	ione
8	ione

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 4 Page 1 of 1

Q,

Does FPL agree that the differences in Table 2 and Graphs 2.1 through 2.4 resemble the hedging gains and losses that would have been realized over the 140-month period, had the Last-Trading-Day Settlement Prices been realized (ignoring transactions costs)? If your response is no, please explain

Α.

Assuming the following conditions are met, FPL will in principle agree with the above statement.

1) Assuming historical forward prices from the LIM database are accurate

2) Assuming hedge quantities are evenly distributed among the hedging period

3) Assuming hedged prices for future months are identical to the Last-trading-Day settlement prices

However, the actual procurement strategies for FPL's hedging program are quite different from the examples used in Table 2

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 5 Page 1 of 1

Q.

Does FPL agree that, <u>on the average</u>, the differences in Table 2 and Graphs 2.1 through 2.4 resemble the hedging gains and losses that would have been realized over the 140-month period, had the Last-Trading-Day Settlement Prices NOT been (exactly) realized? Explain your response.

 $\mathbf{A}_{i}$ 

Please see response to No. 4.

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 6 Page 1 of 1

Q.

Does FPL agree that during the natural gas "price spikes" in 2000-2001 (all graphs), 2002-2003 (6- and 9-month graphs), and 2005-2006 (all graphs), large gains would have been realized by anyone purchasing futures contracts several months in advance and selling those contracts during the high-price periods? Explain your response.

#### $\mathbf{A}_{\mathbf{a}}$

We agree that price spikes happened in 12/2000, 2/2003 and 8/2005-12/2005 periods. We also agree that during these spikes, any futures contracts bought 6, 9, 12 or 15 months before and sold during the spike periods would have provided gains.

FLORIDA POWER & LIGHI CO DOCKET NO. 080001- EI 03/04/08 HEDGING DATA REQUESI QUESTION NO. 7 PAGE 1 OF 2

Q.

Does FPL agree that following the high-price periods, beginning in 2001 and again in 2003, losses would have been realized by anyone purchasing futures contracts several months in advance and selling those contracts during the lower-than-high-price periods (the periods immediately following the high-price periods)? Explain your response.

Α.

We have consolidated our responses based on the attached table (Table 1.1) of settlement prices and gains/losses over futures bought 6, 9, 12 and 15 months before

#### Table 1.1:

	HEDGE GA	AINS/LOSSES		
(all figures are \$/mmbtu)	CONTRACTS BOUGHT 6 MONTHS EARLIER	CONTRACIS BOUGHT 9 MONIHS EARLIER	CONIRACIS BOUGHI 12 MONTHS EARLIER	CONIRACIS BOUGHT 15 MONTHS EARLIER
During 12/2000 Spike	5.932	6.653	718	7.05
In the 3 months after spike	1.0527	1 6340	2.7230	3 0403
(average 1/2001 to 3/2001)	0.0550	0 71 42	1.55(0)	2 1509
In the 6 months after spike	-0 0752	0.7143	1 3 3 6 2	2 1308
(average 1/2001 to 6/2001)	1 0797	1 0147	0.2814	0 3073
In the 12 months after spike	-10/8/	-1 0147	-0 2814	6166.0
(average 1/2001 to 12/2001) In the 24 months after spike	-0 4155	-0 4586	-0 2985	-0.1347
(average 1/2001 to 12/2002)				
During 2/2003 Spike Average gain/loss:	5 147	5.245	5.315	5.915
In the 3 months after spike	1.2900	1.7103	1.6957	2.2767
(average 3/2003 to 5/2003)	0 6122	1 3707	1 4600	1 7245
In the 6 months after spike	0 5122	1.2707	1.4002	(.)545
(average 3 2003 to 8 2003)				

#### FLORIDA POWER & LIGHI CO. DOCKET NO. 080001- EI 03/04/08 HEDGING DATA REQUESI QUESTION NO. 7 PAGE 2 OF 2

	0.0783	0.4157	0.8991	1.3611
In the 12 months after spike				
(average 3/2003 to 2/2004)				
In the 24 months offer will	0.1799	0.5873	1.0225	1 3804
In the 24 months after spike				
(average 3/2003 to 2/2005)				
During the 8/2005 to 12/2005				
Spike				
8/2005	3.179	4.592	4.522	4.927
9/2005	7.172	7.741	6.936	8.153
10/2005	6.838	6.137	6.857	7.534
11/2005	2.905	2.837	4.21	4.376
12/2005	1.985	2.873	3.702	2.902
Average gain/loss:				
In the 3 months after spike	-3.7930	-0.4797	-0 1127	0.7300
(average 1/2006 to 3/2006)				
In the 6 months after spike	-3.4955	-2 1633	-0.4988	0 1683
(average 1/2006 to 6/2006)				
In the 12 months after spike	-2 8908	-2 8459	-2.3085	-1 2892
(average 1/2006 to 12/2006)				
In the 24 months after spike	-2.0748	-2 2493	-2.1123	-1 8642
(average 1/2006 to 12/2007)				

Note: Hedge gains/losses are calculated as the difference between the settlement (current) prices for a contract and the price at which the contract would have been purchased 6, 9, 12 or 15 months earlier.

During a shorter term following the spikes (in the first 3 months after the spike), no losses occurred in 2001 and 2003. However as we compare the losses and gains over a longer time frame after the spike, we see some losses We have concluded that results do not show consistent losses by purchasing futures contracts several months in advance and selling them during the periods after spikes.

	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD	ORWARD	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD	FORWARD
	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH	MONTR	MONTH	MALANI (1	MONTR		NAJAVIN	MONTH	NONTA	WORTH	NORTH	WORVIT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
6/24/1996	2.646	2.667	2.69	2.693	2.71	2.75	2.745	2.625	2.425	2.235	2.145	2.11	2.1	2.065	2.035	2.035	2.108	2.21
7/26/1996	2.192	2.169	2.21	2.27	2.285	2.22	2.145	2.07	1.995	2.005	2.015	2.015	2.01	2.005	2,09	2,185	2.19	2.135
8/27/1998	1,882	2,039	2.1//	2.209	2.156	2.005 Σ04	∠.03 1.985	1043	1 93	193	193	1 935	1 993	2.00	2.175	2.03	1.96	1.92
9/25/1996	2.090	2.290	2.041	2.270	2.172	2.04	2 055	2.055	2.055	2.055	2.055	2.117	2,219	2.22	2,159	2.079	1.999	1.989
11/22/1996	3 4 37	2.97	2.625	2.285	2.195	2.16	2.15	2.151	2.153	2.155	2.22	2.31	2.325	2.25	2.17	2.07	2.04	2.025
12/26/1996	3.384	3	2.49	2.292	2,195	2.18	2.175	2.17	2.175	2.265	2.35	2.38	2.31	2.23	2.164	2,142	2.125	2.121
1/27/1997	2.986	2.615	2,307	2.15	2.128	2.125	2,125	2.131	2.137	2.24	2,355	2.387	2.307	2.227	2.134	2.117	2.09	2.099
2/24/1997	1.78	1.815	1.865	1,91	1.945	1.968	1,99	2.012	2,144	2.267	2,302	2.212	2.124	1.997	1.962	1.962	1.962	1.962
3/24/1997	1.805	1.841	1.9	1.925	1.94	1,95	1.99	2,13	2.20	2 3 6 2	2.212	2.09/	2 057	2 027	2 022	2 033	2 042	2.002
4/24/199/	2.122	2.122	2.137	2.144	2.14	2.100	2.200	2.53	2 425	2 275	2 125	2.07	2 045	2.034	2.048	2 057	2.083	2.207
6/26/1997	2.340	2 123	2.12	2.135	2.265	2.4	2.44	2.363	2.253	2.12	2.075	2.055	2.045	2,046	2.043	2.054	2,166	2.264
7/29/1997	2.161	2.113	2.116	2,252	2.396	2.428	2.35	2.245	2.115	2.08	2.068	2.065	2.065	2.065	2.08	2,185	i 2.295	2.33
8/27/1997	2,515	2.482	2.625	2.732	2.74	2.545	2.36	2.16	2.09	2.078	2,08	2.083	2.085	2.105	2.233	2.363	2.38	2.293
9/26/1997	3.346	3.264	3.304	3.27	2.87	2.57	2.36	2.28	2.27	2.27	227	2.27	2.29	2.422	2.565	2,575	2.465	2.345
10/29/1997	3.266	3,475	3.387	2,977	2.612	2.33	2.24	2.22	2.22	2.22	2.23	2.20	2.395	2.54	2.560	2,405	2.33	2.216
11/24/1997	2.5//	2.682	2.00	2.393	2.235	2.100	2.103	2.100	2.130	2.36	· 2.242 3 2.505	2.30	2.332	2,302	2.45	2.310	2.14	2.133
1/28/1998	2.2001	2.043	2.083	2,123	2.148	2.17	2.19	2.198	2.233	2.36	5 2.495	5 2.52	2.395	2.28	2.18	2.161	2.16	2.173
2/25/1998	2.286	2,318	2.333	2.343	2.35	2.30	2.363	2.385	5 2.508	2.6	3 2.647	2.545	2.42	5 2.302	2.268	3 2.26	3 2.26	2.275
3/27/1998	2,3	2.352	2.385	2.405	2.42	2.4	2.44	2.567	2.682	2.69	7 2.557	2.422	2.29	2.20	5 2.25	5 2.253	3 2,25	5 2.255
4/28/1998	2.262	2.311	2.343	2,373	2.373	2,4	2.5	2.684	2.699	2.55	9 2.414	2.285	5 2.242	2 2.242	2 2.247	2.256	5 2,20	5 2.285
5/27/1998	2.017	2,046	2.1	2,145	2.215	2.38	2.35/	2.595	2.4	2.38	5 2.20	5 2.245	2.24	2.2	2.25	2.28	1 2.30	J 2.434
7/29/1998	1.942	1 933	1.982	2.23	5 2.513	2.60	2.50	3 2.40	3 2.308	3 2.30	9 2.33	5 2.54 5 2.284	2.28	2.34	7 2.32	5 2.35	7 2.59	5 2.63
8/27/1998	1.672	1.716	1,973	2.253	2.385	5 2.34	2 2.2	2.20	5 2.18	5 2.18	5 2.18	5 2.18	5 2.18	3 2.21	3 2,350	5 2.48	7 2.52	3 2.423
9/28/1998	2.031	2,302	2.514	2.58	5 2.475	5 2.33	5 2.19	2 2.14:	2 2.14	4 2.1	4 2.13	B 2.14	4 2.18	8 2.32	9 2.45	2 2.49	5 2.39	5 2,28
10/28/1998	1.972	2,324	2.477	2.40	5 2.305	5 2.20	5 2.17	5 2.17	5 2.17	5 2.17	5 2.17	5 2.21	5 2.35	3 2.4	9 2.53	8 2.42	9 2.31	7 2.224
11/24/1998	2.149	2.275	2.235	D 2.15 D 1.70	9 Z.153 7 1.827	3 2.14 7 18	5 2,14	9 2.150 S 101	3 2.150	5 2.1 5	6 2.20 2 2.44	5 2,34	4 2.47	8 2.53	6 2.42	3 2.30	9 2.21	8 2.183
1/27/1999	1.81	1.826	1.153 1.85	1 1.87	1 1.896	5 1.92	5 1.95	נ.ש. 1 1.97	2 (.9: 6 2.03:	J 1 218	2 2.14	0 2.3 1 2.38	1 2.30	5 Z.29 1 2.21	9 ∠. 6 214	2 2.1 B 2.12	1 2.00	D ∠.069 4 2.157
2/24/1999	1.666	1.697	1.72	7 1.76	7 1.806	5 1.84	6 1.88	6 1.93	2 2,11	9 2.2	9 2.3	6 2.2	9 2.21	9 2.13	7 2.11	2 2.12	2 2.13	1 2.135
3/29/1999	1.852	1.883	1.919	5 1,94	5 1.9	7 1.99	5 2.03	5 2.21	6 2.39	8 2.4	7 2,3	9 2.28	3 2.16	5 2,13	7 2.14	7 2.15	7 2.16	7 2.172
4/28/1999	2.348	2.341	2.35	8 2.37	2 2.37	5 2.39	8 2.52	5 2.67	3 2.72	3 2.60	6 2.47	6 2.33	3 2.29	5 2.30	5 2,3	1 2.3	2 2.32	5 2.349
5/26/1995	2.220	> 2.21	2.23	5 Z.25 9 2.37	ວ 2.293 4 2.52	D 2.4/ 1 2.66	5 2.63 R 2.72	5 2.5 3 2.61	8 2.56	5 2.45	5 2,3	5 2.3	1 2.31	5 2.31	8 2.32	7 2.33	5 2.36	5 2.513
7/28/1999	2.601	2,606	5 2.62	3 2.73	8 2.86	8 2.69	8 2.7	7 2.60	5 2.43	5 23	7 23	s 2.20 6 23	ວ ∠.∠ 6 2.36	9 ∠. 5 2.36	5 2.31 B 2	3 2.34 4 2.55	∠ 2.43 1 2.69	2 2.04
8/27/1999	2.912	2 2.922	2 3.02	7 3.12	6 3.14	5 2.95	7 2.76	5 2.5	8 2.48	5 2.46	5 2.46	5 2.4	7 2.48	5 2.5	2 2.66	1 2.80	4 2.84	5 2.72
9/28/1999	2.56	5 2,85	5 3.05	6 3.09	1 2.88	6 2,7	2 2.58	5 2.5	4 2.5	5 2.5	6 2.5	7 2.5	8 2.6	2 2.76	2 2.87	7 2.90	5 2.7	8 2.644
10/27/1999	3.092	2 3.22	3 3,2	3 3.0 E 2.20	5 2.8	5 2.65	6 2.57	5 2.57	7 2.58	7 2.59	07 2.60	7 2.63	7 2.76	9 2.89	6 2.9	3 2.78	8 2.64	9 2.519
12/28/199	2 - 2.14	4 2.36	9 2.35	5 2,50 4 2,30	z z.29 4 2.34	2 2,30	6 ∠.3 5 2.37	-3 Z.35 75 2.30	5 Z.3/ 5 2.41	5 2.41 3 2.43	)3 2.43 NG 7.65	3 2.55	4 2.6	9 2.72 F 2.60	3 2.60	6 2.49	1 2.39	2.366
1/27/200	2.6	1 2.54	9 2,	5 2.49	5 2,	5 2.51	5 2.5	3 2.5	4 2.55	8 2.6	5 2.5	5 2.00	ra ∠./i 8. 26	J 2.04 7 2.54	5 245	i9 ∠.30 38 ≎24	1 Z.C	10 2.3/4 14 2.445
2/24/200	0 2.549	9 2.55	6 2.57	6 2.59	6 2.61	3 2.6	3 2.63	5 2.66	8 2.80	2 2.92	25 2.9	5 2.80	1 2.67	1 2.55	7 2.5	2 2.5	3 2.5	4 2.547
3/29/200	2.9	9 2.90	8 2.92	8 2.94	3 2.95	3 2,9	i1 2.96	3.06	51 3,15	8 3.17	73 3,0	2 2.8	6 2.7	3 2.69	1 2.69	7 2.70	4 2.7	2 2.717
4/26/200	0 3,08	9 3.0	9 3.10 P 4.36	5 3.11	7 3.11	3 3.12	5 3.21	9 3.31	3 3.32	7 3.16	52 2.99	2.84	5 2.80	4 2.80	5 2.6	81 2.81	7 2.81	5 <b>2.834</b>
6/28/200	0 4.40	0 4,20 9 ∆39	0 4.20 7 4.3	10 4.2 17 & 25	30 4.20 5 4.41	0 4.30 5 //i	5 4.40 5 4.40	5 4.4/	5 4.25	5 4.0	55 3.79 Sa an	35 3.67	2 3.64	9 3.65	3.66	3.65	57 3.67	7 3.777
7/27/200	0 3.8	2 3.84	3 3.86	3.95	i 4.0	5 404	18 3.8	BB 373	33 3.52	.o Na asi	58 3.54	10 J.42 55 J.52	(D 3,4) (C 3,5)	JZ 3.30	SZ 3.38	DZ 3.3/	(2. 3,4) SE 0.1	3 3.543
8/29/200	0 4.61	8 4.64	3 4.69	7 4.7	7 4.7	2 4.4	5 4.20	5 3.94	5 3.84	5 3.8	25 3.8	31 3.8	32 380	NG 3.3- NG 3.7	79 3.80	n 3.0	ઝ ૩, સર્ક ૧૦,	5 3.707 57 3.797
9/27/200	0 5.31	2 5,44	7 5.56	62 5.52	2 5.25	7 4.9	8 4.7	2 4.63	32 4.60	07 4.5	92 4,56	<b>39</b> 4.56	in 1.50	57 4,69	2 4.8	4.7	37 4.5	32 4.332
10/27/200	0 4.54	1 4.65	2 4.67	7 4.49	97 4.26	4.0	54 3.90	34 3.97	77 3.97	75 3.5	97 3.9	97 3.9	98 4	.1 4.2	15 4.22	27 4.03	32 3.8	52 3.676
11/28/200	0 6.01	6 6.20	7 6,00	05 5,50	15 4.89	95 4,0	58 4.6	55 4.0	54 4.62	25 4.6	05 4.5	95 4.68	35 4.72	75 4.71	35 4.56	65 4.37	75 4.1	45 4.095
1/20/200	0 9.9 1 629	0 9.20 A 613	6 5,20	30 0." SS 531	1/ 5.4 55 6.3/	15 5,3 13 5-3	ύΟ 5. 75 Ε.	34 5.3 NG 6.3	32 5.28	35 5. NG G	27 5,2	35 5.4	43 5.4	42 5.1	55 4.8	32 4.3	72 4.2	57 4.232
2/26/200	1 4.99	8 5.09	7 5.12	22 5.10	50 J.J. 56 5.2	1 52	35 5	25 0,0: 21 5.7	33 3. 25 5.	30 D. 37 6	44 5. 44 5.	00 5.5% 46 61	95 5.3	92 5. PD 4	09 4. 47 4	54 4.4	35 4. 75 4.2	41 4.425
3/28/200	1 5.38	4 5.45	3 5.50	08 5,5	55 5.	58 5,	55 5.5	55 5.6	65 5.7	75 !	5.8 5.5		L→ 4.) 05 4.7	us 4. 15 4	+r 4. 6 ∆⊼	ao 4. 85 ∡i	ათ 4.3 61 /	0/ 4,392 62 ∦≏
4/26/200	1 4.89	)1 4,9	4 5.00	5.0	55 5.0	07 5.1	02 5.2	52 5.4	02 5.4	62 5.3	17 5.0	86 4.6	46 4.5	33 4.5	73 4.6	23 4.6	36 4.6	26 4,636
5/29/200	1 3.73	8 3.6	M 3.89	93 3.9	93 3.94	62 4.1	42 4.3	21 4.4	01 4.2	91 4.	13 3.8	13 3.7	53 3.8	03 3.6	56 3.8	69 3,9	06 3.9	24 4.059
6/2//200 7/27/200	n 3,18 n 944	≥ 3.28 7 9.40	ກວ 3.3 M ຈາງ	ວວ 3.4. ລດ ຈ∡	دة 3 مم عتد	L7 3,9	65 4.0	48 3.9	33 3.7	58 3.4	63 3.4	33 3.	48 3.5	32 3.5	59 3.5	74 3.6	01 3,7	48 3.89
8/29/200	1 2.20	)5 2.34	- 3.2. 33 2.64	55 3.40 83 20.	əə 3.73 86 3.11	30 3,8 31 1	04 J.8 31 30	ທາ 3.7 25 າ	04 3,5 04 ว.	44, 3,5 D6 >^	⊠ວ 3,5 ∩າ າ	95 3. 05 2.0	64 3.6 05 3.0	65 3.6	63 3.6	75 3.	83 3,9	95 4.07
9/26/200	1.6	33 2.2	53 2.6	33 2.8	35 2.8	35 2.6	05 2.	75 2.7	75 2.8	27 2F	73 29	13 29	55 3.0 11 2.0	50 3.1 31 3.1	11 3.2 01 3.2	00 3. 91 ຈາ	สม 3. 81 วา	⊃∠ 3.405 AL 3.1≂⊂
10/29/200	3.20	)2 3,33	39 3.4	64 3.4	52 3.3	69 3.2	79 3.3	09 3.3	44 3.3	79 3.4	14 3.4	14 3.4	39 3.6	04 3.7	86 3.8	96 3.8	01 3.6	91 3.561

11/28/2001	2.316	2.732	2.827	2.815	2.772	2.82	2.865	2.905	2.945	2.95	2,98	3.175	3.355	3.455	3.383	3.283	3.146	3.146
12/27/2001	2.555	2.619	2.63	2.63	2.681	2.74	2.788	2.833	2,843	2.878	3.068	3.258	3.348	3.288	3,218	3.063	3.063	3.098
1/29/2002	2.006	2.067	2.15	2.24	2.32	2,393	2.453	2,458	2.488	2./18	2,933	3.031	2.991	2,939	2.804	2.821	2.8/9	2.919
2/26/2002	2.388	2.389	2.449	2.509	2.564	2.614	2.624	2.009	2.921	3.101 A 053	3.200	3 818	3.566	2.392	3.007	3,605	3,635	3.62
3/26/2002	3.472	3.3/4	3.394	3,424	3.404	3,459	3,707	3.93	4 014	3.927	3767	3.554	3 537	3.567	3.587	3.602	3.587	3.617
4/20/2002	3.319	3,505	3,557	3 582	3 612	3.867	4.099	4,182	4,127	4.007	3.827	3.792	3.82	3.857	3.882	3.872	3.912	4.082
6/26/2002	3,278	3.353	3,373	3,401	3.694	3.951	4.038	3.975	3.888	3.776	3.756	3.781	3.823	3.86	3.865	3.9	4.09	4.275
7/29/2002	2.976	2.905	2.93	3,23	3.5	3.635	3.61	3.565	3.48	3.483	3.498	3.533	3.563	3.563	3,593	3,763	3.918	3.973
6/28/2002	3.288	3.403	3.673	3.923	4.038	3.983	3.898	3,773	3.776	3.791	3.814	3.829	3.829	3.848	4.013	4,173	4.233	4.118
9/26/2002	3.686	3.889	4.114	4.216	4.126	3.986	3.B32	3.805	3.827	3.853	3.873	3.875	3.895	4.07	4.223	4.2/3	4.158	3.993
10/29/2002	4.126	4.261	4.346	4.256	4,116	3.946	3.906	3.93	3,961	3.975	3.95	3.965	4.135	4.29	4.35	4.23	4.055	3.62
11/26/2002	4,14	4.236 6.000	4.100	4.000	3.941 4 517	4 507	4 524	4 537	4 51	4.502	4.66	4.815	4.88	4.77	4.555	4.21	4.075	4.025
1/20/2002	4,900	5.629	5 234	4.969	4.879	4.876	4.864	4.819	4.814	4.929	5.034	5.099	4.964	4.744	4.384	4.244	4.202	4.199
2/26/2003	9,133	7.39	6,23	5.81	5.7	5.6	5.5	5.49	5.645	5.81	5.87	5.73	5.472	4.837	4.617	4.492	4,407	4.397
3/27/2003	5.146	5.24	5.28	5.276	5.274	5.232	5.217	5.305	5.4	5.475	5.335	5.1	4.605	4.475	4.42	4.4	4.4	4.41
4/28/2003	5,123	5.19	5.265	5.305	5.29	5.305	5.445	5.585	5.67	5.54	5.315	4.715	4.625	4.6	4.59	4.595	4.585	4.585
5/28/2003	5.945	6.016	6.067	6.057	6.06	6.16	6.3	6,385	6.24	5.97	5.115	4,94	4,89	4.88	4,0/0	4.860	4.00	5.05
6/26/2003	5,291	5.41	5.45	5.49	5.063	5,837	5.931	5,166	4.68	4 57	4.073	4.000	4.00	4.00	4.00	4 752	4 927	5.027
1129/2003 9/27/2003	4.093	4,030	5 108	5.358	5 488	5.428	5.313	4.858	4.77	4,774	4.778	4,785	4.765	4.783	4.946	5.108	5,193	5.13
9/26/2003	4.43	4.621	4.881	5.071	5.033	4,946	4.681	4.593	4.613	4.623	4.63	4.617	4.63	4.775	4.935	5.025	4.97	4.82
10/29/2003	4.459	4.658	5.103	5,104	5.007	4.734	4.679	4.689	4.699	4.714	4,699	4.713	4.883	5.05	5.163	5.13	4.96	4.595
11/25/2003	4.86	5,05	5.08	4.975	4.655	4.62	4.638	4.655	4.675	4.665	4.678	4.841	5.001	5.111	5.071	4.923	4.571	4.501
12/29/2003	6.15	6.243	5.993	5.258	5.088	5.083	5.108	5,133	5,108	5.123	5.303	5.478	5.608	5.563	5.353	4.768	4.658	4.688
1/28/2004	5,775	5.74	5.325	5.233	5.23	5,245	5.253	5.228	5.233	5.431	5.021	5.756	5./18	5.541	4,996	4.895	4.926 5.025	4.956
2/25/2004	5.15	5.497	5.65	561	5,635	5.521	5,29	5.305	5 974	5.645	6.054	5.854	5 254	5.075	4.973	5 182	5 182	5 157
4/28/2004	5.935	5,966	6.033	6.072	6.052	6,066	6.229	6,395	6.509	6.454	6.244	5,484	5.329	5.339	5,359	5.369	5.331	5.341
5/26/2004	6.68	6.732	6.759	8.724	6.734	6.886	7.066	7.191	7.129	6.931	6.136	5,956	5.964	5.986	5.998	5.958	5.969	6.144
6/28/2004	6,141	6.201	6.228	6.26	6.49	6.714	6.844	6.792	6.64	6.015	5.86	5.875	5.915	5.93	5.92	5.94	6.105	6.275
7/28/2004	6.048	6.142	6.197	6.501	6.774	6.943	6,901	6.758	6.093	5.973	5.986	6.014	6.025	6.025	6.043	6.218	6.388	6.513
8/27/2004	5.082	5.189	5.916	6,498	6.831	6.831	6.693 6.421	6.093	5,981	6.001	6.033	6.05	6.042	6.068	6.298	6.516	6.666	6.621
9/20/2004	0.720 7.626	8 775	9435	9.401	7,581 Q	7.55	7.2	7 222	7.25	7 27	7 23	0.320	0.349	7 995	6.804 9.12	0.939	0.899	6./24
11/23/2004	6.793	7.621	7.731	7.536	6.741	6.601	6.636	6.671	6.691	6.671	6.694	6 975	7 256	7.466	7 46	7 245	6.33	62
12/28/2004	6.213	6.341	6.359	6.149	6.159	6.202	6.25	6,275	6.255	6.285	6.63	6.97	7.195	7.185	6.97	6.035	5.895	5.915
1/27/2005	6.288	6.352	6.322	6.345	6,385	6.427	6.455	6.435	6.455	6.775	7.09	7.32	7.295	7.095	6.125	6	6.02	6.05
2/25/2005	6.715	6.81	6.865	6.92	6.947	6.95	6.975	7.34	7.695	7.925	7.895	7.705	6.605	6.465	6.49	6.52	6.55	6.53
3/29/2005	7.323	7.402	2,51	7,598	7.653	7.668	7.698	8.023	8.343	8.561	8.546	8.401	7.131	6.971	6.996	7.026	7.056	7.032
5/26/2005	6 123	6 212	6 287	6 329	6 394	6 994	7 530	7.914	7 900	0.15/ 7.757	6.052	6.977	6.842	6.884	6 924	6,944	6.929	6.962
6/28/2005	6.976	7.073	7.113	7,175	7,745	8,275	8.625	8.647	8.523	7.553	7.415	7.457	7 507	7.551	7 542	0.039	0.879	8 238
7/27/2005	7.647	7.592	7.644	8.194	8.689	9.037	9.037	8.877	7.762	7.622	7.663	7.713	7.758	7.745	7.78	8.13	8 46	87
B/29/2005	10.847	11.139	11.409	11,699	11.949	11.904	11.654	9.579	9.269	9.299	9.342	9.362	9.362	9,392	9,767	10.122	10.377	10.347
9/29/2005	14.196	14.686	14.991	14.761	14.286	11.366	10.836	10.848	10.883	10.918	10.892	10.919	11.334	11.729	12.029	11.934	11.639	9.589
10/2//2005	13.832	13.684	14.004	13,884	13.504	10.854	10.559	10,577	10.619	10.664	10.639	10,674	11.124	11.559	11.884	11.794	11.484	9.204
12/27/2005	11.022	11 216	11.26	10.06	9.95	9 985	10.03	10.075	10.009	10.009	10.057	10.537	11.017	11.402	11.352	11.052	8.942	8.762
1/27/2006	B.4	8.507	8.652	8.752	8.855	8.95	9.035	9.085	9.17	10.09	10.03	11 455	11.465	11.40	11.24 0.34	9.31	9.095	9,14
2/24/2006	7.112	7.313	7.475	7,625	7.76	7.845	7.92	8.015	9.045	10.035	10.695	10.7	10.5	8.67	8.471	8.531	8.606	9.200
3/29/2006	7.233	7.456	7.641	7.816	7.951	8.056	8.201	9,381	10.366	11.031	11.021	10,831	9.221	9.034	9,084	9.149	9.196	9.221
4/26/2006	7,198 5,005	6.454	7.521	7.771	7.994	8.234	9.684	11.064	11.864	11.859	11.669	9.709	9.509	9.594	9.689	9.754	9.814	9.899
5/20/2006	5.925	6 312	6.562	6.063	7.004	8.394	9.684	10.334	10.364	10.194	8.354	8.189	8.299	8.429	8.544	8.654	8.839	9.639
7/27/2006	7.042	7.123	7.363	8.858	10.253	10.868	10.427	10,462	8668	8469	8.197	8.292	8,402	8.497	8.612	8,787	9.567	10.352
8/29/2006	6,816	6.876	8.8	10.47	11.085	11,115	10.925	8.675	8.515	8.605	8,705	8 785	8 875	0.020	10.005	9.758	10.548	11.038
9/27/2006	4.201	5.669	7.209	7.644	7.714	7.579	7.089	7.069	7.163	7,261	7.331	7,401	7.506	8.054	8 589	8951	8 951	A 721
10/27/2006	7.153	7.827	8.277	8,327	8.172	7.582	7.539	7.618	7.706	7,763	7.808	7.893	8,318	B.763	9.008	9.013	8.803	7.673
11/28/2006	8,318	8.559	8.606	8,476	8.116	8.102	8.167	8.25	8.315	8.36	8.455	8.925	9.355	9,58	9,575	9.355	8.06	7.93
1/20/2007	5.535	6,142	0.257	5,357	6.457	6.577	6,702	6.815	6.885	7.025	7.7	8.315	8.635	8.65	8.445	7.375	7.28	7.335
2/26/2007	7.547	7.703	7.784	7 868	7.96	8.042	8.094	7.429 8.190	6 744	8,124	0.669	8,959	8.954	8.749	7,484	7,374	7.424	7.509
3/28/2007	7.558	7.672	7.813	7.957	8.057	8.109	8.22	8.85	9.485	9.209	9.009	9.004	9.329	7.009	7.084	7.734	7.799	7.859
4/26/2007	7,508	7.602	7.764	7,892	7.944	8.057	8.762	9,457	9.802	9,792	9,552	B.237	8.107	8 179	R 264	8 3 3 4	8 377	8.185
5/29/2007	7,591	7.731	7.861	7.924	8.059	8.764	9.464	9,804	9.799	9.574	8.294	8.194	8,279	8,379	8,454	8.499	8 604	9.069
6/27/2007	6.929	7.083	7.174	7.326	8.076	8.786	9.146	9.146	6.936	8.046	7.961	8.046	8.146	8.221	8.271	8.386	8.864	9.341
8/20/2007	6.11	6.208	6.436	7,411	8.356	8.776	8.798	8.646	7.976	7.951	8.043	8.143	8.216	8.276	8,401	8,876	9.361	9.646
9/26/2007	0,43 6 477	0.001 7 0.46	0.001 77740	004, \ 200, g	7.686 B 499	7.913	7.741	7.306	7.321	7.401	7.491	7.561	7.606	7.731	8,186	8.641	8.926	8.926
10/29/2007	7.269	7.974	8 2 9 9	8 328	B 148	7 84	7 889	7 971	1.003	8 131	/.003	9.346	7.906	8.319	8,726	8,981	B.981	8.734
11/28/2007	7,203	7.486	7.551	7,466	7.336	7.401	7.491	7,586	7.659	7.686	7,751	8.146	8.576	9.036	8.311	9.311	9.061 7.800	8.161
12/27/2007	7.172	7.2	7,237	7.272	7.34	7.436	7.536	7.621	7.654	7.729	B.111	8.546	8.809	8.824	8.601	7.963	7 954	8.02
1/29/2008	7.996	7.943	7,933	7.985	8.07	8.153	8.223	8.235	8,308	8.553	8.828	9.033	9.038	8.828	B.096	8.065	8,149	8.213
2/2//2008	8.93	9,06	9.103	9,165	9.239	9.291	9.303	9,383	9.673	10.033	10.263	10.233	9.983	8.663	8,578	8.628	8,688	8,738

	CURRENT												
	MARKET	3 MONTHS	6 MONTHS	9 MONTHS	12 MONTHS	15 MONT	THS				gain Alimenthe	gain 45	
	PRICE	EARLIER	EARLIER	EARLIER	EARLIER	EARLIER	t i i i i i i i i i i i i i i i i i i i	gain 3months	gain 6 months	gain 9months	12months	Tomontins	
7/1/1996	2 19	2											
8/1/1996	1.88	2 2	.69					-0.808	4				
9/1/1996	2.09	6 2	.21					-0.114	,				
10/1/1996	2.73	1 2.	177					0.554	(				
11/1/1996	i 3.43	7 2.3	341 2	.75				1.096	, 0.687				
12/1/1996	3.38	4 2.9	515 2	.22				0.869	+ 1.164				
1/1/1997	2.98	6 2.0	525 2.	085				0.361	0.901		-		
2/1/1997	7 1.7	82	.49 2	.04 2.4	425			-0.71	-0.26	-0.645	j -		
3/1/1997	7 1.60	5 2.	307 2	,08 1.9	995			-0.502	-0.2/5	-0.19	3		
4/1/1997	7 2.12	2 1.	865 2	2.16	2			0.257	-0.038	0.122	2	-	
5/1/1997	7 2.34	6	1.9 2	2.18 1	.93 2.1	1		0.446	0.166	0.416	o 0.23	36	
6/1/1997	7 2.14	52.	137 2.	125 2.0	055 2.01	5		0.008	3 0.02	0.09	y 0.1	13	
7/1/1997	7 2.16	1 2.	311 1.	968 2.1	153	2	A	-0.13	0.193	0.000	8 0.16	51 50	0.49
8/1/1997	7 2.51	5 2	2.12 1	1.95 2.1	1/5 1.93	5	2.035	0.39	0.505	0.34	+ U.:	20 20	1.256
9/1/1997	7 3.34	6 2.	116 2.	155 2.	13/ 2.11		2.09	1.2.	) 1.191 1 0.976	1.20	a 1.24	29 EC -	1,200
10/1/1993	7 3.26	6 2.	625	2.39 2.	144 2.3	51	2.175	0.64	0.875	( 0.22	2 0.95	30 07 (	0.490
11/1/199	7 2,57	7 3.	304	2.4 2	2.25 2.3	38	2.095	-0.72	0.177	0.32	0.1	57 1	0.402
12/1/199	1 2.23	so 3.	367 Z.	1420 Z. 646 7	ວອ/ 2,30 405 ວ່າ	27 10	2.139	-1.10	0.193	0.10.	∠ -0.10 ∧1 -0.2	11 -	0.0169
1/1/199	a 2.00	/1 2 xe ^	156 2	.und 2. 157 °	42.3 Z.Z 253 0.0	12	2.17	-0.54	/ -0.044 1 _0.09/	-0.420 L 0.03	- •V.2 (3, 0.4	89.	0.122
2/1/199	o 2.20 o ^	2 2	083		115 2.0	-* 15	2 134	0.13	່ "ບ.204 7 _ດດາ	τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ τ	5 0.14	85	0 166
AH4400	ບ 2 ຂຳ <sup>1</sup> 4	Z	333 7	188 2	209 21	07	1.962	_0.07	1 0.07/	i 0.10	2 01	92	0.3
5/1/100	ບ <u>2.2</u> 0 ຊີ ວດ	17 2	385	216	2.0 2.0	55	1 957	10.0- AF n_	8 -0.14	3 _0.25	3 -00	38	0.06
6/1/199	8 2.0	58 2	343	2.17	2.22 2.0	65	2.022	0.00	5 0.18	3 0.13	8 0.2	93	0,336
7/1/199	8 19	17	21	2.36 2	195 2.0	83	2 648	-0.15	8 -0.418	a -0.25	3 -0.1	41 -	0.106
8/1/199	8 16	72 2	433	2.42 2	.228 2.	27	2.043	-0.76	-0.74	8 -0.55	i6 -0.5	98 -	0.371
9/1/199	8 2.0	31 1	982	2.41 2	233 2.	26	2.08	0.04	9 -0.37	J -0.20	2 -0.2	29 •	0.049
10/1/199	1.9	72 1	.973 2	.385 2	.508 2,	38	2.233	-0.00	1 -0.41	3 -0.53	16 -0.4	08 -	-0.261
11/1/199	8 2.1	49 2	.514 2	.783 2	.682 2.	53	2,565	-0.36	5 -0.63	4 -0.53	3 -0,3	81 -	-0.416
12/1/199	8 1.7	65 2	.477 2	.603 2	.699 2.	52	2.566	-0.71	2 -0.83	8 -0.97	34 -0.7	'55 ·	-0.801
1/1/199	99 1.	81 2	.235 2	.342	2.49 2.5	45	2,456	-0.42	5 -0.53	2 -0.6	58 -0.7	35 -	-0.646
2/1/199	99 1.6	66 1	.799 2	.335 2	.525 2.4	22	2.187	-0.13	3 -0.66	9 -0.85	59 +0.7	56	-0.521
3/1/199	<b>39</b> 1.8	52 1	.851 2	205 2	.308 2.2	85	2.18	0.00	/1 -0.35	3 -0.45	56 -0.4	133 -	-0.328
4/1/199	99 2.3	48 1	.727 2	.145 2	.185 2.2	45	2.268	0.62	21 0.20	3 0.1F	63 0,1	103	80.0
5/1/199	99 2.2	26 1	.915	1.86	2.14 2	.34	2.25	0.31	1 0.36	6 0.08	<b>36 -0</b> .1	114	-0.024
6/1/199	99 2.2	62 2	.358	.925 2	.175 2.2	284	2.247	-0.09	6 0.33	7 0.06	87 -0.0	022	0.015
7/1/199	99 2.6	01 2	235	1.846 2	.158 2.1	85	2.267	0.36	<i>i</i> 6 0.75	5 0.44	43 0,4	416	0.334
8/1/199	99 2.9	12 2	.349	,995	1.95 2	.14	2.358	0.50	<b>i3</b> 0.91	7 0.96	62 0.7	172	0.554
9/1/199	99 2	,56 2	2.623	2.398 2	2,031 2.2	15	2.325	+0.0+	i3 0.16	2 0.52	29 0.3	345	0.235
10/1/19	99 3.0	92	3.027	2.4/5 2	2.119 2	.34	2.356	0.0	JS 0.61	7 0.9	73 0,7	752	0.736
11/1/19	aa 2	.12 3	2 00 0	2.008		.31	2.452	-0.9	36 -0.54	8 -0.2	78 -0	0.19	+0,332
1/1/19	ອອ 2.3 ກກ າ	61 ·	3.23	2.090 2	2.3 2.3	20	2.538	-0.8	ж •0.55	4 -0.3	).0- B1	037	-0.194
2/4/204	vv ∠ 00 ⊃r	.01	354	2.307	ອວີລີ 2 ວ_A7 ກຳ	.∡∃ 283	2.423	0.2	/ວ -0.34 05 0.11	· 0.0	25 0	1,32	0,187
3/1/20	00 2.1	79 ·	25	2 655	2.77 2.	222	2.2	0.1	30 -0.1/	I 0.0	79 0.3	200	0,349
4/1/20	0 <b>0</b> 30	089	2 576	2.308	2485 2.	31	2,140			-0.4 M 0.0	00 U.S	30/ 770	0.732
5/1/20	00 44	106	2.928	2.355	255 2	285	2.112	0.0	10 U./0 78 0.00		V4 U.	179	0.977
6/1/20	00 4.3	369	3,105	2.515	2.587 2	36	2 31	1.4	64 1.00	- 1.0 54 17		121	2.203
7/1/20	00 3	.82	4.268	2.63	2.375 2	47	2 327	_0 A	49 14	19 1.1		125	1 402
8/1/20	00 4.	618	4.37	2.951	2.413	.58	2 313	יי.ט <del>י</del> מס	4B 1.64			038	7 305
9/1/20	00 5.	312	3.861	3.126	2.558 2	637	2.4	14	51 71/	// <u>2.2</u> 86 27	.50 Z. /54 9	675	2 912
10/1/20	00 4.	541	4.697	4.365	2.802 2	554	2.661	-0.1	56 0.1	76 17	(39 t	987	1.88
11/1/20	00 6.	016	5.562	4.485	3.158 2.	684	2.877	0.4	54 15	31 78	358 3	.332	3 139
12/1/20	100 9	9.98	4.677	4.048	3.327	2.8	2.93 SPIKE	5.3	03 59	32 66	353	7.18	7.05
1/1/20	01 6.	293	6.005	4.465	4.255 2.	801	2.606	0.2	18B 1.R	28 20	38 3	492	3 687
2/1/20	101 4.	998	8.286	4.988	3.925	2.86	2.49	-3.2	.88 n	01 11	073 2	138	2 508
3/1/20	01 5.	384	5.55	4.064	3.593 2.	845	2.458	-0.1	66 1.	32 17	791 2	539	2.926
4/1/20	001 4.	891	5.122	4.68	3.845 3.	672	2.52	-0.2	231 0.2	11 1.0	046 1	219	2 371
5/1/20	<b>)01</b> 3.	738	5.508	5.365	4.607 3.	425	2,697	-1	.77 -16	27 -01	369 n	.313	1.041
6/1/20	<b>)01 3</b> .	182	5.002	5.375	3.975 3	.546	2.81	-1	.82 -2.1	93 -0.7	793 -0	.364	0.372
7/1/20	<b>)01</b> 3.	.167	3.893	5.235	4.625	3.82	3.662	-0.7	26 -2.0	68 -1.4	458 -0	.653	-0,495
8/1/20	001 2.	295	3.353	5.55	5.285 4	.569	3.362	-1.0	158 -3.2	.55 -2	.99 -2	274	-1.067
		1 00	3 9 2 9	E 100	£ ae	0.00							· · · · ·
9/1/20	901 1	1.05	3.2.39	5.102	0.30	3.88	3.544	-1.4	109 -3.2	72 -3	1.53 -	2.15	-1.714

4 # 1# 120.04	2 246	2 633	3 965	5775	5 43	4 812	-0.317	-1 649	-3.459	-3.114	-2.496
11/1/2001	2.510	2.000	3,964	5.460	5.40 E EOE	4 337	-0.909	1 309	-2 907	-3.04	-1 672
12/1/2001	2,555	3.404	3.004	0.402	5.555	4.221	-0.303	1.004	2.301	2.04	3 550
1/1/2002	2.006	2.827	3.1	4.291	5.24	4,565	-0.621	-1.094	-2.205	*3.234	-2.339
2/1/2002	2.388	2,63	2,805	3.758	5.205	4.832	-0.242	-0.417	-1.37	-2.817	-2.444
3/1/2002	3.472	2.15	3.279	3.544	4.646	4.54	1.322	0,193	-0.072	-1.174	-1.068
4/1/2002	3 3 19	2 4 4 9	2.82	2.96	3 753	4 35	0.87	0.499	0.359	-0.434	-1.031
4/ 1/2002	5.515	2.204	3.74	2 927	3 49	4 695	0.026	0.68	0 593	-0.06	-1 165
5/1/2002	3.42	3.394	2.14	2.021	3.40	4.000	0.020	0.995	0.404	0.00	1.945
6/1/2002	3.278	3.407	2.393	3.3/9	3.64	4,623	-0.129	0.005	-0.101	-0.362	-1,340
7/1/2002	2.976	3,557	2,614	2.945	3.095	3.889	-0.581	0.362	0.031	-0.119	-0.913
8/1/2002	3.288	3.373	3.459	2.843	2.911	3.574	-0.085	-0.171	0.445	0.377	-0.286
0/ //2002	3 696	2.03	3 452	2 488	3 439	3.675	0.756	0 234	1.198	0 247	0.011
9/1/2002	3.000	2.30	3.007	2,400	0.435	2,070	0.453	0.259	1 205	0.951	0.858
10/1/2002	4.126	3.6/3	3.00/	2.921	3.175	3.200	0.455	0.2,35	1.200	0.351	0.000
11/1/2002	4.14	4.114	3.951	3,948	3.258	3,291	0.026	0.189	0.192	0.882	0.849
12/1/2002	4.988	4.346	3.635	4.014	3.031	3.896	0.642	1.353	0.974	1.957	1.092
4/4/2003	5 66	4 186	3 983	4.127	3 211	3.383	1,474	1.677	1.533	2.449	2.277
01/2003	0.00	4.000	2 096	3 999	3 810	3 749 SDIKE	4 241	5 147	5 245	5 315	5.915
2/1/2003	9.133	4.052	3.900	3.000	3.516	S.210 SFIRE	4241	0.141	4 660	4 500	0.010
3/1/2003	5.146	5.234	3.946	3.48	3.554	2.804	-0.065	1.2	1.000	1.392	2.342
4/1/2003	5.123	6.23	3.891	3.776	3.792	3.007	-1.107	1.232	1.347	1,331	2.116
5/1/2003	5 945	5 28	4.507	3.827	3.781	3.573	0.665	1.438	2.118	2.164	2.372
JY 1/2003	5,515	6 365	4.070	2.004	2 522	2 597	0.026	0.415	1 33	1 758	1 704
6/1/2003	5,291	5.205	4.0/0	3,901	3.555	3,367	0.020	0.413	1.00	0.004	0.044
7/1/2003	4.693	6.067	5.6	3.947	3,829	3.882	-1.3/4	-0.907	0.746	0.864	0.811
8/1/2003	4.927	5,45	5.232	4.51	3.875	3.865	-0.523	-0,305	0.417	1.052	1.062
0/4/2003	4 43	4 671	5 305	4 614	3.965	3.593	-0.241	-0.875	-0.384	0.465	0.837
4014/0000	4,450	E 109	8 16	5 645	4 087	4 013	-0.649	-1 701	-1 186	0 372	0.446
10/1/2003	4.409	5.106	0.10	3.043	4.007	4.013	-0.045	-1.101	-1.100	0.012	0.007
11/1/2003	4,86	4.881	5.837	5.4	4.815	4.223	-0.021	-0,977	-0.54	0.045	0.637
12/1/2003	6.15	5.103	5.281	5.67	5.099	4.35	1.047	0.869	0.48	1.051	1.8
4/4/2004	5 775	5.08	5 428	6 24	573	4 164	0.695	0.347	-0.465	0.045	1.611
0/4/0004	E 45	E 002	4 040	6 601	51	4 565	0.843	0.204	-0 541	0.05	0.595
2/1/2004	5.15	3.993	4.540	5.091	5.1	4,353	-0.043	0.204	-0.041	0.05	0.004
3/1/2004	5.365	5.325	4./34	4.68	4./15	4.384	0.04	0.631	0,685	0.65	0.981
4/1/2004	5.935	5.241	4.62	4.77	4.94	4.617	0.694	1.315	1.165	0.995	1,318
5/1/2004	6.68	5.55	5.083	4.613	4.865	4.42	1.13	1.597	2.067	1.815	2.26
6/1/2004	6 1 4 1	6.033	5 245	4 699	4 57	4 59	0.108	0.896	1 442	1 571	1 551
7/4/2004	0.141	6.000	E 204	4.075	4 705	4.05	0.711	0.000	4 979	1.000	1 173
//1/2004	0.040	0.759	5.321	4.075	4.705	4.8/5	-0.711	0.727	1.373	1.205	1.173
8/1/2004	5.082	6.228	5.607	5.108	4.617	4.88	-1,146	-0.525	-0.026	0.465	0.202
9/1/2004	5.723	6,197	6.066	5.233	4.713	4.578	-0.474	-0,343	0.49	1.01	1.145
10/1/2004	7.626	5.916	6.886	5.473	4.841	4.946	1.71	0.74	2.153	2,785	2.68
11/1/2004	6 793	7.021	6714	5 974	5 478	4 935	-0 228	0.079	0.819	1 315	1 858
11/1/2004	0.793	0.400	0.7 14	0.514	5.770	4.555	-0.220	0.075	0,013	1.313	1.000
12/1/2004	6,213	9.435	6.943	6.509	5.750	5.163	-3.222	-0.73	-0.296	0.457	1.05
1/1/2005	6.288	7.731	6.831	7.129	5.725	5.071	-1.443	-0.543	-0.841	0.563	1.217
2/1/2005	6.715	6.359	7.181	6.64	5.854	5.353	0.356	-0.466	0.075	0.861	1.362
3/1/2005	7.323	6 322	7 55	6.093	5 484	4 996	1.001	-0 227	1 73	1 839	2 3 27
4/4/3005	6 748	6.965	6 601	5 091	5.956	4.030	0.117	0.147	0.767	0.000	4 770
4/ 02003	0.740	0.005	0.001	0.000	5.930	4.8/3	-0.117	0.147	0.767	0.792	1.773
5/1/2005	6.123	7.51	6.202	6.296	5.875	5.152	-1.387	-0.079	-0.173	0.248	0.971
6/1/2005	6.976	6,888	6.427	7,25	6.014	5.359	0.088	0.549	-0.274	0.962	1.617
7/1/2005	7.647	6.287	6.95	6.691	6.05	5 998	1.36	0 697	0.956	1 597	1 649
8/1/2005	10 847	7 113	7 668	6 255	6 3 2 6	S 02 SDIVE	3 794	2 170	4 500	4.500	4.007
0// 10000	44.400	7.044	7.004	0.200	0.020	J.SZ OFINE	3.1.34	3,173	4.392	4.322	4.927
9/1/2005	14.190	1,044	7.024	0.433	1.20	6.043 SPIKE	6.552	7.172	(.(41	6.936	8.153
10/1/2005	13.832	11.409	6,994	7.695	6,975	6.298 SPIKE	2.423	6.838	6.137	6.857	7.534
11/1/2005	11.18	14.991	8.275	8,343	6.97	6.804 SPIKE	-3.811	2.905	2.837	4.21	4.376
12/1/2005	11.022	14.004	9.037	8.149	7 32	8 12 SPIKE	.2 982	1 985	2 873	3 702	2 002
1/1/2006	84	11 730	11 004	7 800	7 705	7.46	3 330	2.500	2.013	0.002	2.502
0112000	7 4 4 9	14.05	11,304	1.033	1.103	7.40	-3.539	-3.504	0.501	0.695	0.94
2/1/2006	7.132	11.26	11,366	8.523	8.401	6.97	-4.148	-4.254	-1.411	-1.289	0.142
3/1/2006	7.233	8.652	10.854	7.762	6,977	6.125	-1.419	-3.621	-0.529	0.256	1.108
4/1/2006	7,198	7.475	9.869	9,269	6.715	6.49	-0.277	-2.691	-2 071	0.483	0 708
5/1/2006	5.925	7.641	9,985	10.883	7 457	6 996	-1716	-4.06	-4 959	-1 522	1 071
6/1/2006	6 107	7 504	9.06	10 640	7 740	6.034	-1.710	-+.00	-4.556	-1.532	-1.0/1
W 1/2000	0.107	1.521	0.50	10.019	1.115	0.924	-1.414	-2.643	-4.512	-1.606	-0.817
//1/2006	7.042	6.419	7.845	10.009	9.382	6.846	0.623	-0.603	-2.967	-2.34	0.196
8/1/2006	6.816	6.562	8.056	10.085	10.919	7,542	0.254	-1.24	-3.269	-4.103	-0 726
9/1/2006	4.201	7.363	8.234	9.17	10 674	7 78	-3 162	4 033	_4 960	6 473	3.570
10/1/2006	7 153	88	8 304	0.045	10 527	0.767	4 647		4.000	-0.47.3	-3.5/9
441412000	0.040	7 000	0.007	3.045	10.001	9.767	~1.047	-1.241	-1.892	-3.384	-2.614
11/1/2006	8.316	7.209	9.687	10,366	11.11	12.029	1.109	-1.369	-2.048	-2.792	-3.711
12/1/2006	5.838	8.277	10.868	11.864	11.455	11.884	-2.439	-5.03	-6.026	-5.617	-6.046
1/1/2007	6.917	8.606	11.115	10.364	10.7	11.352	-1 689	-4 198	-3 447	.3 793	.4 435
2/1/2007	7.547	6.257	7.579	10,272	10 831	11 24	1 20		-0 700	3 104	2 602
1/1/2007	7 559	7 011	7 600	8 CC0	0.700	0.34	1.27	-0.032	-2.123	-3.284	-3.093
JF 112007	1.000	7,012	1.302	0.008	9.709	9,34	0.546	-0.024	-1.11	-2.151	-1.782
4/1/2007	7.508	7.784	8.102	8.515	8.189	8.471	-0.276	-0.594	-1.007	-0.681	-0.963
5/1/2007	7.591	7.813	6,577	7.163	8.292	9.084	-0.222	1.014	0 428	-0 701	-1 493
6/1/2007	6.929	7.764	7 274	7 706	8 652	9 689	-0 826	_0 345	_0 777	_1 700	-130
7/1/2007	E 11	7 964	8042	P 245	0.001	0.000	-0.033	-0.343	-0.177	-1.723	-2.70
111/2007	0.11	1.001	0.042	0.315	0./85	8.344	-1.751	-1.932	-2.205	-2.675	-2.434
8/1/2007	5.43	7.174	8.109	6.885	7.401	8.612	•1.744	-2.679	-1.455	-1.971	-3.182
9/1/2007	6,423	6.436	8.057	7.569	7.893	8,993	-0.013	-1.634	-1.146	-1.47	-2,57
10/1/2007	7.269	6.561	8,764	8.744	8.925	10.005	0 708	-1 495	-1 475	-1 656	2 736
11/1/2007	7 203	7 746	8 786	9 195	0.346	8 590	0.100	4 500	-1.4/0	-1.000	-2.130
10/1/2007	7 470	7.140	0.700	0.900	0.310	0.003	-0.543	-1.563	-2.282	-1.112	-1.386
12/1/2007	7.172	0.299	0,776	9.802	8.959	9.008	-1.127	-1.604	-2.63	-1.787	-1.836
1/1/2008	7,996	7.551	7.913	9.799	9.554	9.575	0.445	0.083	-1.803	-1,558	-1.579
2/1/2008	8.93	7.237	7.951	8.936	9 555	8.445	1 603	0 979	a00.0-	1 625	0.495
						411.10		V.VI V	-0.000	-0.023	0.400



Current Futures Prices and Prices of MMBtus Purchased 3 Months Earlier



Current Futures Prices and Prices of MMBtus Purchased 6 Months Earlier



Current Futures Prices and Prices of MMBtus Purchased 9 Months Earlier



Current Futures Prices and Prices of MMBtus Purchased 12 Months Earlier



Current Futures Prices and Prices of MMBtus Purchased 15 Months Earlier

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 8 Page 1 of 1

Q.

Does FPL agree that immediately following the 2000-2001 and 2002-2003 price spikes, losses would have been realized for only about twelve months? Explain your response.

Α.

FPL does not agree. We assume the 12 months earlier hedging strategy and demonstrate our response with the following data:

#### 12/2000 Spike

- The average gains(losses) during the first 12 months after the spike (1/2001 to 12/2001) would have been -**\$0.2814/mmbtu** 

- The average gains(losses) during the next 12 months after the spike (1/2002 to 12/2002) would have been -**\$0.3155/mmbtu** 

#### 2/2003 Spike

- The average gains(losses) during the first 12 months after the spike (3/2003 to 2/2004 ) would have been **\$0.8991/mmbtu** 

- The average gains(losses) during the next 12 months after the spike (3/2004 to 2/2005) would have been **\$1.1458/mmbtu** 

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 9 Page 1 of 1

 $\mathbf{Q}_{*}$ 

Does FPL agree that between the each of the 2000-2001 and 2002-2003 price spikes and the twelve-month periods immediately following each of those periods, gains and losses would have roughly cancelled each other, and price stability would have resulted for anyone purchasing futures contracts several months in advance and selling those contracts during the lower-than-high-price periods, and using the gains and losses to offset "market price volatility"? Explain your response

А.

To answer this we again refer to the table of Hedge Gains/Losses (Table 1 1) and the methodology of how gains/losses are calculated. Between each of the 2000-2001 and 2002-2003 price spikes and the following twelve-month periods immediately following each of those periods, gains and losses do not always cancel each other. As Table 1 1 shows, from 1/2001 to 12/2001, hedges would have resulted a loss of \$0.2814/mmbtu assuming hedges were bought 12 months in advance. However, from 3/2003 to 2/2004, immediately following 2002 - 2003 spike, hedges would have resulted a net gain of \$0.8991/mmbtu assuming hedges were bought 12 months in advance.

Specifically, these are only two points in time.

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 10 Page 1 of 1

Q.

Does FPL agree that losses are still occurring roughly 24 months after the 2005-2006 price spike? Explain your response.

 $\mathbf{A}_{\cdot}$ 

Yes, we agree. Referring to Table 1.1, we can see that losses occurred in the 24 month period after the 2005 spike for hedges bought 6 months, 9 months, 12 months and 15 months in advance.

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 11 Page 1 of 1

#### Q.

## Can FPL tell us why, roughly 24 months after the 2005-2006 price spike, futures prices are still one to two dollars above their comparable current market prices?

#### А.

We believe that the premise of this question does not hold true in current market conditions. Post 2005-06 spike, the natural gas market has been in a declining phase. This phase had lasted until the end of 2007 However, we have seen the trend reverse since the beginning of 2008 On March 12, 2008, natural gas futures prices for 2009 and 2010 were \$9.66/mmbtu, \$9.07/mmbtu, respectively, while April 2008 natural gas futures price was \$10.01/mmbtu Natural gas futures prices for 2009 and 2010 were not trading at a higher level than April 2008 price. While the price phenomena highlighted by the Staff might have been true until the end of 2007, FPL believes that the current market situation does not reflect this.

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 12 Page 1 of 1

Q.

Should another price spike occur in the near future, with regard to natural gas market prices and futures prices, does FPL think that the period following the spike would resemble the period following the 2000-2001 and 2002-2003 spikes, or the period following 2005-2006 price spike? Why?

Α.

Many factors influence natural gas futures prices. Should another price spike occur in the near future, FPL has no way of knowing whether the period following the spike would resemble the period following the 2000-2001 and 2002-2003 spikes, or the period following 2005-2006 price spike. It is also possible that historical price behaviors do not represent future price patterns.

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 13 Page 1 of 1

Q.

In carrying out hedging activities to achieve reduced price volatility, does FPL regard "volatility" as 1) unknown prices in future periods, or 2) period-to-period price variability?

Α.

FPL regards volatility as the unknown or unpredictable variability in prices from period-to-period.

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 14 Page 1 of 1

Q.

Generally, the longer the refund/recovery period for refunding over recoveries or recovering under recoveries, the smoother will be the period-to-period recovery factors. Agree? Explain your response

Α.

Yes to the extent that true-up amounts are spread over greater periods of time, this will tend to smooth out recovery factors.

Florida Power & Light Company Docket No. 080001-E1 03/04/08 Staff's Data Request Question No. 15 Page 1 of 1

Q. Is this truer for under recoveries than it is for over recoveries?

#### Α.

No

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 16 Page 1 of 1

Q.

If an under recovery is extraordinarily small (negative sign, large number of dollars) or an over recovery is extraordinarily large (positive sign, large number of dollars), what benefit is there to ratepayers deferring part of the amount beyond the next immediate recovery period?

А.

There would still be some amount of volatility control by causing a "smoothing out" effect regardless of how small or large the true-up amount

Florida Power & Light Company Docket No. 080001-E1 03/04/08 Staff's Data Request Question No. 17 Page 1 of 1

Q.

As future months draw nearer, if you realize that your natural gas (heavy oil) needs are going to be lower than anticipated when swaps were initiated, do you reverse your short positions to maintain your percentage of hedged MMBtu's (barrels)?

Α.

Yes FPL currently "rebalances" its hedge positions to stay within pre-determined tolerance bands around its management-approved hedge percentages

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 18 Page 1 of 1

Q.

Table 3 shows the estimated End-of-Period Total Net True-ups [Column (c)], estimated Total Fuel Revenue [Column(d)], and estimated Fuel Revenue Applicable to Period [Column (f)] for the last five years' reprojected estimates. The table also shows over-recovery percentages based on total revenue [Column (e)] and over-recovery percentages based on applicable revenue [Column (g)]. The percents are also based on reprojected estimates.

Do you agree that the amounts in Table 3 are correct for FPL? If not, please provide corrected dollar amounts.

 $\mathbf{A}_{\cdot}$ 

Yes.

Florida Power & Light Company Docket No. 080001-E1 03/04/08 Staff's Data Request Question No. 19 Page 1 of 1

 $\mathbf{Q}_{\mu}$ 

Do you agree that the percents in Column (g) are calculated according to the mid-course percent method adopted in 2007 (Order No. PSC-07-0333-PAA-EI)? If not, please provide corrected percents.

Α.

Yes, for FPL, the calculations of the percent of fuel over/under-recoveries for the determination of a mid-course correction in Column (g) of Table 3, are based on the mid-course percent method adopted in Order No PSC-07-0333-PAA-EI, where the current period's total actual/estimated jurisdictional fuel revenue applicable to period is based on the Estimated/Actual True-Up Filing (E-1b) for the years 2003-2007

Florida Power & Light Company Docket No. 080001-E1 03/04/08 Staff's Data Request Question No. 20 Page 1 of 1

.

#### Q.

Although none of the four large IOU's have petitioned for mid-course corrections since early 2003, do you agree that during the previous five years, your mid-course percents have been greater than 10 percent, at least at the times that some of the estimated revenues and expenses were "reprojected." If you disagree, please explain.

#### А.

Based on the calculation of the mid-course percent method adopted in 2007 (Order No. PSC-07-0333-PAA-EI), FPL would have been under-recovered by more than 10% twice during the years 2003-2007.

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 21 Page 1 of 1

Q.

Please indicate the years from 2003 through 2007 in which hedging gains or losses prevented the percents in columns (e) and (g) from being less than -10% or greater than +10% at the time that the estimates were reprojected.

Α.

Hedging results prevented the percents in columns (e) and (g) from being less than -10% or greater than +10% in 2004, 2006 and 2007. In 2003 FPL's Hedging Program was not fully implemented and FPL experienced a midcourse correction that year

Florida Power & Light Company Docket No. 080001-EI 03/04/08 Staff's Data Request Question No. 22 Page 1 of 1

Q.

Please indicate the years from 2003 through 2007 in which hedging gains or losses caused the percents in columns (e) and (g) to be greater than -10% or greater than +10% at the time that the estimates were reprojected.

А.

Hedging results did not cause the percents in columns (e) and (g) to be less than -10% or greater than +10% during 2004 through 2007. In 2003 FPL's Hedging Program was not fully implemented and FPL experienced a midcourse correction that year

FLORIDA POWER & LIGHI CO. DOCKET NO. 080001- EI 03/05/08 HEDGING DATA REQUESI QUESTION NO. 1 PAGE 1 OF 2

Q.

FPL buys very large quantities of residual oil and natural gas. FPL has storage for natural gas and on-site storage for residual oil. Given its ability as a large buyer of residual oil and natural gas with storage capability, FPL has significant ability to physically hedge oil and gas prices.

A. Does FPL agree with the above statement? If not, explain.

B. With the availability of financial hedging instruments in the oil and gas markets, have fixed-price contracts for the supply of residual oil and natural gas become uncommon? Please explain.

C. To the extent to which FPL engages in physical hedging for the price of natural gas, residual fuel oil, and purchased power, how does (or how would) FPL measure the effectiveness of physical hedging?

А.

A. FPL agrees that because it is one of the largest consumer's of natural gas and residual fuel oil among electric utilities in the United States, its opportunity to hedge large quantities of natural gas and residual fuel oil both physically and/or financially is significant. However, the need to hedge large quantities of fuel also creates limitations on FPL's flexibility regarding hedging strategies.

B Although long-term fixed-price contracts for the supply of residual fuel oil and natural gas are not uncommon, FPL's recent experience has been that, in general, suppliers are more comfortable entering into index-based contracts for the supply of residual fuel oil and natural gas. This is particularly applicable to FPL's residual fuel oil suppliers. Because FPL's residual fuel oil specifications are stringent, a supplier would be exposed to much greater price tisk by entering into a fixed-price contract as meeting these specifications can require the blending of several residual streams. Therefore, a supplier would generally charge a premium for a fixed-price contract to help mitigate this price exposure.

C. The effectiveness of both physical and financial hedges is measured by the reduction in fuel price volatility that is achieved by implementing the hedge. Calculating the gains and/or losses associated with hedge transactions is not an appropriate measure of the effectiveness of hedging, however gains and/or losses are a direct result of hedging. Per Commission Order No. PSC-02-1484-FOF-EI, each IOU is required to report gains and/or losses that result from its hedging activities Calculating the gains or losses

FLORIDA POWER & LIGHI CO. DOCKET NO. 080001- EI 03/05/08 HEDGING DATA REQUESI QUESTION NO. 1 PAGE 2 OF 2

associated with physical hedging is identical to calculating the gains or losses associated with financial hedging The fixed-price hedge must be compared to a price that the buyer would have paid if the hedge was not initiated. For example, the gains or losses associated with a financial swap for natural gas are calculated by taking the differential between the financial swap price and the monthly NYMEX settlement. Likewise, if FPL were to enter into a physical, fixed-price contract for natural gas supply from FGI Zone 3, FPL's fixed-price would be compared to the relevant FGI Zone 3 index to calculate the gain or loss associated with the hedge.

FLORIDA POWER & LIGHI CO. DOCKET NO. 080001- EI 03/05/08 HEDGING DATA REQUESI QUESTION NO. 2 PAGE 1 OF 2

Q.

Please refer to paragraph 16 of the petition.

A. Does FPL through its petition propose eliminating physical hedging for residual oil and natural gas purchases? For purchased power? For natural gas in storage?

B. If so, why does FPL propose to eliminate physical hedging (for gas, oil, or purchased power) as discussed on Page 10 of its petition?

C. What types of physical hedges and associated annual volumes did FPL hedge prior to the issuance of Order No. PSC-02-1484-FOF-EI?

D. What types of physical hedges and associated annual volumes did FPL hedge after the issuance of Order No. PSC-02-1484-FOF-EI?

E. In consideration of, among other things, Paragraph 4 of FPL's petition, has FPL evaluated the effectiveness of a hedging policy restricted to physical hedging? Please explain.

### А.

A FPL's petition for the Volatility Mitigation Mechanism (VMM) proposes to eliminate all hedging, both physical and financial for residual fuel oil and natural gas FPL's petition does not propose to change any of its current practices with regard to the utilization of purchased power transactions to help reduce overall fuel costs or the utilization of natural gas storage.

B. FPL proposes to eliminate both physical and financial hedging for residual fuel oil and natural gas because its VMM approach can achieve the same objectives of hedging while avoiding some of the disadvantages of hedging

C. In 2002, prior to the issuance of Order No. PSC-02-1484-FOF-EI, FPL hedged approximately 71.5 BCF of natural gas utilizing physical, fixed-price contracts. This represented approximately 25% of FPL's total natural gas consumption for year. FPL also reported natural gas storage utilization in its annual hedging results filing, however these volumes are not included in the percentage listed. FPL is no longer reporting natural gas storage utilization in its annual hedging results filing consistent with Order No. PSC-06-1070-FOF-EI which concluded that storage of natural gas is not a physical hedge as defined in Order No. PSC-02-1484-FOF-EI. Also during 2002, FPL hedged approximately 3.9 million barrels of heavy fuel oil utilizing physical. fixed-price

FLORIDA POWER & LIGHI CO. DOCKET NO. 080001- EI 03/05/08 HEDGING DATA REQUESI QUESTION NO. 2 PAGE 2 OF 2

contracts. This represented approximately 13% of FPL's total heavy fuel oil consumption for the year The 2002 hedged volumes represent a significant increase over prior years when FPL was not actively engaged in hedging.

D. After the issuance of Order No. PSC-02-1484-FOF-EI, for the years 2003 through 2006, FPL hedged approximately 5%, 10%, 2% and 0% respectively of its total natural gas consumption utilizing physical, fixed-price contracts. During these years, FPL primarily executed financial hedges as part of its hedging program. Given the size of FPL's hedging requirements, the utilization of financial hedging offered FPL more credit worthy counterparties, additional liquidity and the reduction of supply risk as part of its hedging program. FPL also reported natural gas storage utilization in its annual hedging results filing, however these volumes are not included in the percentages listed. FPL is no longer reporting natural gas storage utilization in its annual hedging results filing consistent with Order No. PSC-06-1070-FOF-EI which concluded that storage of natural gas is not a physical hedge as defined in Order No. PSC-02-1484-FOF-EI. FPL did not hedge any of its total heavy fuel oil consumption utilizing physical, fixed-price contracts for the years 2003 through 2006. For the same reasons listed for natural gas, FPL transitioned into financial hedging for heavy oil.

E The execution of physical and/or financial hedges are both effective for accomplishing the goal of reducing fuel price volatility. As stated in response to Part D above, FPL believes that financial hedging offers several distinct advantages over physical hedging given the size of FPL's portfolio, including more credit worthy counterparties, additional liquidity and the reduction of supply risk as part of its hedging program.

FLORIDA POWER & LIGHI CO. DOCKET NO. 080001- EI 03/05/08 HEDGING DATA REQUESI QUESTION NO. 3 PAGE 1 OF 2

Q.

Staff would like to understand transaction costs – direct, indirect, or estimated - associated with swap transactions.

A. In evaluating whether to use a swap to financially hedge natural gas prices, does FPL compare the value of the swap to concurrent futures contract prices?

B. In evaluating whether to use an option to financially hedge natural gas or residual oil prices, does FPL compare the value of the swap to concurrent futures contract prices?

C. How does FPL determine if it is paying a reasonable price for swaps?

D. In evaluating whether to use a swap to financially hedge natural gas prices, how does FPL evaluate the swap? Discuss bid/ask spreads and comparing quotes from different banks.

E. Does FPL estimate the transaction costs of swaps? For example, would an appropriate estimate be the difference in the initial cost of a swap and the initial cost of futures contracts for the same time and quantity of a natural gas purchase?

#### Α.

A. Yes.

B. FPL compares natural gas prices to concurrent futures contract prices, but not for residual oil since residual oil has no futures contracts

C FPL uses a market comparison approach to execute a financial hedge. For natural gas, the real-time prices can be observed by FPL through electronic tools, such as ICE (InterContinental Exchange), FutureSource or over-the-counter brokers. Residual oil swaps are not an exchange traded commodity and hence competing prices from counterparties, over-the-counter broker quotes, along with observed trends in crude oil prices and estimated price differentials to crude oil prices, are used to determine the market values.

D. FPL uses a market comparison approach to execute a financial hedge. For natural gas, the real-time prices can be observed by FPL through electronic tools, such as ICE (InterContinental Exchange), FutureSource or over-the-counter brokers. FPL has approximately 15 approved counterparties (CPs) for financial

FLORIDA POWER & LIGHI CO. DOCKET NO. 080001- EI 03/05/08 HEDGING DATA REQUESI QUESTION NO. 3 PAGE 2 OF 2

trading. Based on available credit limits with CPs, the trading desk selects 3-4 CPs. The trader obtains competing quotes from these CPs and compares the quotes against each other and the observed market prices. The trader first checks whether the prices are in line with observed market prices. If not, the trader either requests the CPs to re-submit their best prices or will request additional quotes from other CPs. If prices are in line with market prices, the best price for FPL is selected. If two or more prices are similar, then the CP with the lowest credit exposure is selected. If no prices are in line with over-the-counter brokers.

E. Yes. FPL has the ability to utilize swaps or futures contracts. If prices for swaps are equal or better than futures prices, FPL will use swaps. FPL's credit rating enables FPL to set up credit margining arrangements with counterparties which potentially reduce margining/transacting costs.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 4 Page 1 of 1

Q.

Please provide an overview of the company's residual oil and natural gas trading software. Discuss the current information that is available from this software including spot market information and information on futures, options, and swaps.

А.

FPL uses electronic platforms (FutureSource and ICE (InterContinental Exchange)) to observe real time natural gas prices. Both tools provide real time bid/ask prices for natural gas or oil FutureSource also provides the latest energy related news

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 5 Page 1 of 1

Q.

Please provide an overview of company's power trading software. Discuss the current information that is available from this software including spot market information and any information on options, and swaps.

#### А.

FPL utilizes two software programs to generate marginal costs that are utilized when FPL buys or sells power GenTrader software is used to develop marginal cost projections for all transactions that are greater than one hour in duration FPL's Energy Management System (EMS) is utilized to develop marginal cost projections for next-hour transactions. For pricing information, FPL utilizes ICE (InterContinental Exchange) but does not transact power on this platform

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 6 Page 1 of 1

 $\mathbf{Q}_{\cdot}$ 

In its petition - paragraphs 8 and 9 in particular - FPL alleges that regulatory risk associated with its hedging activities has increased and that this could affect its bond rating and increase its cost of capital.

A. Please describe any reference by Moody's, Standard & Poor's, or Fitch to increased regulatory risk associated with hedging activities for any investor-owned electric utility in Florida.

**B.** Please provide documentation of these references to increased regulatory risk in Florida.

#### Α,

FPL's petition states that FPL is concerned that its shareholders might be exposed to risks of non-recovery when the hedging program results in losses. Additionally, as stated in paragraph 8 of the petition,

"8. This concern was exacerbated by the Commission's decision in the 2007 fuel adjustment docket not to rule on the prudence of any of FPL's 2007 hedging results until the Fall of 2008. That approach, regardless of any perceived procedural benefits, effectively leaves FPL's shareholders – and the investment community generally – in doubt as to the final recovery of hundreds of millions of dollars in hedging results during periods such as the present when the pendulum makes its natural swing from net gains to net losses. *If perpetuated in future clause recovery cycles*, this incremental regulatory risk will ultimately result in higher capital costs to FPL and its customers as credit rating agencies reflect this increase in regulatory risk into their credit assessment and investors price this risk into their required returns" [emphasis added]

As the highlighted language indicates, FPL's concern is about potential future consequences if the current uncertainty about hedging prudence reviews continues Accordingly, FPL is not aware of documentation referencing the increased risk at this time, nor would FPL necessarily expect any

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 7 Page 1 of 1

Q.

Please refer to paragraph 10 of the petition. FPL states there is a slight bias against gas short electric utilities.

A. Is this "hedging premium" simply in increase in the price of price volatility insurance that hedging instruments provide, particularly since the tropical storms and hurricanes in the Gulf of Mexico during 2004 and 2005?

**B.** Before the tropical storms and hurricanes in the Gulf of Mexico during 2004 and 2005, were oil and gas producers and marketers paying a hedging premium? Do the producers and marketer ever pay a hedging premium?

C. Please refer to Graph 2.4. Was FPL paying a short hedging premium before the end of 2005?

D. Would the market for futures, swaps, and options, and the market for the underlying commodity, correct any such bias or premium over a longer period?

 $\mathbf{A}_{\cdot}$ 

A The "hedging premium" reflects the additional amount a buyer must pay during periods of generally rising prices to induce a seller to transact. When the underlying market fundamentals point to higher prices (bullish fundamentals), sellers, in theory, are generally reluctant to sell as the potential for lost opportunity is greater. Therefore, a seller would command a premium under rising market conditions to enter into a transaction.

B Following the principle described in Part A., during periods of generally falling prices, one could assume that there will be times when a producer and/or marketer would have to sell at a discount. As market fundamentals point to lower prices (bearish fundamentals), the buyer, in theory, has gained some leverage as sellers are more apt to mitigate the risk of a further reduction in prices

C. Graph 1.4 compares current future prices and prices of MMbtus purchased 15 months earlier. This comparison does not provide any insights whether FPL was paying a hedging premium before the end of 2005

D. FPL has no insight as to whether or not the market will correct any such bias or premium over a longer period.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 8 Page 1 of 1

Q.

Please see Exhibit 2 of FPL's Petition. Show this same graph restricted to the fuel component of the bill rather than the total bill in order to see true impact of hedging separate from the fluctuations of other bill components, such as base rates.

Α.

See attached file

# **Comparison of Volatility Mitigation**



Note: Figures for 2008 are based on FPL's estimated fuel projections filed in September 2007. Therefore, 2008 figures do not represent actual data.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 9 Page 1 of 1

 $\mathbf{Q}_{\cdot}$ 

Please refer to the Specific Parameters identified in Exhibit 3 of FPL's petition. How does FPL intend to bring to the Commission's attention the special circumstances for advance approval, what are examples of such special circumstances, and how quickly will FPL expect the Commission to respond to such special circumstances?

А.

At this time, FPL cannot quantify what type of circumstances could warrant advance approval and therefore, FPL has not developed a specific process for notifying the Commission. However, FPL's intent would be to communicate the emergence of special circumstances as quickly as possible.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 10 Page 1 of 1

Q.

Please refer to Page 11 of FPL's petition, Paragraph 16. FPL appears to indicate that the amount of the final true-up underrecovery is the amount subject to the VMM. Does FPL intend to include over and underrecoveries of the actual/estimated year in its proposed Volatility Management Mechanism? Are actual/estimated year underrecoveries included in the development of FPL's Exhibits attached to its petition?

#### А.

FPL intends to include over and under-recoveries of the final true-up and actual/estimated year in its proposed Volatility Mitigation Mechanism. Both of these true-up amounts are included in the development of FPL's exhibits attached to its petition.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 11 Page 1 of 1

#### Q.

#### Provide examples to demonstrate FPL's intent of Page 3 of Exhibit 3 of FPL's petition.

Α.

A typical example of FPL's intent of Page 3 is as follows:

During a particular year, future prices are consistently trending upward during FPL's "hedging window" (as defined in Exhibit 3). Natural gas prices fall dramatically during the following year due to a number of different factors and FPL's hedge positions result in significant losses. FPL would not be deemed to have acted imprudently in this case because it does not speculate on future fuel prices and would not have had any way of knowing that fuel prices would ultimately drop FPL continued hedging according to its guidelines, it did not speculate on future fuel prices and therefore, acted prudently.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 12 Page 1 of 1

Q.

In the past five years, the Commission has at times determined to spread large FPL fuel underrecoveries over two years and at other times determined to pass through large FPL fuel underrecoveries in a single year. The Commission exercised its flexibility based on the specific circumstances at the time. The Commission has never spread medium to small underrecoveries over two years. Why should the Commission forsake the flexibility of using a case by case review for a policy of spreading all underrecoveries over a two year recovery period?

А.

FPL is proposing to spread underrecoveries over a two-year period as a normal process Should the Commission decide that any particular underrecovery amount does not warrant a two-year recovery, the Commission could mandate a one-year recovery period

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 13 Page 1 of 1

 $\mathbf{Q}_{\mu}$ 

In responding to this question, refer to paragraph 7 of the petition. Here FPL states that the volatility of gain and loss position inherent in FPL's hedging program from time to time has elicited expressions of concern from various stakeholders, suggesting to FPL that there may currently be far less than the full support among constituents than existed at the outset of the hedging program. Please identify the stakeholders who have expressed concerns and specifically what concerns they expressed and when they expressed such concerns.

#### А.

Please refer to Page 5 of FPL's Petition

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 14 Page 1 of 1

Q.

Please refer to paragraph 13 of the petition. It references Exhibit 2. Paragraph 13 states that Exhibit 2 shows fuel charges that customers actually have paid or will pay during the period of 2000 to 2008. Is it correct that Exhibit 2 shows the entire 1,000 KWH residential bill for those years rather than fuel charges?

А.

Yes. Exhibit 2 shows the entire 1,000 KWH residential bill for those years

Florida Power & Light Company Docket No. 080001-E1 03/05/08 Hedging Data Request Question No. 15 Page 1 of 1

Q. Under VMM, would all incremental hedging O&M costs be eliminated? When?

Α.

Yes. Incremental hedging O&M costs would be eliminated beginning in 2009

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 16 Page 1 of 1

Q.

Under VMM, would there be any residual value to the incremental hedging O&M costs incurred to date, for such things as software programs?

Α.

No FPL's incremental hedging O&M costs have been solely of the "expense" type

Florida Power & Light Company Docket No. 080001-E1 03/05/08 Hedging Data Request Question No. 17 Page 1 of 1

Q.

Under VMM, would employee positions added to staff for FPL's hedging program remain, and if so, what duties would be performed? When would such positions be deleted?

 $\mathbf{A}_{\mathbf{r}}$ 

FPL does not intend to eliminate these positions These highly trained employees could perform numerous other functions within EMT or within FPL generally. However, their salaries will no longer be included for recovery through the fuel clause

Florida Power & Light Company Docket No. 080001-E1 03/05/08 Hedging Data Request Question No. 18 Page 1 of 1

 $\mathbf{Q}_{\cdot}$ 

The petition at page 9 discusses the need for FPL to reach an agreement with the Commission on a fair approach to reflect the impact of using commercial paper interest rate on the deferred underrecoveries on FPL's earnings for surveillance purposes. How and when does FPL propose that such an agreement be entered into?

#### А.

Because of the accelerated schedule for review of FPL's VMM proposal, FPL does not propose seeking a determination on this issue in connection with the Commission's determination on the VMM. FPL believes that it would be appropriate to address this in the next fuel cost recovery proceeding.

Florida Power & Light Company Docket No. 080001-E1 03/05/08 Hedging Data Request Question No. 19 Page 1 of 1

#### $\mathbf{Q}_{\mathbf{u}}$

### What does FPL propose in the agreement discussed in question 18 above?

А.

The fuel cost recovery clause provides that FPL pay interest to its customers for over-recoveries and collect interest from customers for under-recoveries at the commercial paper rate. In order to accurately reflect the impact of over/under recoveries on FPL's earned return, both should be excluded from rate base for surveillance reporting purposes (presently only under-recoveries are excluded). Additionally, adjustments to working capital to remove over/under recoveries from rate base should be made using the same funding sources assumed for recovery through the fuel clause.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 20 Page 1 of 1

Q.

Paragraph 19 of the petition suggests that, as an alternative, FPL file monthly information on hedging results pursuant to current A-schedule procedures, allowing staff the opportunity to review such filings for the twelve months ended September 30, for purposes of the November fuel hearing. Does that schedule allow sufficient time for discovery, for both staff and parties, thereby enabling the Commission to make a determination of prudence? Explain your answer.

#### Α.

This proposed schedule would be more effective than the current process as results data would be available on a monthly basis and allow Staff the opportunity for on-going discovery and review.

Florida Power & Light Company Docket No. 080001-El 03/05/08 Hedging Data Request Question No. 21 Page 1 of 1

Q. Please provide the data, spreadsheets and methodology for creating the graphical representations that appear in Exhibits 1 and 2 of the petition.

Α.

**Exhibits 1:** 

#### See attached data file. CONFIDENTIAL ATTACHMENT

#### Exhibits 2: (Data – the following table, or See separate Excel file) CONFIDENTIAL ATTACHMENT

#### Hedge and Deferral Impacts on Residential Bill

• •						-			
(per 1,000 kWh)	2000	2001	2002	2003	2004	2005	2006	2007	2008
Customer Bill - Current Approach w/ Hedges (Actual)	\$74.12	\$81.66	\$76.22	\$86.73	\$86.43	\$91.62	\$108.61	\$103.43	\$102.49
Customer Bill - VMM Approach (Estimated) 2-Year Recovery w/o Hedge	\$74.12	\$78.80	\$79.27	\$86.86	\$85.17	\$93.84	\$110.81	\$98.91	\$91.76

Methodology: The Exhibit was created to show the VMM approach's impact on the Customer Bill, the Residential Bill (RS-1, 1000 KWh), compared to the Current approach, which is using the fuel factors filed with Commission that reflect the effects of FPL's hedging program.

The VMM Approach is an estimate of the Residential Bill without hedges, using the 2-year deferral method. The Bills were created by removing all financial hedges (Mark to Market projections and realized values) from FPL's energy procurement costs and then recalculating the Customer Bill based on prior years' Over or Under recoveries and End-of-Year True-ups.

- Over-recoveries are handled in the same manner as they are in the current process.

- Under-recoveries are deferred over a 2-year period plus interest at the commercial paper rate of each year.

- End-of-year true-ups are handled in the same manner as they are in the current process.

Florida Power & Light Company Docket No. 080001-E1 03/05/08 Hedging Data Request Question No. 22 Page 1 of 1

Q,

Please refer to paragraph 12 of FPL's Petition. The Commission in past years has flexibly administered mid-course corrections involving underrecoveries such that any factor adjustments are implemented during either; A - the remainder of the current year or B - the remainder of the current year plus the following year. Under VMM, does FPL propose the Commission retain the flexibility of establishing underrecovery periods on a case-by-case basis, or does FPL propose a standard recovery period for mid-course corrections involving underrecoveries? If so, what is that period

А.

FPL believes that the Commission should retain the flexibility of using a case by case review when determining the recovery period for midcourse corrections

Florida Power & Light Company Docket No. 080001-E1 03/05/08 Hedging Data Request Question No. 23 Page 1 of 1

Q,

Please refer to Paragraph 18 of the Petition. How does FPL propose that the Specific Parameters included in "FPL Hedging Guidelines" (Exhibit 3 of the Petition) be revised from year to year, assuming FPL's initial guidelines are approved as requested by May 2008? Please include in your response the scheduling of filing revisions, regulatory review, and regulatory final decisions contemplated.

### Α.

FPL plans to have the specific parameters stay as they are included in Exhibit 3 unless and until a change is warranted. FPL does not contemplate routinely changing the specific parameters.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 24 Page 1 of 1

Q.

Is there overlap between FPL's annual risk management plans (specifically, Items 1, 2, and 3 of Exhibit TFB-4) filed in September of each year and the Specific Parameters included in FPL Hedging Guidelines? If so, how does FPL propose that such overlap of reporting be resolved/addressed?

Α.

Yes. FPL's hedging guidelines would become a subset of the annual risk management plan

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 25 Page 1 of 1

Q.

## Explain how the VMM would affect the Commission staff's policy to send accurate rate signals to rate payers.

Α.

Any form of volatility control will affect the price signal to customers For example, even the levelized fuel factor affects the price signal to customers FPL believes that volatility mitigation is also an important issue for the Commission and customers. The VMM is designed to provide a substantial measure of volatility mitigation, comparable to FPL's hedging program.

Florida Power & Light Company Docket No. 080001-EI 03/05/08 Hedging Data Request Question No. 26 Page 1 of 1

Q.

Explain whether – and to what extent – deferring consumer payments for underrecoveries over a two year period, with interest, would cost the consumer more than what it would cost if the consumer repaid the underrecovery over 1 year?

#### Α.

Under FPL's VMM proposal customers will pay additional interest costs incurred by deferring under-recoveries over 2 years but interest is charged at the commercial paper rate which is lower than customers' cost of borrowing. Under FPL's VMM proposal customers will no longer be charged for transaction costs or incremental O&M costs.