

MEMORANDUM

August 28, 1989

ORIGINAL
FILE COPY

TO: STEVE TRIBBLE, DIVISION OF RECORDS AND REPORTING

FROM: TIM DEVLIN, DIVISION OF AUDITING AND FINANCIAL ANALYSIS *19X*

RE: STAFF RECOMMENDATION IN DOCKET NO. 870098-EI - PETITION FOR APPROVAL OF AND INCREASE IN THE ACCRUAL OF NUCLEAR DECOMMISSIONING COST BY FLORIDA POWER CORPORATION AND FLORIDA POWER AND LIGHT COMPANY

The recommendation in the above docket needs to be revised to correct an error in the calculation of the present value of the companies' fund requirement. The discount rate used to determine the present value of the fund requirement on Schedule 2, pages 125-129 of the recommendation was not changed when the earnings rate was changed on the final run. Attached is a revised Schedule 2. Correction of this error results in an increase in Staff's recommended fund requirements and annual accruals. It should be noted that the key determinants of the fund requirement are the escalation rate, which reflects expected cost increases, and the earnings rate, which reflects the expected earnings rate of the fund. Determination of these factors is subjective. Even though the effect of this change has a significant dollar impact, it involves a relatively simple change to Staff analysis.

To facilitate the Commissioners' analyses, also attached is a schedule (Attachment 1) that demonstrates what effect different escalation rate and earnings rate assumptions have on the annual accruals.

TJD/1h
(8742F)

*Recommended items not
to defend since even
is easy to understand with even.*

WJD

DOCUMENT NUMBER-DATE
08666 AUG 28 1989
FPSC-RECORDS/REPORTING

**Sensitivity Analysis of Escalation Rate
and Earnings Rate Assumptions**

<u>Escalation Rates</u>	<u>Earnings Rates</u>	<u>Accrual</u>	<u>FPC</u>
		<u>FPL</u>	
Company	5.27%	\$37,327,820	\$13,758,537
"	6.27	28,103,271	10,560,785
"	7.27	20,205,248	7,842,312
Staff	5.27	51,408,094	11,188,360
"	6.27	39,644,975	8,450,463
"	7.27	29,671,119	6,114,554

PA. ST. LUCIE UNIT #1
 ANNUAL ACCRUAL SCHEDULE

YEAR	% OF 1988 COST TO BE SPENT	ESTIMATED COST IN 1988 \$	ESTIMATED COST IN YEAR INCURRED	FPA SHARE IN YEAR INCURRED	QUALIFIED PLAN AMOUNT	NONQUALIFIED PLAN AMOUNT	TAX SAVINGS	NET AMOUNT NONQUALIFIED FUND	AGGREGATE QUALIFIED FUND	1988 IMPV OF NONQUALIFIED FUND	1988 IMPV OF QUALIFIED FUND	1988 IMPV OF TAX SAVINGS
2014	0.2229%	457,501	2,091,581	2,054,500	649,677	1,506,903	176,739	292,938	1,506,903	77,065	416,949	44,496
2015	0.8253%	1,700,701	8,282,026	8,135,517	1,859,779	6,275,737	699,835	1,159,944	6,275,737	289,876	1,540,339	174,892
2016	8.5153%	17,470,006	89,815,291	88,226,458	20,168,568	68,057,890	7,589,432	12,579,136	68,057,890	2,986,217	16,156,565	1,001,889
2017	2.9034%	5,959,209	32,466,430	31,892,118	7,290,538	24,601,580	2,743,430	4,547,109	24,601,580	1,025,419	5,547,904	618,471
2018	1.2318%	2,528,261	14,403,448	14,345,130	3,279,297	11,065,833	1,233,999	2,045,297	11,065,833	439,145	2,370,530	264,348
2019	1.2318%	2,528,261	15,482,594	15,288,707	3,476,710	11,731,997	1,308,286	2,168,424	11,731,997	441,266	2,387,419	266,231
2020	1.2318%	2,528,261	16,414,644	16,124,271	3,686,008	12,438,263	1,387,045	2,298,963	12,438,263	444,410	2,404,428	266,528
2021	1.2318%	2,528,261	17,402,008	17,094,952	3,907,906	13,187,046	1,470,545	2,437,361	13,187,046	447,377	2,421,559	279,899
2022	6.0011%	12,317,217	89,887,187	88,297,083	20,186,713	68,112,370	7,595,508	12,589,206	68,112,370	2,196,045	11,881,433	1,324,950
2023	19.5089%	40,041,885	309,804,347	304,323,909	69,568,445	234,735,463	26,178,606	43,389,839	234,735,463	7,189,956	38,990,385	4,337,952
2024	20.2418%	41,546,157	340,793,776	334,765,134	76,527,310	258,237,824	28,797,227	47,730,083	258,237,824	7,533,214	40,649,333	4,532,985
2025	20.2418%	41,546,157	361,309,561	354,917,995	81,134,254	273,783,742	30,530,820	50,603,434	273,783,742	7,566,742	40,938,941	4,569,280
2026	8.5283%	17,496,068	161,315,779	158,462,103	36,224,437	122,237,666	13,631,256	22,593,181	122,237,666	3,209,236	17,363,184	1,936,264
2027	7.4598%	15,309,547	149,653,381	147,006,012	33,605,574	115,400,438	12,645,778	20,959,797	113,400,438	2,828,178	15,301,515	1,704,339
2028	0.6216%	1,275,830	13,222,231	12,988,329	2,969,132	10,019,197	1,117,284	1,851,848	10,019,197	237,367	1,284,245	143,272
	100.00%	205,249,321	1,622,545,122	1,593,842,299	344,352,350	1,229,489,949	137,105,789	227,246,540	1,229,489,949	34,890,713	199,592,730	22,237,456

MPV @ 12/31/88	LESS BALANCE @ 12/31/88	PM OF FUND REQUIREMENTS	MONTHLY FUND REQUIREMENT	ANNUAL FUND REQUIREMENT	MONTHLY ACCRUAL	ANNUAL ACCRUAL
			QUALIFIED	TOTAL		
			199,592,730	236,483,443		
			23,198,421	42,120,797		
			176,394,309	194,362,646		
			1,005,763.59	1,108,215.31		
			12,069,163	13,296,584		
			1,005,763.59	1,170,028.01		
			1,971,173	14,040,336		

Revised Schedule 2
Docket No. R700098-EI

FPL ST. LUCIE UNIT #2
ANNUAL ACCRUAL SCHEDULE

1968 COST: 202,975,000
EARNING RATE: 5.27%
ESCALATION RATE: 5.91%

5.15%

YEAR	% OF 1968 COST TO BE SPENT	ESTIMATED COST IN 1968 \$	ESTIMATED COST IN YEAR INCURRED	FPL SHARE IN YEAR INCURRED	QUALIFIED PLAN AMOUNT	NONQUALIFIED PLAN AMOUNT	TAX SAVINGS	NET AMOUNT NONQUALIFIED FUND	AMOUNT QUALIFIED FUND	1968 MPV OF NONQUALIFIED FUND	1968 MPV OF QUALIFIED FUND	1968 MPV OF TAX SAVINGS
2021	0.1102%	223,881	1,489,148	1,248,969	1,218,494	30,475	11,468	19,007	1,218,494	3,490	223,754	2,106
2022	0.4372%	887,407	6,251,434	5,243,163	5,115,230	127,933	48,161	79,792	5,115,230	13,919	892,294	8,398
2023	4.8044%	9,753,761	72,772,279	61,035,105	59,545,848	1,489,257	560,487	928,849	59,545,848	153,916	9,887,103	92,863
2024	20.1176%	40,833,699	322,663,298	270,622,117	264,018,937	6,603,180	2,484,777	4,118,403	264,018,937	648,280	41,539,341	391,130
2025	24.7470%	50,230,223	420,371,172	352,571,044	343,968,313	8,602,724	3,237,299	5,365,525	343,968,313	802,308	51,433,653	484,060
2026	24.7620%	50,230,223	445,215,109	373,407,995	364,296,840	9,111,155	3,428,528	5,682,627	364,296,840	807,186	51,746,351	487,003
2027	14.6687%	29,773,794	279,498,214	234,417,294	228,697,512	5,719,782	2,152,354	3,567,428	228,697,512	481,365	30,868,950	299,425
2028	10.3660%	21,042,012	209,202,077	175,440,641	171,179,401	4,281,240	1,611,030	2,670,209	171,179,401	342,263	21,941,514	206,499
	100.00%	202,975,000	1,757,440,751	1,474,086,330	1,438,040,576	35,965,754	13,533,913	22,431,841	1,438,040,576	3,252,727	208,522,963	1,962,484

	NONQUALIFIED	QUALIFIED	TOTAL
MPV @ 12/31/88	3,252,727	208,522,963	211,775,690
LESS BALANCE @ 12/31/88	6,061,703	22,209,741	28,271,444
PV OF FUND REQUIREMENTS	(2,808,976)	186,313,222	183,504,246
MONTHLY FUND REQUIREMENT	(14,554.21)	965,348.76	950,794.56
ANNUAL FUND REQUIREMENT	(174,650)	11,584,185	11,409,535
MONTHLY ACCRUAL	(23,335.27)	965,348.76	942,013.50
ANNUAL ACCRUAL	(280,023)	11,584,185	11,304,162

Revised Schedule 2
Docket No. 87009R-EI

FPL TURKEY POINT UNIT #5
ANNUAL ACCRUAL SCHEDULE

1988 COST: 162,072,000
EARNINGS RATE: 5.27%
ESCALATION RATE: 5.15%

YEAR	% OF 1988 COST TO BE SPENT	ESTIMATED COST IN 1988 \$	ESTIMATED COST IN YEAR INCURRED	FPL SHARE IN YEAR INCURRED	QUALIFIED PLAN AMOUNT	NONQUALIFIED PLAN AMOUNT	TAX SAVINGS	NET AMOUNT NONQUALIFIED FUND	AMOUNT QUALIFIED FUND	1988 IMP OF NONQUALIFIED FUND	1988 IMP OF QUALIFIED FUND	1988 IMP OF TAX SAVINGS
2005	0.2793%	452,991	1,181,262	1,160,365	773,616	386,750	145,534	241,216	773,616	100,744	323,107	60,703
2006	1.1316%	1,034,007	5,059,912	4,970,402	3,313,767	1,656,635	623,392	1,033,243	3,313,767	409,939	1,314,737	247,331
2007	6.8650%	11,126,243	32,477,023	31,902,505	21,269,400	10,633,105	4,001,237	6,431,868	21,269,400	2,499,470	8,016,179	1,500,018
2008	20.3103%	32,917,309	101,657,092	99,050,778	66,575,848	33,282,931	12,524,267	20,750,564	66,575,848	7,431,895	23,835,499	4,483,976
2009	25.4687%	41,634,190	136,054,524	133,426,073	89,089,836	44,538,237	16,759,738	27,778,498	89,089,836	9,447,386	30,299,194	5,699,938
2010	25.4687%	41,634,190	143,924,524	141,378,501	94,257,047	47,121,454	17,731,803	29,309,651	94,257,047	9,494,951	30,451,741	5,726,636
2011	12.3073%	20,076,345	73,426,868	72,127,947	48,087,702	28,040,245	9,046,344	14,993,991	48,087,702	4,401,594	14,758,006	2,776,302
2012	5.7567%	9,297,584	35,077,100	35,340,465	23,561,622	11,779,044	4,432,454	7,346,590	23,561,622	2,141,780	6,869,011	1,292,211
2013	1.9122%	3,099,141	12,487,703	12,463,257	8,309,254	4,154,004	1,563,152	2,590,852	8,309,254	717,508	2,301,158	432,898
	100.00%	162,072,000	542,426,010	532,830,494	353,238,090	177,592,404	66,828,021	110,764,382	353,238,090	36,845,341	118,166,632	22,230,093

	NONQUALIFIED	QUALIFIED	TOTAL
MPV @ 12/31/88	36,845,341	118,168,632	155,013,993
LESS BALANCE @ 12/31/88	15,649,644	19,815,377	35,465,021
PV OF FUND REQUIREMENTS	21,195,717	98,353,255	119,548,972
MONTHLY FUND REQUIREMENT	149,035.03	691,558.60	840,593.63
ANNUAL FUND REQUIREMENT	1,788,420	8,298,703	10,087,124
MONTHLY ACCRUAL	238,953.07	691,558.60	930,511.67
ANNUAL ACCRUAL	2,867,437	8,298,703	11,166,140

Revised Schedule 2
Docket No. 870098-EI

FPL TURKEY POINT UNIT #4
ANNUAL ACCRUAL SCHEDULE

1908 COST: 190,494,000
EARNINGS RATE: 5.27%
ESCALATION RATE: 5.15%

YEAR	% OF 1908 COST TO BE SPENT	ESTIMATED COST IN 1908 \$	ESTIMATED COST IN YEAR INCURRED	FPL SHARE IN YEAR INCURRED	QUALIFIED PLAN AMOUNT	NONQUALIFIED PLAN AMOUNT	TAX SAVINGS	NET AMOUNT NONQUALIFIED FUND	AMOUNT QUALIFIED FUND	1908 NPV OF NONQUALIFIED FUND	1908 NPV OF QUALIFIED FUND	1908 NPV OF TAX SAVINGS
2005	0.1304%	248,404	647,762	636,303	636,313	199,990	75,256	124,734	636,313	52,096	182,230	31,431
2006	0.5392%	1,027,144	2,833,826	2,783,696	1,908,780	874,916	329,231	543,685	1,908,780	216,500	737,300	136,422
2007	4.2340%	8,065,516	23,342,894	23,126,420	15,857,766	7,268,634	2,735,187	4,533,447	15,857,766	1,798,401	5,976,407	1,039,899
2008	5.9950%	11,421,258	35,271,774	34,447,817	23,758,008	10,889,809	4,097,835	6,791,974	23,758,008	2,431,664	8,505,847	1,467,108
2009	19.0640%	36,315,776	118,457,270	116,558,223	79,923,973	36,634,249	13,785,468	22,848,781	79,923,973	7,770,804	27,181,911	4,488,998
2010	24.0993%	45,907,721	158,697,422	155,690,261	106,893,932	48,996,309	18,437,311	30,558,998	106,893,932	9,872,733	34,534,361	5,994,545
2011	24.0993%	45,907,721	167,902,084	164,931,896	113,893,801	51,838,095	19,366,875	32,331,420	113,893,801	9,922,439	34,708,231	5,994,545
2012	12.8349%	24,449,714	94,608,426	92,994,803	63,725,394	29,209,408	10,991,500	18,217,908	63,725,394	5,311,138	18,578,112	3,204,395
2013	7.2027%	13,720,711	56,171,797	55,178,118	37,835,636	17,342,483	6,325,976	10,816,506	37,835,636	2,992,515	10,478,171	1,807,299
2014	1.8006%	3,430,035	14,856,822	14,594,004	10,007,109	4,586,896	1,726,049	2,860,847	10,007,109	752,618	2,632,622	454,081
	100.00%	190,494,000	673,190,276	661,281,540	453,448,732	207,840,788	78,210,489	129,630,299	453,448,732	41,034,108	143,535,399	24,797,311

	NONQUALIFIED	QUALIFIED	TOTAL
NPV @ 12/31/88	41,034,108	143,535,399	184,569,507
LESS BALANCE @ 12/31/88	11,165,134	14,866,056	26,031,190
PV OF FUND REQUIREMENTS	29,868,974	128,669,343	158,538,317
MONTHLY FUND REQUIREMENT	210,019.95	904,722.38	1,114,742.33
ANNUAL FUND REQUIREMENT	2,520,239	10,856,669	13,376,908
MONTHLY ACCRUAL	336,732.33	904,722.38	1,241,454.70
ANNUAL ACCRUAL	4,040,788	10,856,669	14,897,456

FPC CRYSTAL RIVER UNIT #3
ANNUAL ACCRUAL SCHEDULE

Revised Schedule 2
Docket No. 870098-EI

1988 COST: 189,123,000
EARNINGS RATE: 5.27% 5.15%
ESCALATION RATE: 6.08%

YEAR	% OF 1988 COST TO BE SPENT	ESTIMATED COST IN 1988 \$	ESTIMATED COST IN YEAR INCURRED	FPC SHARE IN YEAR INCURRED	QUALIFIED PLAN AMOUNT	NONQUALIFIED PLAN AMOUNT	TAX SAVINGS	NET AMOUNT NONQUALIFIED FUND	AMOUNT QUALIFIED FUND	1988 NPV OF NONQUALIFIED FUND	1988 NPV OF QUALIFIED FUND	1988 NPV OF TAX SAVINGS
2015	3.1811%	6,016,192	29,609,186	25,206,063	20,795,002	4,411,061	1,659,882	2,751,179	20,795,002	687,534	5,196,778	416,813
2016	3.1811%	6,016,192	31,409,425	26,738,592	22,059,338	4,679,254	1,760,803	2,918,450	22,059,338	692,824	5,236,764	418,805
2017	3.1811%	6,016,192	33,319,118	28,364,298	23,400,546	4,963,752	1,867,860	3,095,892	23,400,546	698,155	5,277,059	421,221
2018	23.7764%	44,966,641	264,177,471	224,892,168	185,536,038	39,356,129	14,809,711	24,546,418	185,536,038	5,258,349	39,745,649	3,172,346
2019	23.7764%	44,966,641	280,239,461	238,565,612	196,816,630	41,748,982	15,710,142	26,038,840	196,816,630	5,298,810	40,051,472	3,196,957
2020	23.7764%	44,966,641	297,278,021	253,070,401	208,783,081	44,287,320	16,665,319	27,622,002	208,783,081	5,339,581	40,359,648	3,221,356
2021	9.5639%	18,087,535	126,848,472	107,985,089	89,087,699	18,897,391	7,111,088	11,786,303	89,087,699	2,164,338	16,359,318	1,305,821
2022	4.7819%	9,043,673	67,279,726	57,274,693	47,251,621	10,023,071	3,771,682	6,251,390	47,251,621	1,090,484	8,242,511	657,927
2023	4.7817%	9,043,294	71,367,348	60,754,453	50,122,423	10,632,029	4,000,833	6,631,197	50,122,423	1,098,829	8,305,586	662,962
100.00%		189,123,000	1,201,528,228	1,022,851,368	843,852,379	178,998,989	67,357,320	111,641,670	843,852,379	22,328,904	168,774,784	13,471,808

	NONQUALIFIED	QUALIFIED	TOTAL
NPV @ 12/31/88	22,328,904	168,774,784	191,103,687
LESS BALANCE @ 12/31/88	8,773,682	24,951,975	33,725,657
PV OF FUND REQUIREMENTS	13,555,222	143,822,809	157,378,030
MONTHLY FUND REQUIREMENT	76,338.90	809,966.50	886,305.40
ANNUAL FUND REQUIREMENT	916,067	9,719,598	10,635,665
MONTHLY ACCRUAL	122,396.83	809,966.50	932,363.33
ANNUAL ACCRUAL	1,468,762	9,719,598	11,188,360