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**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
**FLORIDA POWER & LIGHT COMPANY**  
**REBUTTAL TESTIMONY OF JOSEPH P. STEPENOVITCH**  
**DOCKET NO. 011605-EI**

**July 24, 2002**

**Q. Please state your name and business address.**

A. My name is Joseph P. Stepenovitch. My business address is 11770 U.S. Highway One, North Palm Beach, Florida 33408.

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

A. I am employed by Florida Power & Light Company (FPL) as the Director of FPL's Energy Marketing & Trading Division.

**Q. Have you previously filed testimony in this docket?**

A. Yes, I have.

**Q. Have you prepared or caused to be prepared under your direction, supervision or control an exhibit to your rebuttal testimony in this proceeding?**

A. Yes, I have. It consists of the following documents:

- Document JPS-3, Forward Price As A Percentage Above or Below Spot at Time of Maturity
- ~~Document JPS-4, FPL Proposed Risk Sharing Program Cost/Benefit Analysis~~

DOCUMENT NUMBER 011605-EI  
08414 AUG-98  
FPSC-COMMISSION CLERK

1 **Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to comment on certain portions of the  
3 testimony of FIPUG's witness Bryan Stone and Staff's witness Todd  
4 Bohrmann. ~~Specifically, with respect to Mr. Bohrmann's Testimony, I will~~  
5 ~~address his concerns with FPL's proposed Risk Sharing Program that are~~  
6 ~~identified as items 2 and 8 on pages 16 and 17 of his Testimony. The~~  
7 ~~remainder of the concerns identified by Mr. Bohrmann's Testimony are~~  
8 ~~addressed in Ms. Dubin's Rebuttal Testimony.~~

9

10 **TESTIMONY OF BRYAN STONE**

11 **Q. Would you please comment on the statement on page 12, lines 14 - 16**  
12 **of Mr. Stone's testimony that FIPUG "see[s] no need for a program with**  
13 **such an apparent lack of benefit to consumers. Rather than reducing**  
14 **fuel cost risk, in our opinion, there is an increased fuel cost risk, due to**  
15 **the potential for abuses via creative financial engineering"?**

16 A. I disagree with Mr. Stone's statement. ~~FPL projects that, over time, its~~  
17 ~~proposed Risk Sharing Program can achieve both a reduction in volatility and~~  
18 ~~a reduction in fuel costs to its customers. As shown on Document JPS-3,~~  
19 ~~Forward Price As A Percentage Above or Below Spot at Time of Maturity, the~~  
20 ~~forward fuel markets (in particular natural gas) provide, on average over time,~~  
21 ~~a forward discount to the spot market at time of maturity. Specifically, the x-~~  
22 ~~axis of Document JPS-3 shows the forward term of a forward contract for a~~  
23 ~~given commodity. The y-axis measures the relative premium or discount the~~  
24 ~~specific commodity contract would realize at the time of maturity of the~~

1 forward contract, relative to the spot market price of that specific commodity  
2 at the time of maturity. The graph clearly shows that, on average over the  
3 1996 through 2001 period, providing a fixed forward price to FPL's  
4 customers, for any period greater than six months forward should provide the  
5 customer with a lower fuel price than if FPL waited until that period occurred  
6 and purchased in the spot fuel market. Financial theory on procuring a risky  
7 commodity generally supports a market discount, due to the uncertainty  
8 pertaining to future supply and demand of the commodity. Basically, this  
9 theory holds that suppliers will be willing to offer a discount on forward  
10 contracts in order to achieve certainty on their firm sales of the commodity in  
11 advance. As shown Document JPS-3, on average, the longer the forward  
12 period, the greater the discount FPL could provide to its customers.

13  
14 ~~Q. Has FPL prepared a cost/benefit analysis of FPL's proposed Risk~~  
15 ~~Sharing Program?~~

16 ~~A. Yes. It is provided as Document JPS-4. The cost/benefit analysis is based~~  
17 ~~on a Monte Carlo simulation (i.e. randomized scenarios) of 2000 potential~~  
18 ~~annual periods, all assuming that FPL would fix the price of 20% of its actual~~  
19 ~~volume of residual fuel oil and natural gas burn, for a given year, in July of the~~  
20 ~~prior year but each having different assumptions on the cost relationship~~  
21 ~~between forward contract and spot prices for those fuels. The results show a~~  
22 ~~range of net benefits or costs to customers under the varying fuel price~~  
23 ~~scenarios, but the expected value for the full set of 2000 scenarios is a net~~  
24 ~~benefit to the customer of \$23 million per year. This net benefit is a result of~~  
25 ~~an expected value benefit from hedging of \$41 million per year, partially offset~~

1 by an expected value risk premium of \$13 million per year, an expected value  
2 cost resulting from spot prices exceeding FPL's actual purchase costs of \$4  
3 million per year, and an incremental cost of FPL's hedging operations of \$1  
4 million per year.

5  
6 **Q. Please explain the risk premium that is reflected in the cost/benefit**  
7 **analysis on Document JPS-4.**

8 **A.** A fundamental component of FPL's proposed Risk Sharing Program is that,  
9 except under conditions that qualify as a force majeure event, FPL will  
10 assume the volume risk for the difference between the projected and actual  
11 volume burned for residual fuel oil and natural gas. As partial compensation  
12 to FPL for this volume risk (and to a lesser extent for the timing and execution  
13 risk inherent in FPL's guaranteeing customers a predetermined fixed price for  
14 a predetermined percentage of residual fuel oil and natural gas), the Monte  
15 Carlo analysis assumes that the customer will pay a 5% risk premium on the  
16 fixed priced portion of the program. Please note that, consistent with FPL's  
17 proposed Risk Sharing Program, 5% is less than the full market based  
18 premium for assuming these risks, which means in effect that FPL and its  
19 customers share in the cost of the risks.

20  
21 **Q. On page 7, line 22 of his testimony, Mr. Stone states that utilities "can**  
22 **financially engineer derivative transactions to generate profit risk-**

1 free....” Does this accurately characterize FPL’s intended use of  
2 hedging instruments in its fuel procurement program?

3 A. No. Mr. Stone asserts that there are risk-free profit opportunities in the  
4 derivatives market. To the best of my knowledge no such opportunities exist.  
5 Furthermore, Mr. Stone seems to suggest that FPL and other utilities will  
6 engage in speculation. ~~This is not the intent of FPL’s proposed Risk Sharing~~  
7 ~~Program and it is not the policy of FPL. FPL will not purchase more residual~~  
8 ~~fuel oil or natural gas than what it will burn and FPL will not enter into any~~  
9 ~~derivative or non-derivative transaction with the only objective to generate~~  
10 ~~financial gains for FPL. FPL’s strategy for fuel procurement is to secure a~~  
11 ~~balanced portfolio for FPL’s customers at the lowest possible cost.~~

12

13 ~~Q. Mr. Stone states on pages 8-12 of his testimony that if the Commission~~  
14 ~~approves the utilities’ hedging programs, there are “necessary~~  
15 ~~constraints” needed to ensure the program is fair. He describes~~  
16 ~~“necessary constraints” as independent analysis of the programs,~~  
17 ~~limiting the types of instruments and transactions that the utilities use~~  
18 ~~to hedge, and prohibiting trading with affiliates. Does FPL believe these~~  
19 ~~constraints are necessary?~~

20 ~~A. No. If the Commission approves FPL’s proposed Risk Sharing Program, the~~  
21 ~~Commission will not have to place constraints on FPL to ensure the program~~  
22 ~~is fair. FPL’s proposed Risk Sharing Program transfers price risk, among~~  
23 ~~other risks, from FPL’s customers to FPL. Under FPL’s proposed Risk~~  
24 ~~Sharing Program, FPL is seeking to modify the current fuel cost recovery~~

1 mechanism from actual cost to recovery that is based on a combination of an  
2 approved market based, fixed price for a set percentage of actual volume and  
3 a market based, spot index price, for the balance of actual volume.  
4 Therefore, FPL's customers will be insulated from any risks associated with  
5 FPL's fuel procurement practices, including the types of instruments that are  
6 used to hedge fuel. FPL's customers will always pay the market price for  
7 fuel, regardless of FPL's actual fuel costs. Lastly, the audit process that  
8 currently exists can provide the necessary information to ensure that FPL is  
9 adhering to the program and also to ensure that the program is providing its  
10 stated benefits.

11

12 **TESTIMONY OF TODD BOHRMANN**

13 **~~Q. Would you please comment on item no. 2 on page 16, line 6 through line~~**  
14 **~~12 of Mr. Bohrmann's testimony that "FPL's proposal seeks to recover~~**  
15 **~~the balance of its natural gas and residual oil requirements based on a~~**  
16 **~~spot index price. A stated goal of FPL's procurement efforts is to obtain~~**  
17 **~~natural gas and residual fuel at below spot market prices. This feature~~**  
18 **~~does not create any value to FPL's ratepayer, and only rewards FPL for~~**  
19 **~~actions that would have occurred regardless of any incentive."~~**

20 **~~A. Although it is a stated goal of FPL's procurement efforts to obtain natural gas~~**  
21 **~~and residual fuel oil at below spot market prices, there are no guarantees. As~~**  
22 **~~energy markets evolve and change, market conditions occur which both~~**  
23 **~~historically and currently can make it difficult for FPL to achieve this goal. In~~**  
24 **~~particular, currently, due to conditions in the natural gas market, FPL has~~**

1            ~~been unable to consistently purchase natural gas below the spot market~~  
2            ~~index. FPL's proposed Risk Sharing Program guarantees that FPL's~~  
3            ~~customers will not be exposed to market conditions that lead to FPL~~  
4            ~~purchasing above the spot market index.~~

5

6            ~~**Q. Mr. Bohrmann has criticized FPL's proposal to retain twenty percent of**~~  
7            ~~**the gains from all non-separated wholesale energy sales and the**~~  
8            ~~**savings from all wholesale energy purchases (item no. 8, page 17 of Mr.**~~  
9            ~~**Bohrmann's Testimony). Please explain why FPL has proposed this**~~  
10           ~~**element of its Risk Sharing Program.**~~

11          ~~A. FPL believes that wholesale power transactions (purchases and sales) are an~~  
12          ~~important component of a balanced hedging program. A complete and~~  
13          ~~comprehensive hedging program should include wholesale energy, as these~~  
14          ~~transactions directly impact fuel requirements and provide an additional~~  
15          ~~mechanism to lower overall fuel costs and volatility for its customers.~~

16

17          ~~**Q. Does FPL have any comments on Exhibit TFB-11 of Mr. Bohrmann's**~~  
18          ~~**testimony?**~~

19          ~~A. Yes. I would like to comment on the Financial Hedging Techniques listed on~~  
20          ~~Exhibit TFB-11, page 3 (page 45 of Mr. Bohrmann's testimony). FPL~~  
21          ~~believes that Mr. Bohrmann's discussion of Financial Hedging Techniques is~~  
22          ~~accurate, as far as it goes. However, FPL would like to add to his discussion~~  
23          ~~by noting that Financial Trading involves taking not only long positions but~~

1 also taking short positions. For example, if FPL's view is that the residual fuel  
2 oil market will decline, FPL would like the opportunity to protect the value of  
3 the residual fuel oil in inventory for FPL's customers by selling a forward  
4 contract. Additionally, Exhibit TFB-11 refers to measures that the NYMEX  
5 futures exchange has in place to control counterparty risk for its clearing  
6 members. While these statements about NYMEX's measures to control  
7 counterparty risk are correct, FPL may also use over-the-counter swaps and  
8 options. For over-the-counter transactions, FPL has in place its own policies  
9 and procedures to mitigate counterparty credit risk.

10

11 ~~Q. On page 9, Lines 1-3 of Mr. Bohrmann's testimony, he states, "A utility~~  
12 ~~should procure no less than the minimum amount of each fuel that the~~  
13 ~~utility must dispatch on its system through one or more fixed price~~  
14 ~~mechanisms." Does FPL believe that procuring the minimum of each~~  
15 ~~fuel that it must dispatch on its system at a fixed price would effectively~~  
16 ~~reduce fuel price volatility and overall fuel costs for its customers.~~

17 ~~A. No. As part of its response to Staff's First Set of Interrogatories in Docket No.~~  
18 ~~011605-EI, FPL calculated the minimum amount of each fuel that it could~~  
19 ~~dispatch on its system given certain price relationships between natural gas~~  
20 ~~and residual fuel oil on randomly selected days during shoulder periods. The~~  
21 ~~output data show that the minimum dispatch of natural gas on FPL's system~~  
22 ~~is approximately 31,600 mmBtu/day and that there is essentially no minimum~~  
23 ~~dispatch for residual fuel oil. These minimum dispatch volumes are negligible~~  
24 ~~compared to FPL's total fuel requirements and total fuel budget. For~~

1 example, assuming that natural gas can be fixed at a price of \$3.00/mmBtu,  
2 the total cost of fixing this minimum dispatch volume would be approximately  
3 \$34.6 million for a one year period. FPL's total fuel budget for 2002 is  
4 approximately \$2.2 billion. This fixed price natural gas position equates to  
5 less than two percent of FPL's total fuel budget. Although FPL's system is  
6 large, its mix of generation resources provides great flexibility in dispatch,  
7 which reduces FPL's dependency on any particular fuel. This flexibility helps  
8 FPL dispatch its system in a manner that reduces its need for any one  
9 particular high-priced fuel. Therefore, minimum fuel requirements, given  
10 certain load and generation conditions, could be relatively small at any  
11 particular time compared with FPL's total average fuel requirements. For  
12 FPL, procuring only the minimum amount of natural gas and residual fuel oil  
13 at a fixed price would not significantly help reduce overall fuel price volatility.  
14 Fixing the price of any volume requirements may help reduce overall fuel  
15 costs if the spot market of that particular fuel is higher than the fixed price  
16 position.

17

18 **Q. Do you see any other problems with Mr. Bohrmann's approach?**

19 **A.** Yes. Regardless of the percentage of total fuel requirements that would be  
20 fixed on a forward contract basis, his approach would require the Commission  
21 to evaluate the specific forward contract arrangements that the utility makes,  
22 but I have reservations about the effectiveness of his proposed evaluation  
23 mechanism. Staff appears to envision that reviewing and approving a utility's  
24 risk management plan will provide an effective means of evaluating the

1 utility's performance in procuring fuel on a forward contract basis. However,  
2 this may not be the case. For example, if the Commission requires that a risk  
3 management plan rigidly limit the range of permissible hedging mechanisms  
4 in order to facilitate use of the plan as an evaluation tool, then the utility may  
5 be foreclosed from taking the maximum advantage of market conditions.

6  
7 **Q. Do you believe that FPL's proposed Risk Sharing Program would be**  
8 **more effective than Mr. Bohrmann's approach for limiting customers'**  
9 **exposure to fuel-cost volatility?**

10 **A. Absolutely.**

11  
12 **Q. On page 12, Lines 12-13 of Mr. Bohrmann's testimony, he states "By**  
13 **their own admission, the utilities have little to no experience in**  
14 **executing financial hedging transactions." Would you please comment**  
15 **on this statement?**

16 **A. I have two reactions to Mr. Bohrmann's statement. First, it does not have**  
17 **much application to FPL's proposed Risk Sharing Program. As I have made**  
18 **clear on several occasions, FPL relies primarily upon physical commodity**  
19 **transactions rather than financial instruments to hedge fuel costs. We intend**  
20 **to continue doing so under the proposed Risk Sharing Program. Second, to**  
21 **the extent that FPL does rely upon financial instruments, I disagree with Mr.**  
22 **Bohrmann's assessment that FPL lacks experience with such transactions.**  
23 **FPL has been financially hedging its natural gas and residual fuel oil**

1 transactions for several years. For natural gas, FPL has been executing  
2 exchanged traded futures and options contracts, as well as over-the-counter  
3 (OTC) swaps, collars, options, and forwards. For residual fuel oil, FPL has  
4 been executing OTC swaps, options, collars and forwards. FPL's financial  
5 traders are well trained and experienced in all exchanged traded and OTC  
6 financial instruments and fully knowledgeable of the risks, limitations, and  
7 management of these tools.

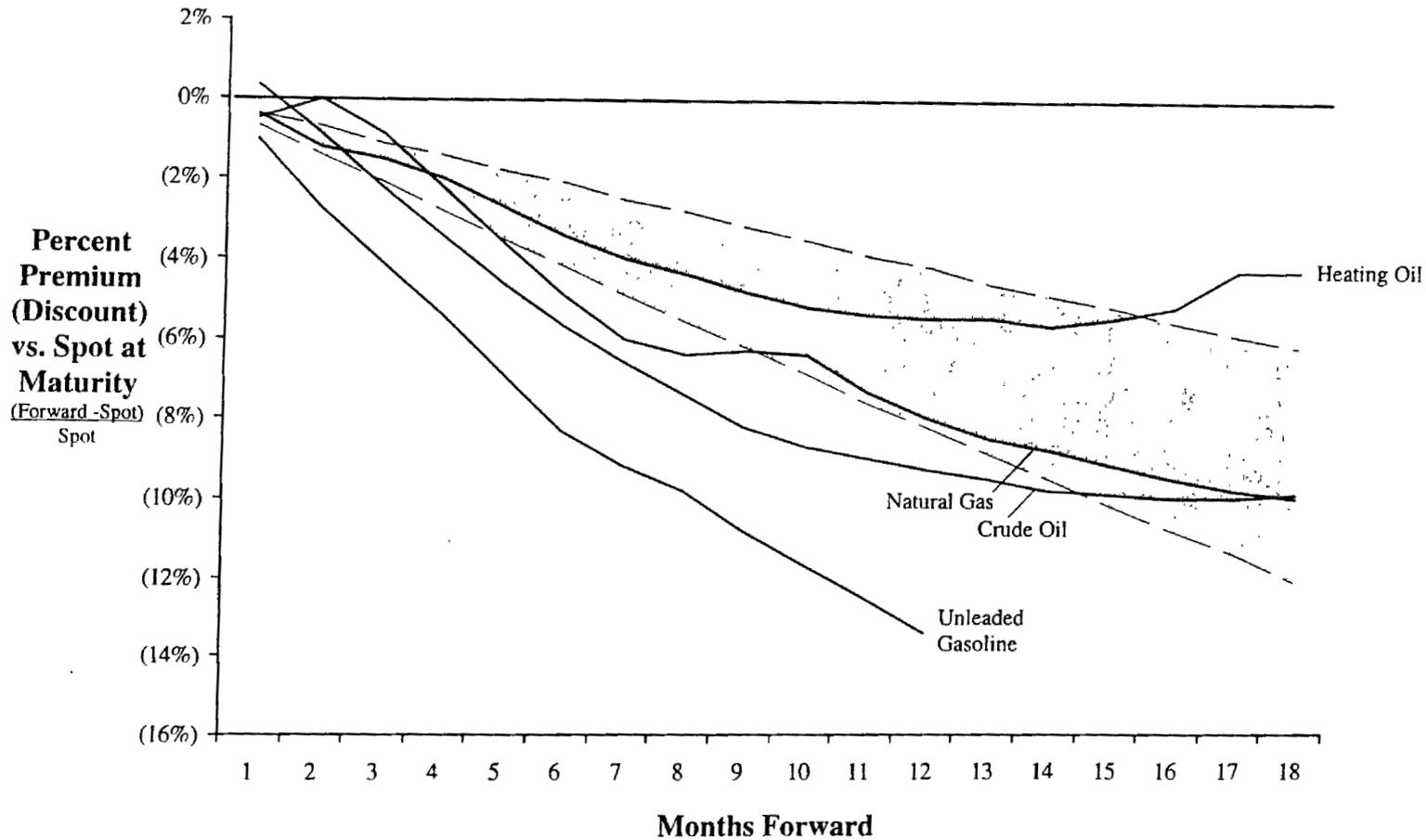
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9 **Q. Does that conclude your rebuttal testimony?**

10 A. Yes it does.

# Forward Price as a Percentage Above or Below Spot At Time of Maturity

1996 Through 2001



JPS-3  
Docket No. 011605-EI  
FPL Witness: J. P. Stepenovitch  
Exhibit \_\_\_\_\_

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