



May 23, 2001

Ms. Connie Kummer, Chief  
Bureau of Electric Rates  
Florida Public Service Commission  
Capital Circle Office Center  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Dear Ms. Kummer:

Enclosed for your review are FPL's responses to Staff's Data Request in Docket No. 010443-EI.

Should you require any further information, please call me at (305) 552-4519.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Steve Romig', with a large, sweeping flourish at the end.

Steve Romig  
Director, Rates & Tariffs Department

Enclosure

SR:be

DOCUMENT NUMBER-DATE

06575 MAY 25 2001

FPSC-RECORDS/REPORTING

May 23, 2001

Staff's Data Request

Docket No. 010443-EI

Florida Power & Light Company's proposed Wireless Internet Service Rate (WIS-1) and Service Agreement

1. Will the Metricom Microcell Radios (radios) be installed on both streetlight arms and directly on distribution poles?

The Metricom radios will only be installed on streetlight arms.

2. Will FPL have any responsibility for the installation and maintenance of the radios? If not, please explain how FPL and Metricom will coordinate the installation and maintenance of the radios. If FPL installs or maintains the radios, how is the cost for this recovered?

FPL will have no responsibility for either the installation or maintenance of Metricom radios. Metricom will use FPL approved contractors to install and maintain the radios. To coordinate the installation and tracking of Metricom's attachments, FPL will utilize an attachment permitting process similar to the attachment permitting process used for cable and telecommunication companies.

3. The proposed WIS-1 tariff includes language that FPL reserves the right to withdraw this rate schedule. Does FPL intend to seek Commission approval prior to withdrawing the WIS-1 rate?

FPL would seek Commission approval prior to withdrawing the WIS-1 rate.

4. Please provide all information used by FPL to determine the usage characteristics of the radios such as hourly load profile and consumption during standby and transmit mode.

See Attached.

5. Please provide a detailed explanation as to how FPL will bill a customer such as Metricom (i.e., number of accounts per bill, etc.)

Metricom will be billed under the provisions for Summary Billing outlined in tariff sheet 6.060, section 7.15 of FPL's tariff. Under summary billing a detailed bill statement is performed for each separate or subordinate account covered under a customer's summary bill, and a summary billing statement is developed to consolidate all the customer's subordinate accounts. The summary billing customer receives both the detailed billing statements and the consolidated billing statement each month. For Metricom the estimated number of accounts per summary bill are given under "Number of Accounts" on Table 2.

The following questions refer to TABLE 2 in the cost support provided to staff on April 23, 2001.

6. Please explain the "system failures" (see footnote 7) FPL anticipates from offering the WIS-1

rate.

“System failures” refers to performance problems in the computer billing information systems which may develop in modifying the existing billing systems for Metricom. FPL did not anticipate nor incorporate any “system failures” in developing the base case estimates shown in Table 2. The possibility of performance issues occurring must nevertheless be acknowledged and would impact the base case billing costs of \$27,140.

8. Please explain in detail the modifications to FPL’s billing system that will be required to implement the WIS-1 rate.

The modifications include the creation of a new unmetered rate code using the existing tax logic, the existing financial components, the existing clauses, and the existing customer care transactions currently incorporated in the billing system.

9. Please provide a detailed explanation for the line labeled “Tariff/Contract Administration.”

“Tariff/Contract Administration” covers a variety of activities including: addressing and resolving customer issues with the rate (e.g. whether certain customers would qualify, etc), administering the service agreements, responding to regulatory issues regarding the rate, and forecasting and reporting sales and revenues.

10. Please provide workpapers showing the derivation of the discount rate used.

See Attached.



## POWER CONSUMPTION REPORT METRICOM HIGH SPEED RICOCHET<sup>2</sup> NETWORK RADIOS

Power consumption tests were conducted on four Metricom High Speed Ricochet<sup>2</sup> Network radios to determine their power consumption in network applications.

Power consumption measurements were taken under the following:

- Conditions:
  - Voltage inputs: 120 & 240 VAC
  - Temperature: 23 C
- Radio modes:
  - Standby/receive 26.02 watts @ 120 VAC (26.15 @ 240 VAC)
  - Transmit 900 MHz 37.0 watts @ 120 VAC (36.8 @ 240 VAC)
  - Transmit 2.4 GHz 36.6 watts @ 120 VAC (36.4 @ 240 VAC)

Note: Under normal network operation, the network radio will be in the transmit mode between 1-4% of the time depending on traffic (average 2.5%).

- Average power consumptions were computed based on an analytical derivation and empirical measurements of the present Ricochet network (note that the results are essentially the same for 120 VAC or 240 VAC):
  - Transmit duty cycle: 2.5%
  - Receive mode: 97.5%
  - Transmit 900 MHz: 75% of transmit
  - Transmit 2.4 GHz: 25% of transmit

$$26.02 \text{ W} \times 97.5\% + 37.0 \text{ W} \times (2.5\% \times 0.25\%) + 36.6 \text{ W} \times (2.5\% \times 0.75\%) = 26.28 \text{ W}$$

- Yearly consumption and costs (based on 10c/kWhr) are projected at:

$$26.28 \text{ W} \times 8760 \text{ hrs/year} \times \$0.1/\text{kWhr} = 230.212 \text{ kWhrs/year and } \$23.02/\text{year}.$$

To determine the appropriate annual cost at a different per kWh rate, simply substitute the applicable rate for \$0.1/kWhr.

Mike Cunningham  
Director Research & Quality Assurance  
Metricom, Inc.

1/29/99

## Staff's Data Request

Docket No. 010443-EI

Florida Power & Light Company's proposed Wireless Internet Service Rate (WIS-1) and Service Agreement  
Question #10

The discount rate is based on projected incremental cost of debt and a ROE in the upper end of the currently allowed range of 10 to 12%

<u>Source</u>		<u>Projected Cost</u>	<u>Weighted Cost</u>	<u>After Tax Wtd Cost</u>
Debt	45%	7.4%	3.3%	2.04%
Preferred	0%	0.0%	0.0%	0.00%
Equity	55%	11.7%	6.5%	6.45%
Total	100%		9.8%	8.5%