

040766

12/13/04

submitted by

LONG TERM ELECTRICAL SUPPLY PLAN

Ed
Regan

STAFF RESPONSE TO QUESTIONS, ISSUES, AND RECOMMENDATIONS MADE IN NOVEMBER 2004

Presentation to the
Gainesville City Commission
December 13, 2004



WE RESPONDED TO:

1. Alachua County Department of Environmental Protection Technical Report (Nov 15)
2. Alachua County Environmental Protection Advisory Committee Recommendation (Nov 15)
3. R.W. Beck's Report (Nov 15)

WE RESPONDED TO: (Continued)

4. Alachua County Board of County Commissioners (Nov 23)
5. Additional Issues
 - Biomass Estimates
 - Forestry Practices
 - Emissions From Open Wood Burning
 - New Emission Control Technology
 - Cost Comparisons

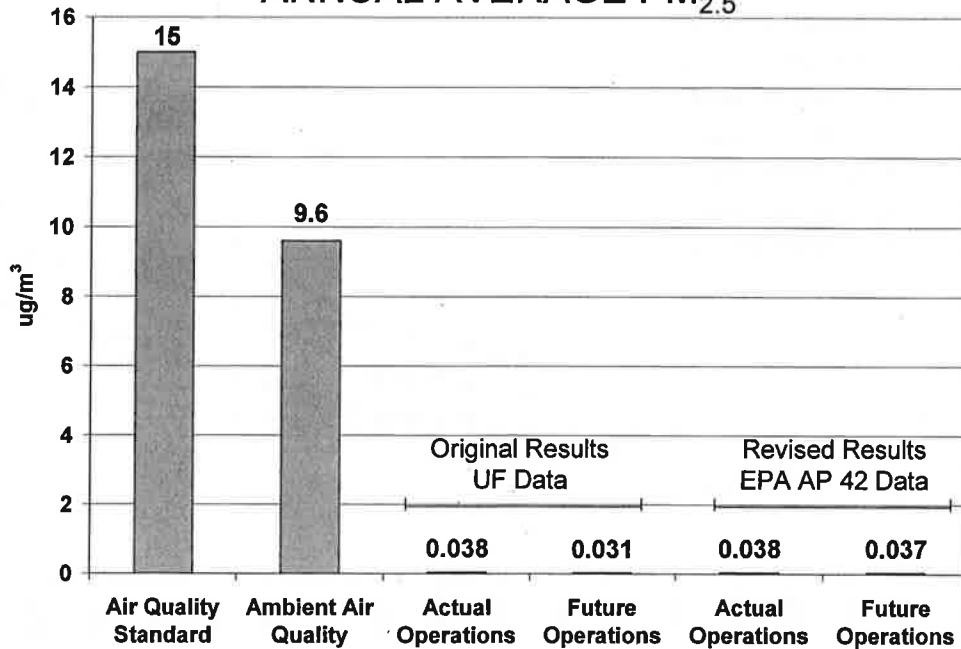
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ADDITIONAL ANALYSES PERFORMED IN RESPONSE TO COMMENTS

1. Additional PM_{2.5} Air Quality Modeling
2. Emissions From Open Burning
3. An Alternative Low Case Natural Gas Price Forecast
4. Sensitivity of Project to \$200/ton Carbon Tax (\$55/ton CO₂)

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**RESULTS FROM USING
RECOMMENDED* DATA WERE SLIGHT
ANNUAL AVERAGE PM_{2.5}**



* As recommended by the Alachua County Environmental Protection Department and Environmental Protection Advisory Committee

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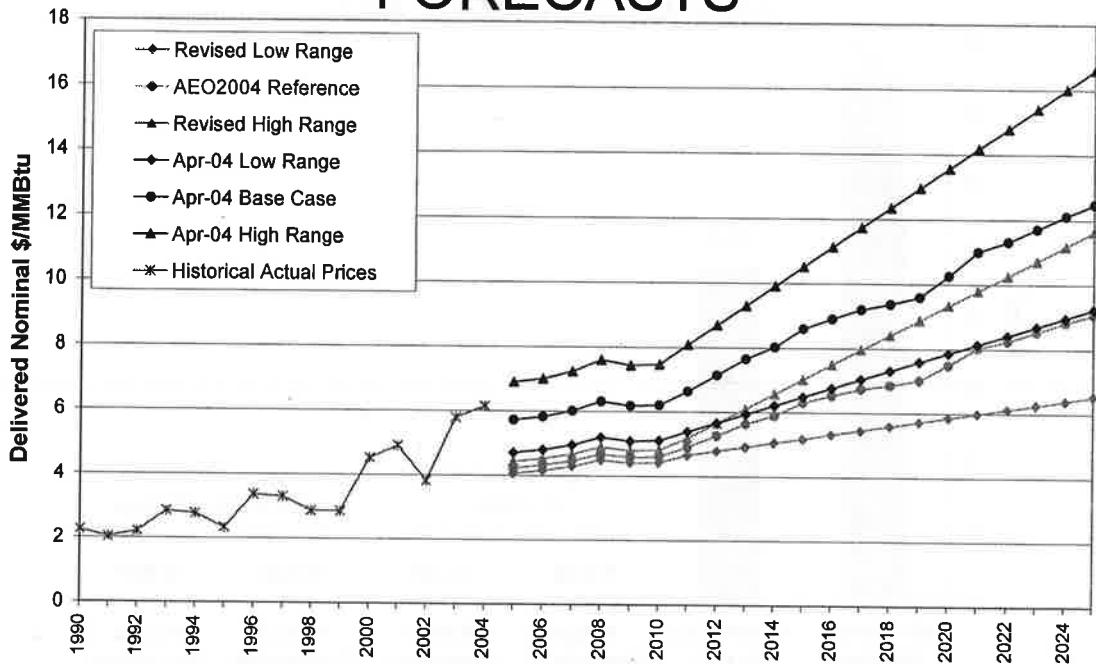
**ONE BENEFIT IS REDUCED
PARTICULATE EMISSIONS FROM
OPEN BURNING OF WASTE WOOD**

Particulate Reduction From Use Biomass	-766 tons/year
Increased Particulates From Solid Fuel Power Plant	65 tons/year
Net Particulate Decrease From Proposed Plan	<u>-701 tons/year</u>

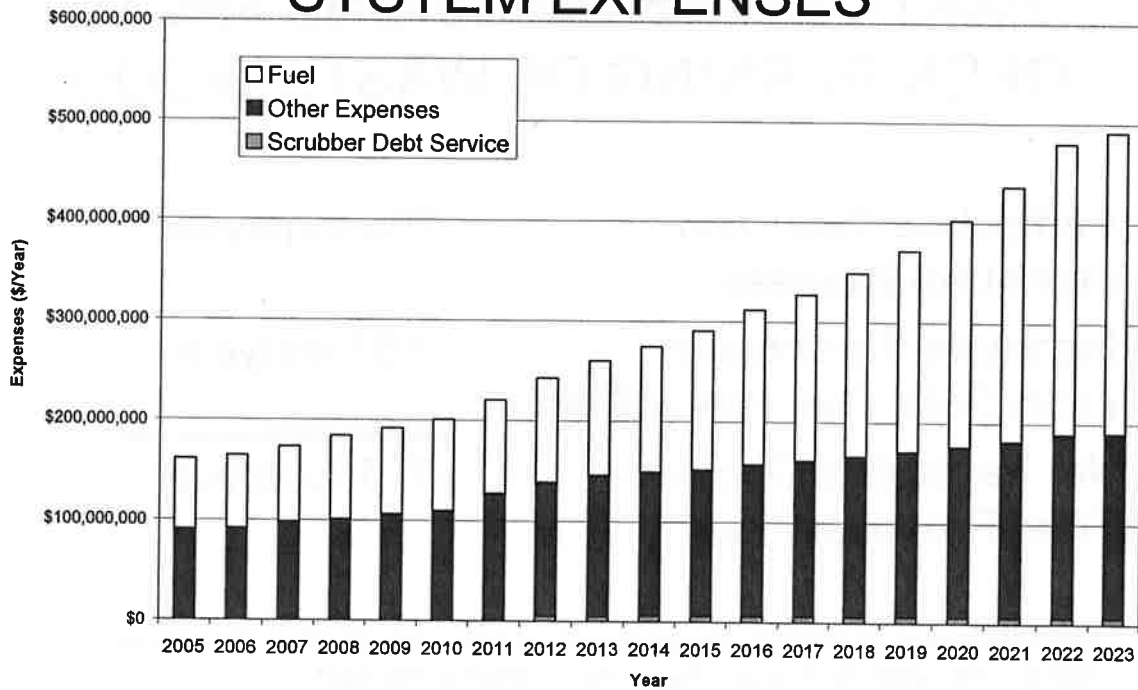
* Estimate based on amount of wood required to sustain 30 MW of baseload capacity. Assumes 50% would have been burned in the field.

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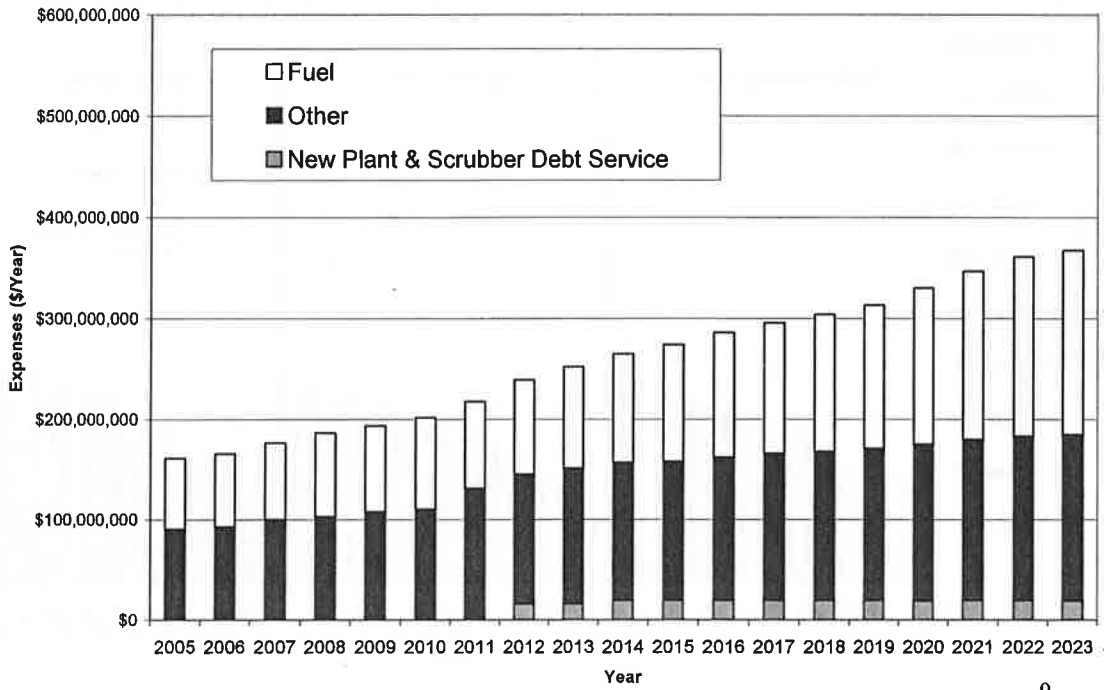
NATURAL GAS PRICE FORECASTS



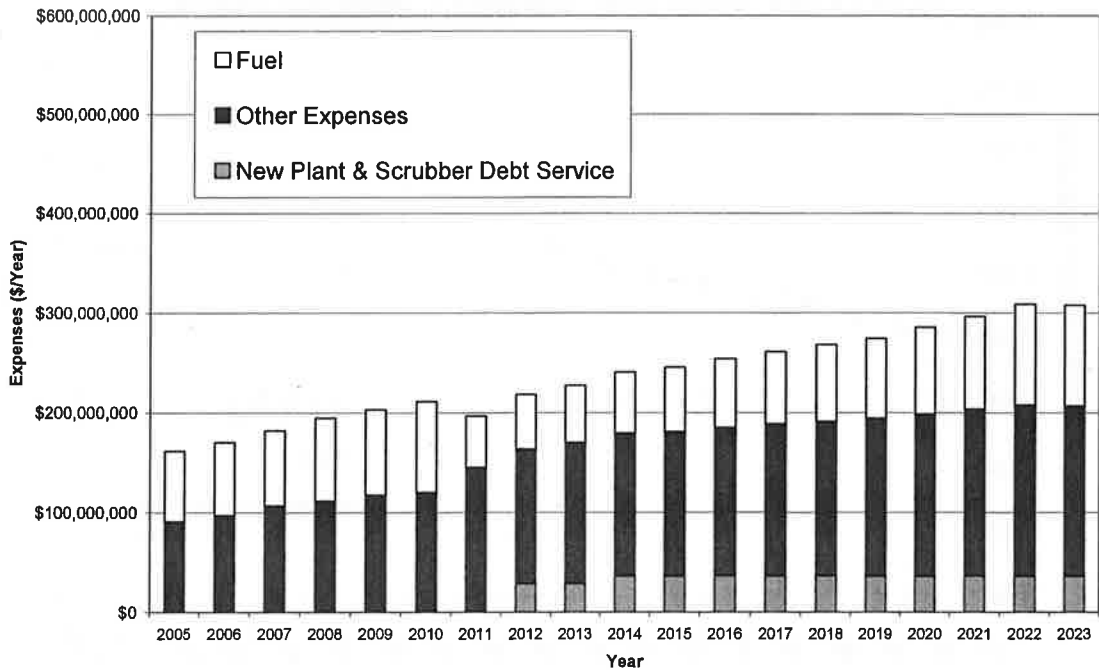
“RENT CAPACITY” PLAN SYSTEM EXPENSES



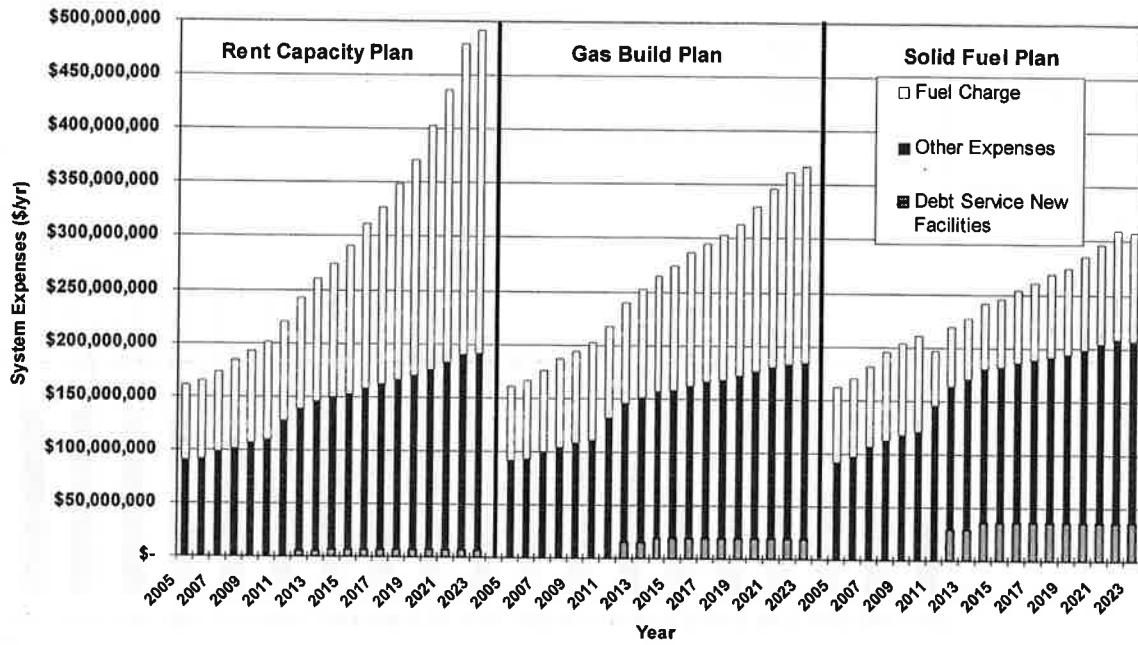
“Gas Build” Plan System Expenses



“Solid Fuel” Plan System Expenses



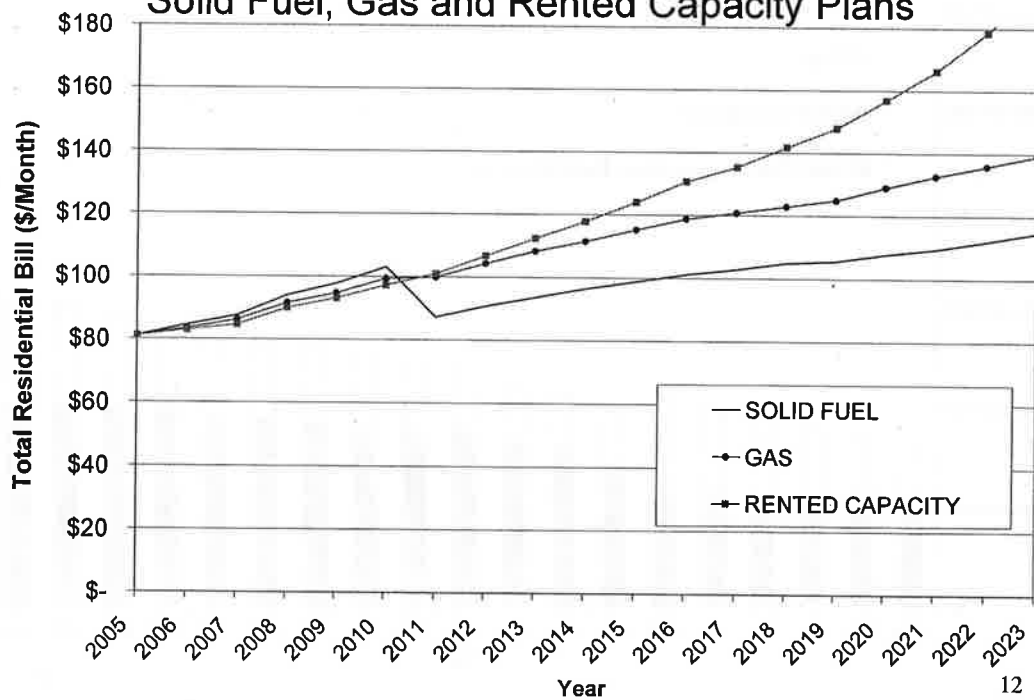
SYSTEM EXPENSES BY SCENARIO



RESIDENTIAL ELECTRIC BILL

(1000 kWh Consumption)

Solid Fuel, Gas and Rented Capacity Plans



ADDITIONS TO THE PROPOSAL PLAN*

1. Additional Ambient Air Particulate Monitoring
2. A Greenhouse Gas Fund For Local Projects
3. A Conservation And Renewable Energy Goal

*In conjunction with affirmative decision to proceed with the development of the proposed plan.

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PROPOSED FUNDING MECHANISM: 1.5% of Capital Cost

Fiscal Year	Projected Spending Plan	Principal Draw	Greenhouse Gas Fund
2005	2.0%	\$8,388,696	\$125,830
2006	3.0%	\$12,960,536	\$194,408
2007	2.0%	\$8,899,568	\$133,494
2008	14.0%	\$64,165,885	\$962,488
2009	41.0%	\$193,551,810	\$2,903,277
2010	33.0%	\$160,459,171	\$2,406,888
2011	5.0%	\$25,041,356	\$375,620
		Nominal Total	\$7,102,005
		Present Value Total	\$4,921,728

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PROPOSED RENEWABLE ENERGY AND CONSERVATION GOAL

The following goal is attainable by Gainesville Regional Utilities if the proposed long term electric supply plan is implemented.

“Meet an additional 10% of our customers’ electrical needs through renewable energy and conservation by 2012”.

This goal is higher than that of any other electric utility in Florida.

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Thank You

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