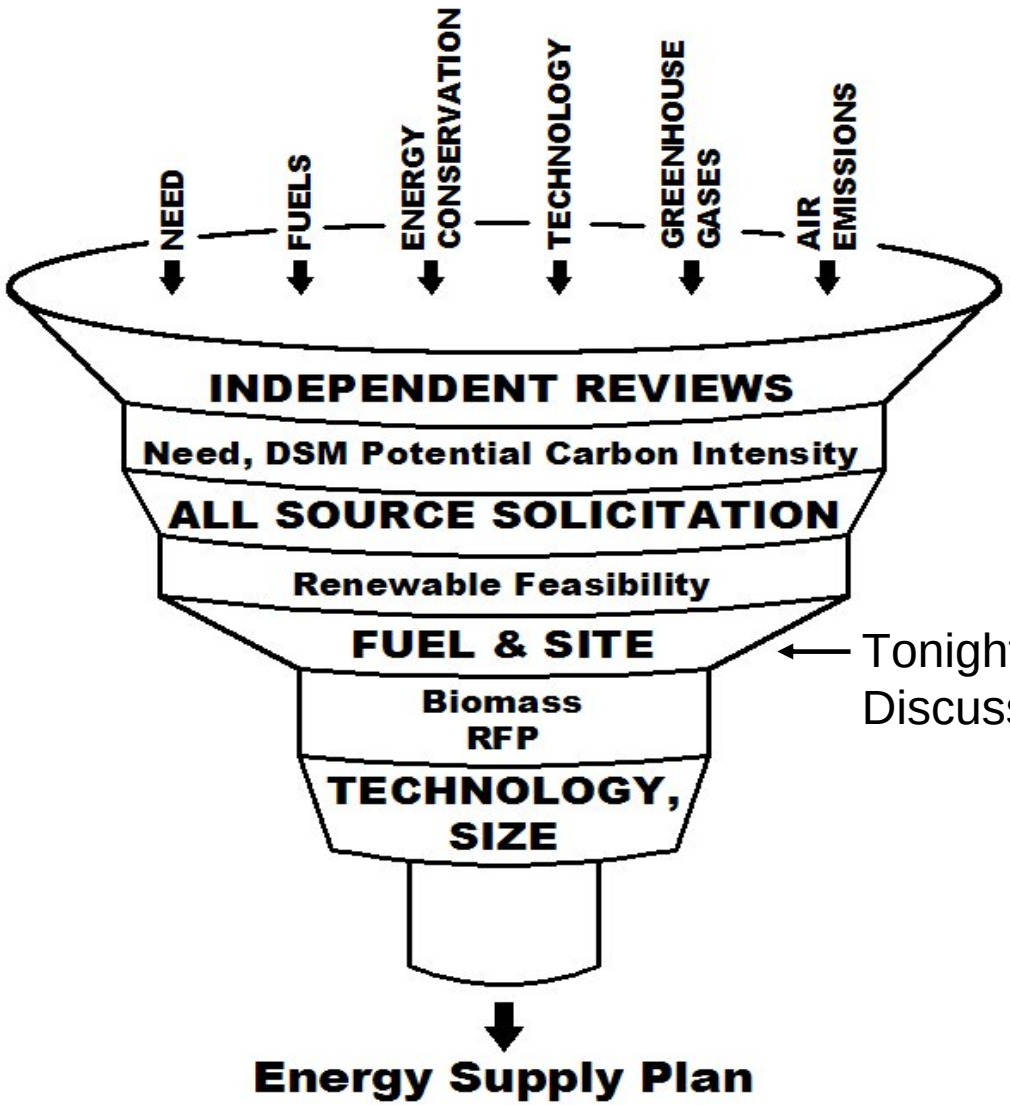
OPTIONS FOR A BIOMASS ENERGY SUPPLY REQUEST FOR PROPOSAL

Presentation to the
Gainesville City Commission
June 18, 2007

Screening Through Our Options



← Tonight's Discussion

Ongoing Renewable Energy Power Supply Projects & Solicitations

- City of Tallahassee
- Florida Power And Light
- JEA
- Seminole Electric Cooperative
- Others Throughout The Southeast

May 10, 2007
Special Commission Meeting Action

1. Prepare an RFP for biomass-fueled capacity:
   - Perhaps jointly with other utilities
   - Possibly located at Deerhaven
   - Possibly multi-fuel including MSW or coal
   - Possibly incrementally constructed
   - <100 Megawatts
2. Negotiate a Purchased Power Agreement(s) to cover the upcoming period of biomass plant construction, projected fleet retirements and ongoing implementation of DSM programs:
   - Economic need for baseload capacity now
   - Reliability and price issues vs. the “opportunity energy” we purchase hourly now
   - Fuel sources for the energy
   - How much and for how long?
3. Continue research and due diligence work on new integrated “eco-industry” possibilities that are designed for carbon capture.

Site Considerations

1. Delay
2. Cost
3. Efficiency
4. Reliability

Fuel Types

Biomass	Forest Thinning
	Logging Residue
	Municipal Solid Waste (MSW)
	Pulpwood
	Urban Waste Wood
Fossil Fuels	Coal
	Methane
	Petroleum Coke

Factors For Comparing Fuel Types

- Emission Controls
- Environmental Sustainability
- Fuel Cost
- Reliability
- Traffic Effects

Florida Forest Management

	% of Forest Area In Florida
Best Management Practices	Approx. 89%
Voluntary Certifications - Sustainable Forest Initiative - American Tree Farm System	Approx. 10%
Purchased Certifications - Smartwood - Forest Stewardship Council	<1%

Operational Considerations

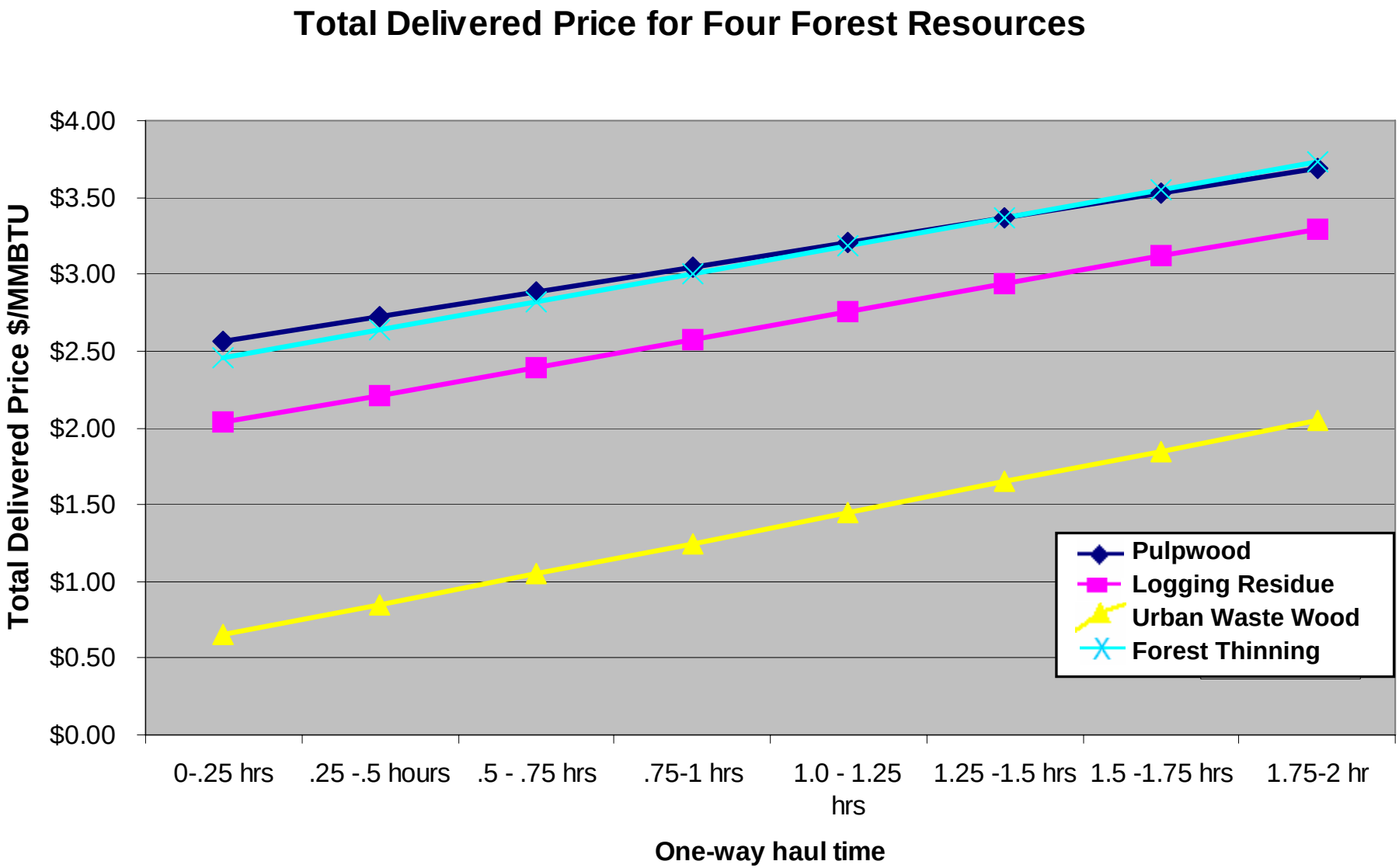
- Fuel Quality
- Fuel Blending
- Ash Management
- Fuel Flexibility
- Transportation Logistics

Environmental Comparisons of Fuel Sources

	Forest Products	Municipal Solid Waste	Coal or Pet Coke
Particulates	Yes	Yes	Yes
NO_X	Yes	Yes	Yes
Toxic Organic Emissions	N/A	Technology Dependent	N/A
Metals	N/A	Technology/ Scrubber	Scubber
Ash Disposal/Reuse	Fertilizer	Land Fill	Cement
Greenhouse Gases	Carbon Neutral	Low Carbon	High Carbon

(Yes = Control Needed)

Preliminary Biomass Costs



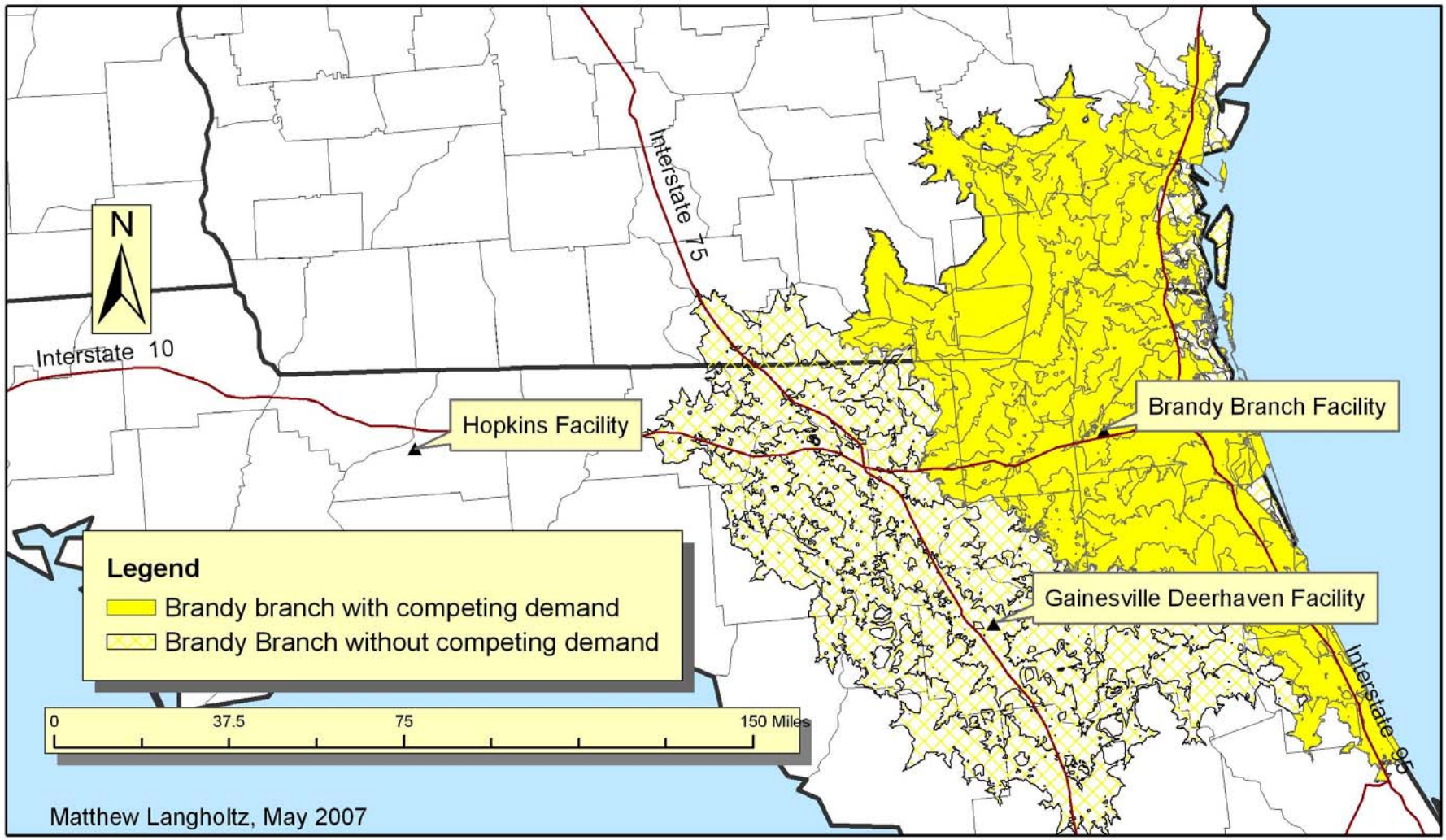
Preliminary Comparison Of Fuel Costs And Supply

	Approx. $/MMBTU	Supply
Municipal Solid Waste	Low	Stable
Urban Wood Waste[a]	1.60	Seasonal
Petroleum Coke	2.00	Price of 0il
Logging Residue[a]	2.90	Market Conditions[b]
Coal	3.00	Stable
Forest Thinning[a]	3.40	Market Conditions[b]
Pulp Wood[a]	3.40	Market Conditions[b]
Natural Gas	8.00	Volatile Price

a. Within 1.25-1.5 hours collect time

b. Market Conditions=Value of pulp, competition with mills.

Biomass Catchment Area: JEA & GRU Results



Preliminary Traffic Impacts From Truck Delivery

(40 MW Plant)

	Trucks/Day	Roadway Traffic Impact
US 441 From North	72	0.37%
US 44 From South	111	0.58%
Total	183	0.50%

Note: 300 delivery days per year

Conclusion

Provide policy guidance on:

1. The acceptable range of fuels to include in the RFD; and

2. Making the Deerhaven Site an option.

Thank you

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