ATTACHMENT C BIOMASS RFP 2007-135 EVALUATION METHODOLOGY

EVALUATION CRITERIA AND WEIGHTS

The major objectives of the RFP were to provide: 1) cost effective renewable electrical generation capacity and/or energy benefits, 2) environmental attributes consistent with the preferences of the Gainesville community, and 3) enhanced and reliable energy supply for the GRU system. Fourteen criteria were developed as means to measure each proposal's ability to achieve these objectives. Section 29 of RFP 2007-135 listed the evaluation criteria to be applied. The weights to be applied to each of the criteria were developed by the evaluation team with the intent of weighting the factors so that each major objective would be roughly similar. The weights were developed prior to the due date of the proposals. Table 1 summarizes the criteria applied and the weights assigned to them.

TABLE 1 EVALUATION CRITERIA AND WEIGHTS GROUPED BY MAJOR OBJECTIVES

Category / Criteria	Criteria Weight	
(1) Economics: Cost Effective Renewable Capacity and/or Energy Benefits		
(a) Project All-in Production Cost	10.0	
(b) Project Variable Production Costs	8.0	
(e) Fuel Requirements and Sources	7.0	
(f) Anticipated Project In-Service Date and/or Energy Delivery	4.0	
(n) Local Economic Impact	2.0	
Category Subtotal	31.0	
(2) Environmental: Environmental Attributes Consistent with the Gainesville Community		
(d) Environmental Emissions	10.0	
(g) Project Commitment to Sustainable Forest Resource		
Management	10.0	
(m) By-product/Waste Production and Disposition	8.0	
(h) Project Site Requirements		
Category Subtotal	34.0	
(3) Risk & Reliability: Enhanced and Reliable Energy Supply		
(k) Proposed Contractual Terms and Conditions	10.0 ¹	
(c) Technology Readiness and Project Reliability	9.0	
(j) Experience and Resources of Project Developer/Sponsor		
(i) Project Size and Design	5.0	
(I) Respondent's Financial Strength	5.0	
Category Subtotal	35.0	
Total	100.0	

¹ Weights for criteria (k), (c), and (j) in Table 1 were reported in error in the documents originally submitted to GRU's website. The errata were corrected and entered into this document on January 16, 2008.

CRITERIA SCORING

The method for scoring each criterion was also developed before the proposals were received. The methodologies were designed to allow a decision matrix to be developed using normalized scores assigned to each criteria. This approach allows the weight applied to each criterion score to clearly reflect the relative importance of that factor. The convention applied set a value of 1 as representing the worst score a proposal could receive for a given criterion and 5 as the best. A zero (0) would be applied if information sufficient to score a proposal on a given criterion was missing. The development of scores differed for each criterion, some of which included a number of "sub factors" as will be described in this summary. The scores for each criterion were normalized according to the following formula which sets the lowest score for a specific factor received by any given proposal as the value 1, the maximum score as the value 5, and linearly interpolates between the maximum and minimum score for scores in between based on each proposal according to the following formula:

Normalized Score = 1.0 + 4 * (score – min score)/ (max score – min score)

ALL-IN PRODUCTION COST

The respondents were instructed to provide all-in production costs per megawatt hour (MWh) for a specific set of fuel prices and capacity factors (see Table 2 in the RFP). Allin production costs include capital and financing, operation, maintenance, and fuel costs. The all-in production cost per MWh for each scenario, were normalized across all the proposals, and then summed. The summation for each proposal was then normalized to assign an overall production cost score for the decision matrix. This methodology captured the effects of heat rate curves, profit levels, and different fixed and variable costs across a wide range of operating conditions.

VARIABLE PRODUCTION COSTS

The respondents were instructed to provide variable production costs per megawatt hour for a specific set of fuel prices and capacity factors (see Table 3 in the RFP). Variable production costs include only fuel, chemical and other costs associated with running a unit. These variable production costs, for each scenario, were assigned scaled scores across all proposals, and then summed. The summation for each proposal was then normalized to assign a variable production cost score. Variable production costs are important as they indicate the relative position of the facility in GRU's economic dispatch stack and are related to the marketability of excess power in the wholesale power markets. The methodology captured the effects of heat rate curves and variable costs across a wide range of operating conditions.

TECHNOLOGY READINESS AND PROJECT RELIABILITY

This criterion is described in Section 26 of the RFP. Scores were based on the number of systems in commercial operation that are producing electricity and have a fuel consumption of at least 25 tons per day. Information provided by each respondent as well as a thorough web search related to each specific technology were used to make this determination.

ENVIRONMENTAL EMISSIONS

Each proposal was scored based on ratings assigned to sub factors related to SO2, NOx, Hg, and PM emission standards and carbon neutrality. If a proposal claimed to only meet a standard it was scored a 1 for that sub factor, if it claimed to be able to beat the emission standard for each parameter it was rated as a 3, and if those claims were quantified and substantiated by the systems being proposed it was rated as a 5 for that sub factor. In a similar manner, a proposal with non-renewable fuel requirements (such as natural gas for process stabilization) was rated with a 1 for that sub factor, one that was 100% carbon neutral was rated as a 3, and those that avoided methane production in landfills² were rated with a 5. The sub factor scores were then summed, and this value was normalized to score the criterion across proposals.

FUEL REQUIREMENTS AND SOURCES

Sections 18 and 21 and Appendix A of the RFP address fuel requirements and sources in detail. Table 2 describes sub factors applied to develop scores for this criterion. Each proposal was rated on a scale of 1 to 5 for each sub factor, the sub factor scores were then summed, and the sum was normalized to score the criterion for each proposal.

Criterion Sub Factor	Sub Factor Objective	Explanation of evaluation process
Price	* Compare price to UF study	* Estimated price compares to "Economic Availability of Alternative Biomass Sources for Gainesville, Florida * Preference given to those who are competitive - fall within a threshold
Access to biomass supply	* Existing contracts in place for source * Land ownership issues	 * Written/existing contracts ensure reliable supply * Land ownership of Forest related biomass supply ensures a reliable stream of fuel
Quality Assurance	* Designated local, regional or corporate quality assurance director * Written fuels program provided meets standards * Performance history provided	 * Preference given to companies with quality assurance division, monitors the fuels * Must meet fuel standards (sustainable, non-recyclable, uncontaminated etc.) * Fuel Performance indicators are provided from past contracts (specific things here)

TABLE 2 SUB FACTORS APPLIED TO FUEL REQUIREMENTS AND SOURCES

² Pursuant to NREL Publication TP-510-32575 <u>Biomass Power and Conventional Fossil Systems with and</u> <u>without CO2 Sequestration -- Comparing the Energy Balance, Greenhouse Gas Emissions and Economics.</u> Spath, P. L.; Mann, M. K. 38 pp. 2004

Reliability of supply	 * Size of company * Response time after request for assistance * Sensitivity of feedstock to seasons and weather 	 * Size determines the labor and equipment resources available to GRU in an emergency situation * Need response time as indicated * Need employees familiar and trained on how to respond safely and quickly
Fuel Delivery mode	* Multimodal delivery options	 * looking for multiple ways to deliver fuels to the plant (train, truck, etc.) - multimodal delivery reduces trips to facility
Fuel Diversity	* Proposal shows thought into diversity of fuels	 * proposal shows thought into providing a diversity of fuels - fuel diversity reduces risk - risk increases when supply is constrained to one source
Where fuels are processed	* Preference given to off site processing * Preference given to fuels arriving ready to use	 * On site processing may generate waste products. GRU does not want waste products on-site. Off site processing eliminates wastes and the associated removal and disposal of waste
Fuel types	* Proposal uses appropriate/specified materials	* Are proposed fuels those specified in the RFP? Including coal, coke, fuels outside of specifications is not permissible

ANTICIPATED PROJECT IN-SERVICE DATE AND/OR POWER DELIVERY

Earlier commercial service dates and/or energy delivery dates were scored higher than those with later dates. The projected in-service date was normalized to score this criterion for each proposal.

COMMITMENT TO SUSTAINABLE FOREST RESOURCE MANAGEMENT

Section 25 of the RFP described GRU's concerns related to this topic. Proposals were scored for this criterion relative to each other after consideration of the following sub factors:

- Biomass coming from forest related operations only.
- Higher scores given for proposals that reference natural resource sustainability.
- Higher scores for those that show sustainability by identifying/defining the total forest biomass resources to be used and the effects of annual fuel procurement on this resource.
- Higher scores for plans that reference or follow state regulations (Example: State of Florida Silvicultural Best Management Practices)
- Added values
 - A detailed procurement plan.
 - Plan shows the effects of the fuel stream removal on the total resource.
 - Procurement by fuel types is addressed

- Obtaining a percentage of the forest related biomass from forests that have been certified by one of the following forest certification systems
 - Sustainable Forestry Initiative
 - American Tree Farm System
 - Forest Stewardship Council
- Company or subcontractors that procure the biomass use continuing education programs that show a commitment to environmental stewardship (Example: Florida's Master Logger Program)

PROJECT SITE REQUIREMENTS

The objective of this criterion was to measure the compatibility of the proposed facilities with the Deerhaven site. Location, number of acres, transportation, transmission, fuel delivery systems, water and wastewater requirements solid waste disposal requirements and other aspects of the project were taken into consideration in scoring the proposals relative to each other.

PROJECT SIZE AND DESIGN

Section 19 of the RFP describes GRU's capacity requirements. Proposals were scored relative to each other based on their ability to meet projected base load requirements and flexibility for expansion on an incremental basis to meet future needs.

EXPERIENCE AND RESOURCES OF PROJECT DEVELOPER/SPONSOR

Section 29 of the RFP describes GRU interests with regard to this criterion. Proposals were scored relative to each other based on the information provided by the respondent.

PROPOSED CONTRACTUAL TERMS AND CONDITIONS

Sections 23, 24, and 28 of the RFP describes GRU's interests with regard to contractual terms and conditions. Table 3 contains the sub factors considered, the scores assigned based on certain contractual features, and the weights applied to the sub factor scores. The total weighted score was then normalized to score each proposal on this criterion.

TABLE 3 SUB FACTORS, SCORES, AND WEIGHTS FOR CONTRACTUAL TERMS AND CONDITIONS

Sub Factor Category	Wt.	Proposed Contract Terms & Conditions	Score
Contract Structure	25.0%	- Take and Pay with option to purchase or equity share, energy charge only (4.5 if energy & capacity charge, 4.3 if must take w/energy & capacity charge)	5.0
		- Take and Pay with no option to purchase, no equity share, energy charge only (3.5 if energy & capacity charge, 3.3 if must take w/energy & capacity charge)	4.0
		- Engineer, Procure and Construct (EPC) with GRU ownership & operation	3.0
		- Take or Pay with option to purchase or equity share	2.0
		- Tolling arrangement with GRU taking fuel risk	2.0
		- Take or Pay with no option to purchase, no equity share	1.0

		- Contract structure not specified in proposal			
		- Other: Proposed contract structures not identified above will be given score commensurate with risk most closely related to a contract structure listed above			
		Category Weighted Score			
	25.0%	- Firm Energy/Capacity with liquidated damages	5.0		
		- Replacement energy or capacity at lower of contract or market price	5.0		
		- Backup fuels or systems with energy priced at lowest of cost of production, contract price, or market price			
		- Performance standards or guarantees	4.0		
Risk		- Replacement energy or capacity at contract price			
Mitigation		- Backup fuels or systems with energy priced at cost of production	3.0		
		- Mark-to-market default settlement	2.0		
		- Replacement energy or capacity at market price	2.0		
		- No risk mitigation proposed	0.0		
		 Other: Proposed risk mitigation not identified above will be given score commensurate with risk most closely related to a risk mitigation measure listed above 	0.0		
		Category Weighted Score			
	15.0%	- GRU retains title to all Project energy and capacity	5.0		
Title to Excess		- Proposed sharing of title to energy and capacity between Respondent and GRU with allocation to GRU greater than or equal to 50%	3.0		
Energy or Capacity		- Proposed sharing of title to energy and capacity between Respondent and GRU with allocation to GRU less than 50%			
		- Respondent retains title to all excess energy and/or capacity or not addressed in proposal	0.0		
		Category Weighted Score			
	15.0%	- GRU retains title to all RECs and environmental credits	5.0		
Ownership		 Proposed sharing of ownership of RECs and environmental credits between Respondent and GRU with allocation to GRU greater than or equal to 50% 			
of Environ-		- REC ownership to be negotiated.	2.0		
Attributes		 Proposed sharing of ownership of RECs and environmental credits between Respondent and GRU with allocation to GRU less than 50% 	1.0		
		- Respondent retains title to all RECs and/or environmental credits or not addressed in proposal	0.0		
		Category Weighted Score			
	10.0%	- GRU determines project financing arrangement	5.0		
Financing		- GRU can modify proposed financing arrangement	3.0		
Flexibility		- Financing flexibility implied but not explicitly detailed.	1.0		
		- GRU cannot modify proposed financing arrangement or not addressed in proposal	0.0		
		Category Weighted Score			
	5.0%	- Acceptable, well-defined force majeure provisions	5.0		
Force		- Force majeure provisions to be negotiated between parties	3.0		
Majeure		- Asymmetric force majeure provisions favoring Respondent or none proposed	1.0		
Provisions		 Force majeure provisions not addressed in proposal Other: Proposed force majeure provisions not identified above will be assigned a score from 1-5 	0.0		
	1	Category Weighted Score			
Dispute	E 0%	Assentable proposed process at Despendent's synames	E O		
	3.0%	- Acceptable biodosed biocess at Respondent's expense	5.0		
Resolution	5.0%	Acceptable proposed process at Respondent's expense Acceptable proposed process with expenses shared equally	5.0 3.0		

Totals	100.0%	Total Weighted Score		
		Category Weighted Score		
		- Other: Proposed dispute resolution provisions not identified above will be assigned a score from 1-5		
		- No dispute resolution process identified in proposal	0.0	
		 Acceptable proposed process and GRU responsible for more than 50% of expenses 	1.0	
		- Acceptable proposed process and allocation of expenses not addressed		

PROPOSER'S FINANCIAL STRENGTH

Sections 23, 24, 28, and 29 all describe GRU's interests related to the respondent's financial capability, which is strongly associated with financial risk mitigation. The various factors considered in assigning a score are described below.

Credit Ratings Bond Rating

	Standard &			
<u>Moody's</u>	Poor's	<u>Grade</u>	<u>Risk</u>	Ranking
Aaa	AAA	Investment	Lowest Risk	5
Aa	AA	Investment	Low Risk	4
А	A	Investment	Low Risk Medium	3
Baa	BBB	Investment	Risk	2
Ba, B	BB, B	Speculative	High Risk Highest	1
Caa/Ca/C	CCC/CC/C	Speculative	Risk	
С	D	Junk	In Default	

Commercial Paper Credit Ratings

	Standard &				
<u>Moody's</u>	Poor's	<u>Grade</u>	<u>Risk</u>	<u>Ranking</u>	
P1	A1+ or A1	Superior	Lowest Risk	5	
P2	A2	Satisfactory	Low Risk	4	
P3	A3	Adequate	Medium Risk	3	
NP	B or C	Speculative	High Risk	2	
NP	D	Defaulted	Highest Risk	1	

Key Financial Ratios – Profitability

Net Profit Margin (Return on Sales) - A measure of net income dollars generated by each dollar of sales.

Net Income *

 Net Sales

 Return on Assets - Measures the company's ability to utilize its assets to create profits.

 Net Income * (Beginning + Ending Total Assets) / 2

Return on Investments - Measures the income earned on the invested capital.
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Return on Equity - Measures the income earned on the shareholder's investment.

Equity

Key Financial Ratios – Solvency

Debt to Asset - Provides information about the company's ability to absorb asset reductions arising from losses without jeopardizing the interest of creditors.

Total Liabilities Total Assets

Debt to Equity - Indicates how well creditors are protected in case of the company's insolvency.

Total Debt Total Equity

Interest Coverage Ratio (Times Interest Earned) - Indicates a company's capacity to meet interest payments. Uses EBIT (Earnings Before Interest and Taxes)

EBIT Interest Expense

Long Term Debt to Net Working Capital - Provides insight into the ability to pay long term debt from current assets after paying current liabilities.

Long-term Debt Current Assets - Current Liabilities

Key Financial Ratios – Liquidity

Working Capital - Working capital compares current assets to current liabilities, and serves as the liquid reserve available to satisfy contingencies and uncertainties. A high working capital balance is mandated if the entity is unable to borrow on short notice. The

ratio indicates the short-term solvency of a business and in determining if a firm can pay its current liabilities when due.

Current Assets - Current Liabilities

Acid Test - A measurement of the liquidity position of the business. The quick ratio compares the cash plus cash equivalents and accounts receivable to the current liabilities. The primary difference between the current ratio and the quick ratio is the quick ratio does not include inventory and prepaid expenses in the calculation. Consequently, a business's quick ratio will be lower than its current ratio. It is a stringent test of liquidity.



<u>Cash + Marketable Securities + Accounts Receivable</u> Current Liabilities

Current Ratio - Provides an indication of the liquidity of the business by comparing the amount of current assets to current liabilities. A business's current assets generally consist of cash, marketable securities, accounts receivable, and inventories. Current liabilities include accounts payable, current maturities of long-term debt, accrued income taxes, and other accrued expenses that are due within one year. In general, businesses prefer to have at least one dollar of current assets for every dollar of current liabilities. However, the normal current ratio fluctuates from industry to industry. A current ratio significantly higher than the industry average could indicate the existence of redundant assets. Conversely, a current ratio significantly lower than the industry average could indicate a lack of liquidity.

<u>Current Assets</u> Current Liabilities

BY-PRODUCT/WASTE PRODUCTION AND DISPOSITION

Section 29 of the RFP specified the information to be provided related to this criterion. Three sub factors were used to score each proposal: a) the quantity produced (1= relatively large, 5 relatively small); b) the disposal requirements of the material (100% hazardous = 1, 50% hazardous = 3 and non hazardous = 5); and c) the ability to beneficially re-use any by-products (0% = 1, 50% = 3 and 100% = 5). The sub factors were then summed and the total for each proposal was then normalized to score the criterion.

LOCAL ECONOMIC IMPACT

Section 24 of the RFP addresses issues related to local economic value that are not explicitly part of the all-in production cost of the proposed facility. These sub factors include:

- (i) Number of Local Jobs
- (ii) Average Salary of Local Jobs
- (iii) Tangible Taxes produced in Alachua County
- (iv) Ad Valorem Taxes in Alachua County

Each proposal was scored relative to each other based on these factors.