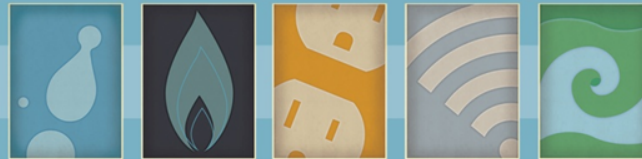


# GRU100

100 YEARS of SERVICE | 1912-2012

## GREC Proposal Discussion

Item # 130310



**August  
23**



**Sept.  
5**



**Sept.  
19**



**Sept.  
23**



**Oct.  
3**



**Oct.  
17**



**Oct.  
22**



GREC  
Advises GRU  
it wants to sell  
GREC

Right of First  
Offer 60 Days  
Begins

GREC offers  
to reimburse  
legal fees  
(\$1.5 million)  
if GRU  
waives some  
rights

City  
Commission  
meeting

Advise City  
Commission  
of GREC  
intention  
and offer

Frame  
Decisions

City Commission  
meeting

Describe the  
sources of savings

Present high level  
numbers

Qualitatively discuss  
assumptions/ risks

**Direction**

Will GRU accept  
GREC's offer to  
reimburse legal fees  
(\$1.5 million)?

Determine areas in  
which City  
Commission wishes  
more, or more in  
depth, information

**GREC  
offer  
expires**

City Commission  
meeting

Address items  
identified at Sept.  
9 meeting

Discuss risk  
assessment  
1603 grant  
Financial risk  
Operational risk  
other

City  
Commission  
meeting

**Decision:**  
Make Right of  
First offer final  
decision

**GRU's right  
of first offer  
rights expire**

**August**

**23**



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Discuss risk  
assessment

- 1603 grant
- Financial risk
- Operational risk
- other

Sept.  
19

City Commission  
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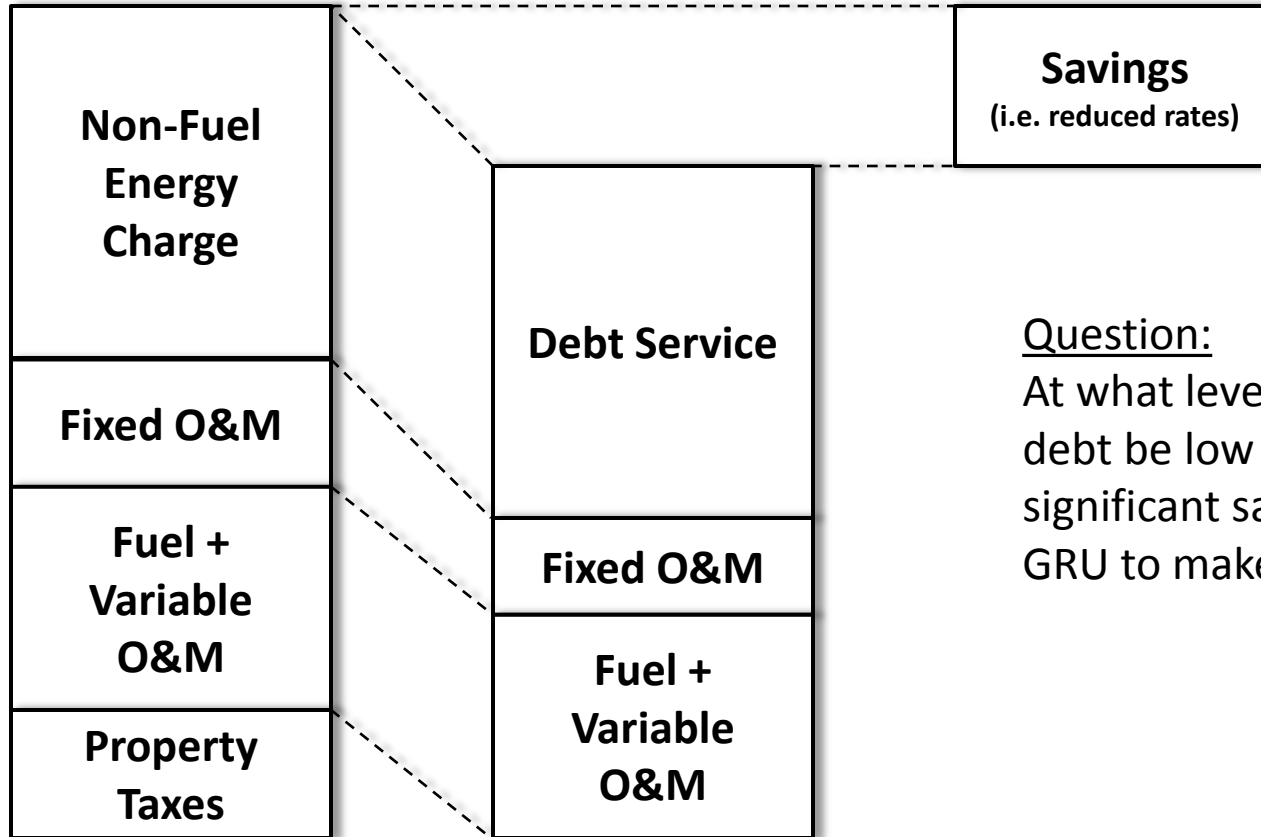
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↑  
\$



- No property tax
- Reduced FOM
- Swap NFER for debt

Question:

At what level of borrowing will debt be low enough to achieve significant savings but also allow GRU to make a competitive bid?

GRU costs as  
"Buyer" of power  
under PPA

GRU costs as  
"Owner" of GREC



# Cost/Value to GRU

<b>Purchase Price</b>	\$520 M	\$620 M	\$720 M	\$800 M
<b>Less Grant</b>	(\$120 M)	(\$120 M)	(\$120 M)	(\$120 M)
<b>Net Price (GRU Debt)</b>	\$400 M	\$500 M	\$600 M	\$680 M
<b>Net Present Value of Saving</b>	\$490 M	\$376 M	\$263 M	\$172 M
<b>% 30 Year Savings to PPA</b>	25%	20%	14%	9%
<b>% 30 Year Savings to PPA less Fuel &amp; Variable O&amp;M</b>	TBD	TBD	TBD	TBD

- Cost of tax-exempt borrowing = 5.5%
- Average weighted cost of capital = 4.5%

# Major Assumptions

- ☑ • GRU's cost of borrowing = 5.5 percent (reflects interest rate of high "A" bond rating)
- ☑ • GRU's average weighted cost of capital = 4.5 percent
  - Facility will maintain  $\geq 90\%$  availability factor
  - Assuming and managing the plant's O&M generates savings with minimal marginal risk
  - The difference in fuel risk between being "buyer" under the PPA & being "owner" is minimal
  - Other

# Assessment of Change in Risk Profile Associated with GREC Acquisition

		Under PPA, GRU as Buyer	Under GRU Ownership	Chg. To GRU Risk	Confidence (in scope of risk)	Significance (of change in GRU risk)
<b>Operational Performance Risk</b>	<b>Performance; thermal</b>	GREC has the risk of capacity falling short of 100 MW and of Heat Rated being greater than contract requirement. As a similar plant is in service and has demonstrated performance, risk is negligible. Any HR improvement over contract is to GREC's economic advantage.	GRU has capacity and HR risk, as with its existing generation assets. Acquisition likely after GREC has completed successful Dependable Capacity Test. Any improvement in HR over contract is to GRU's economic advantage. (To the degree that GREC has some margin, i.e. profit, built into the HR, GRU can receive this benefit)	↑	MEDIUM	MEDIUM
				See note		
	<b>Performance; environmental</b>	GREC has the risk of receiving and complying with the required air and ground/surface water permits. Compliance requires BACT technology	Timing of an acquisition is such that GRU would acquire the facility after the required permits are issued. GRU would have the risk of ongoing operation in compliance with the permits, as it does with its existing facilities.	↓	HIGH	LOW
	<b>Reliability</b>	GREC has risk of maintain reliability at contract levels or lose NFEC and/or pay damages. Assume GREC maintains $\geq 90\%$ availability factor	GRU has reliability risk, as it does with its other generating facilities. GRU could assume NAES 7 year O&M contract. All plant equipment is in reliable service elsewhere. DH2 normalized (for planned outage) 18 yr availability = 91.70%. Last 5 yr = 93.62%	↑	HIGH	LOW; while GRU does take op. risk, the incremental risk above that already managed is minimal.
<b>Operational Flexibility</b>	GREC must dispatch around the following restrictions: - low load = 70m - OFF/ON cycle (Winter) = 16 - OFF/ON cycles (summer) = 0	Improved Operational Flexibility - Low Load = 50 mw - OFF/ON cycles = Unlimited	↓	HIGH	MEDIUM; Reduced ANOPC from more flexibility in unit commitment	

# Assessment of Change in Risk Profile Associated with GREC Acquisition

		Under PPA, GRU as Buyer	Under GRU Ownership	Chg. To GRU Risk	Confidence (in scope of risk)	Significance (of change in GRU risk)
<b>Operational Non-Fuel Cost Risk</b>	<b>Variable O&amp;M</b>	GRU pays \$3.15 MW-h, escalated by CPI.	GRU has risk of VOM escalating faster than CPI. (Note; if the \$3.15 has profit in it, that would flow to GRU.)	↑	HIGH; GRU experience is that VOM escalation exceeds CPI	MEDIUM
	<b>Non-Fuel Energy Charge</b>	Fixed to GRU over 30 years; no inflation risk to GRU	No NFEC. Exchanged for 30 year fixed debt (see credit risk.) Acquisition based on the NFEC/debt swap bring significant value as all profit in NFEC flows to GRU.	↓	HIGH	HIGH
	<b>Fixed O&amp;M</b>	Fixed to GRU over 30 years; no inflation risk to GRU (1) 1 year O&M expense = \$14 M (1 <sup>st</sup> year) (1) To be willing to have FOM flat for 30 years, a risk premium was embedded in the expense projection	GRU assumes inflation risk, which it has for its existing assets. (As owner, GRU participates in any saving resulting from staffing efficiencies and any profit built into the NFEC now flowing to GRU.) Assume O&M = \$10M (including insurance, 1 <sup>st</sup> year)	↑	HIGH	LOW: GRU FY14 O&M = \$107 million. Increase < 10% with GREC
		Assumes GREC cost of \$14m/yr and 2.5% escalation (for them, not passed on to GRU)	Assumes GRU's cost to be \$10m/yr, and 2.5% escalation	↓	MEDIUM	MEDIUM
	<b>Capital</b>	No direct risk to GRU with fixed NFEC. Only indirect risk if GREC fails to adequately fund plant improvements/upgrades to maintain reliability.	GRU assumes cost of capital upgrades. Assume \$1-2M/yr. in early (3-5?) years and \$3-5M/yr. there after	None/ Negligible	HIGH	LOW

## Assessment of Change in Risk Profile Associated with GREC Acquisition

		Under PPA, GRU as Buyer	Under GRU Ownership	Chg. To GRU Risk	Confidence (in scope of risk)	Significance (of change in GRU risk)
<b>Fuel Risk</b>	<b>Availability</b>	GREC uses BRM for fuel procurement. Currently has 40% + requirements under contract for 5 years. Many independent studies show more than needed supply in the 75 mile radius woodshed.	Current contract with BRM likely assignable to GRU	None / Negligible	HIGH	LOW
	<b>Price</b>	Fuel cost is pass through to GRU with yearly true up. True up is economic advantage to GRU in a rising fuel cost market	GRU pays for fuel at as delivered price. Fuel cost reduced by any profit built into the Target Fuel Price calculation in the PPA.	↓	MEDIUM	MEDIUM
	<b>Replacement Power Cost</b>	Incremental cost if GREC is unavailable and GRU has to replace the power from (a) its other units or (b) from the market. Expect replacement power, even firm from market, to be less than GREC total cost. (Note; when GREC is unavailable, GRU is not charged NFEC or FOM)	Incremental cost if GREC is unavailable and GRU has to replace the power from (a) its other units or (b) from the market. Assume GREC and GRU system average production costs to be comparable.	↑	MEDIUM	LOW
	<b>Competitiveness with Other Fuel Types</b>	<p style="text-align: center;">FUEL + VOM</p> <ul style="list-style-type: none"> <li>- GREC; \$37.33 (contract)</li> <li>- DH2; \$42.34 (9-17-13)</li> <li>- CC1; \$33.53 (9-17-13)</li> <li>- "mkt"; \$33.16 (Fa HR &amp; HH Gas-\$5 VOM)</li> </ul>	<p style="text-align: center;">FUEL + VOM</p> <ul style="list-style-type: none"> <li>- GREC; \$37.33 (contract)</li> <li>- DH2; \$42.34 (9-17-13)</li> <li>- CC1; \$33.53 (9-17-13)</li> <li>- "mkt"; \$33.16 (Fa HR &amp; HH Gas-\$5 VOM)</li> </ul>	None/ Negligible	HIGH	LOW

# Fuel Pricing

Weighted 12 month  
average OR \$28/ton  
in year one

$$\downarrow$$
$$\boxed{\text{Target Fuel Price} * 1.35}$$

$$\text{Fuel Charge To GRU} = \boxed{\text{Base Fuel Charge}} + \boxed{\text{Fuel Price Adjuster}}$$

$$\boxed{(\text{Actual Fuel Price} - \text{Target Price}) * 1.15}$$

$\uparrow$   
Average \$/Ton during Month

# Direction

- Will the City accept GREC's offer to reimburse legal fees of about \$1.5 million?
- Determine areas in which the City Commission wishes more, or more in depth, information