

Financial Opportunities to Mitigate Upward Rate Pressure and/or Reduce Rates

June 5, 2014

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Interim CFO

Outline of Financial Opportunities for City Commission Consideration

- Modify swaps to lock in lower fixed rate interest payments by agreeing to alternate variable rate indices, or convert to taxable index.
- Prepay 1-year of GREC fixed charges in exchange for a target 3 percent discount,
- Modify debt issuance to provide lower debt service payments in FY15 through FY20, higher debt service payments beginning FY21.
- Restructure debt to lower debt service payments in FY15 through FY20, higher debt service payments beginning FY21.

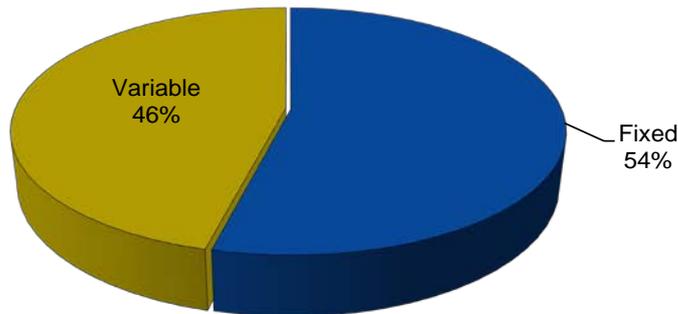


Swaps

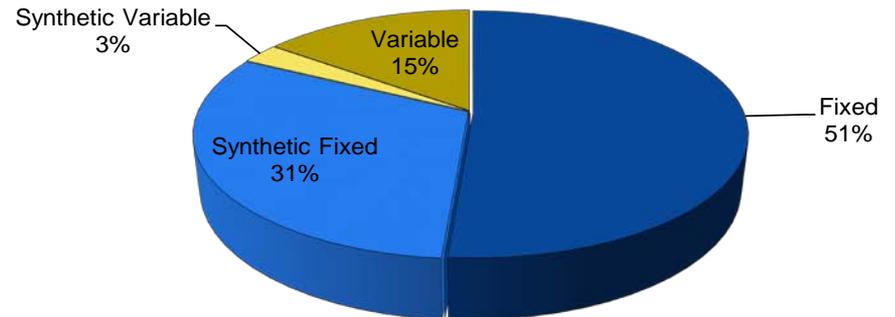
Outstanding Debt Composition

- Nominally, GRU's debt composition stands at 54% fixed versus 46% variable, but actual composition when accounting for hedging shows a more conservative profile.
 - 82% of outstanding debt is fixed via either the initial mode of the debt or a fixed-payer swap.

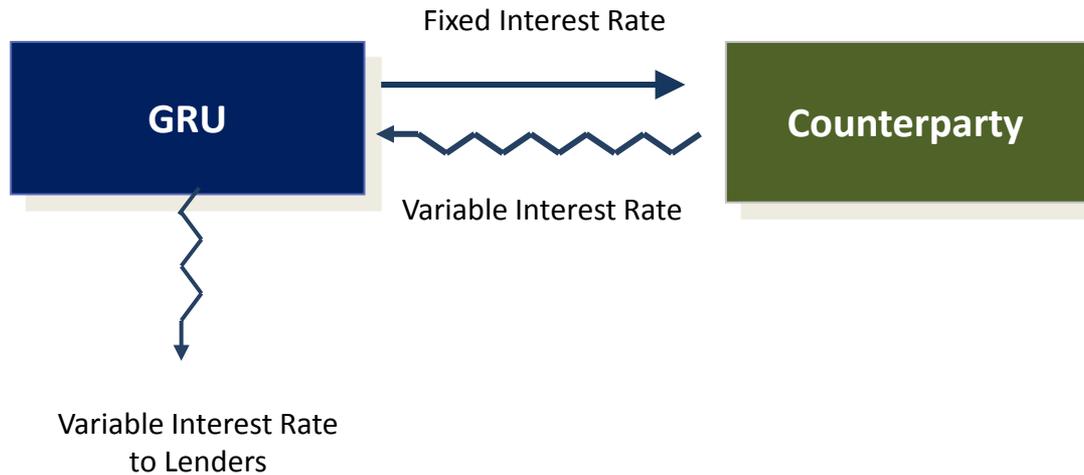
Debt Composition
Fixed vs. Variable



Debt Composition
Net Fixed vs. Variable

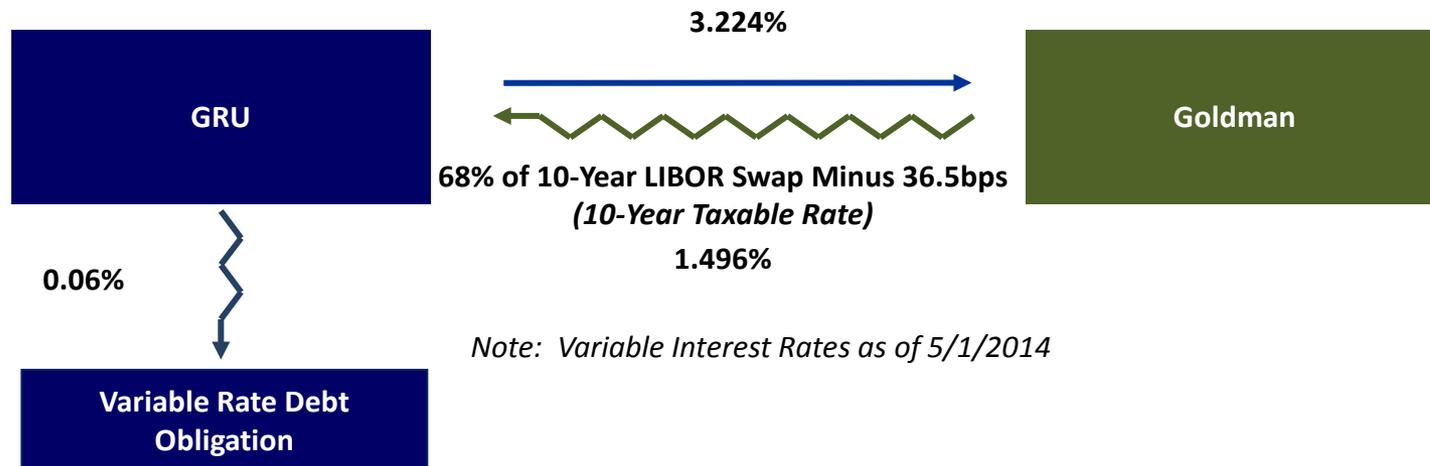


Synthetically Fixed Interest Rate



Swap No. 1 – Current

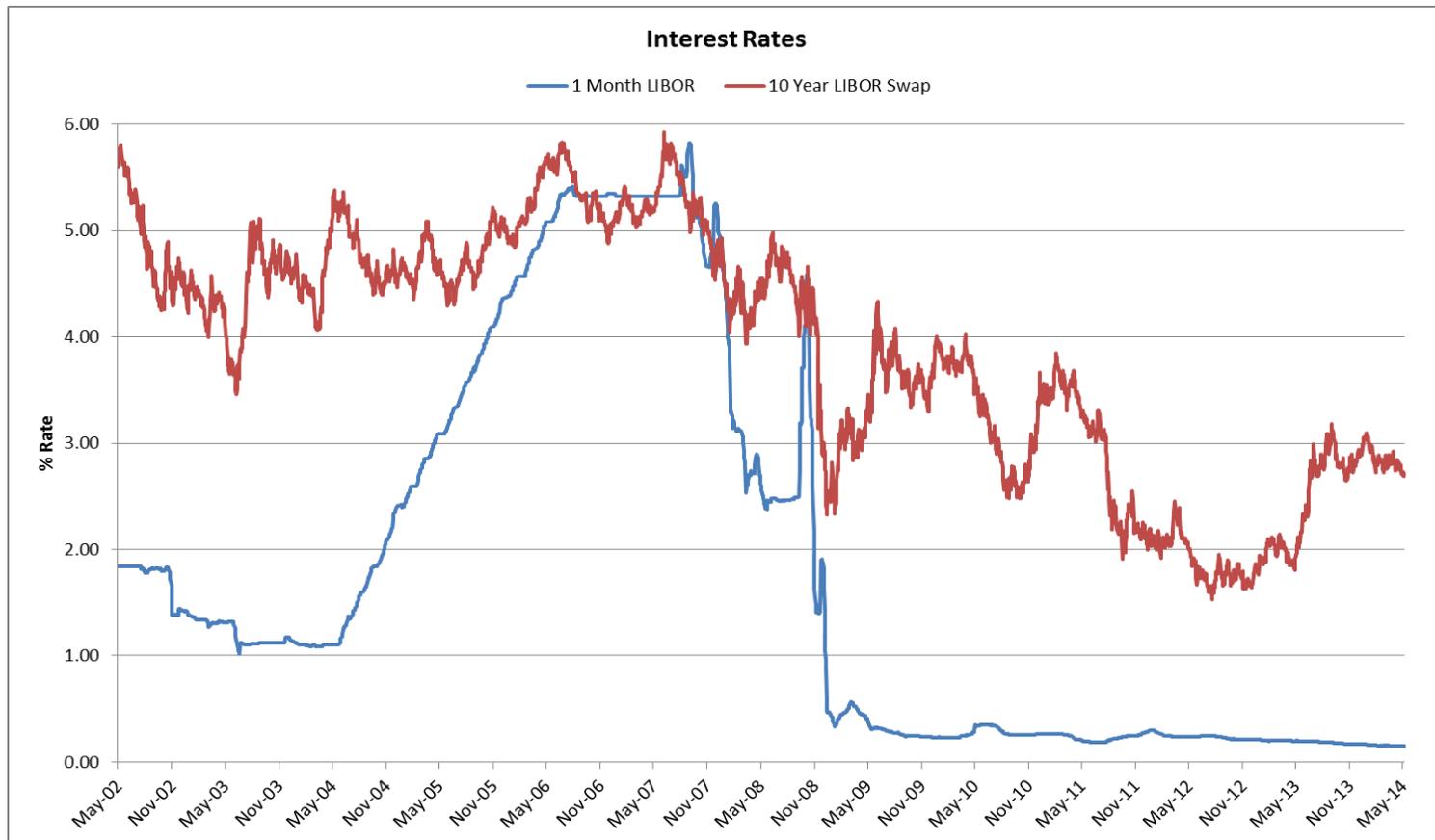
1. Current Notional Amount: \$41.145 Million
2. Maturity Date: 10/1/2026
3. Counterparty: Goldman Sachs MMDP (“Goldman”)
4. Associated Debt: 2006A Revenue Bond



- In September 2005 GRU Entered a Fixed-Payer Swap with Goldman
 - Pay 3.224% vs. Receive 68% of 1-Month LIBOR
- June 2006 – Swap Amendment was Done
 - 68% of 10-Year LIBOR Swap Less 0.365% Replaces 68% 1-Month LIBOR
 - Take Advantage of Historically “Flat” Yield Curve to Enter Amendment
 - Amendment Has Saved \$3.67 Million Through May 1, 2014

Historic LIBOR Interest Rates

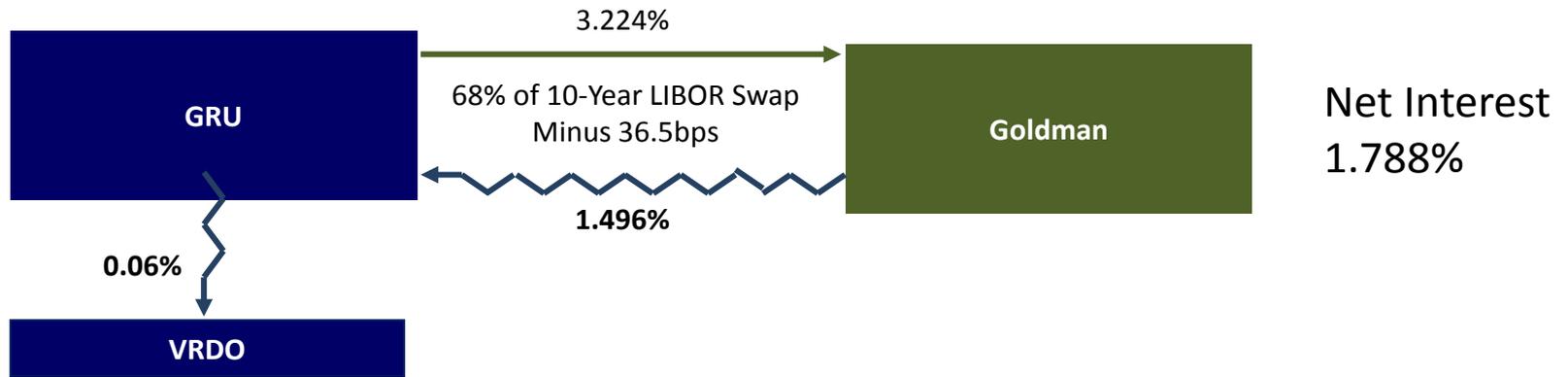
- The swap amendment was made in June 2006 when the yield curve was unusually flat (short-term interest rates and long-term interest rates were at similar rate levels).
- 1-Month LIBOR was equal to or higher than the 10-year LIBOR Swap rate at times in 2006.



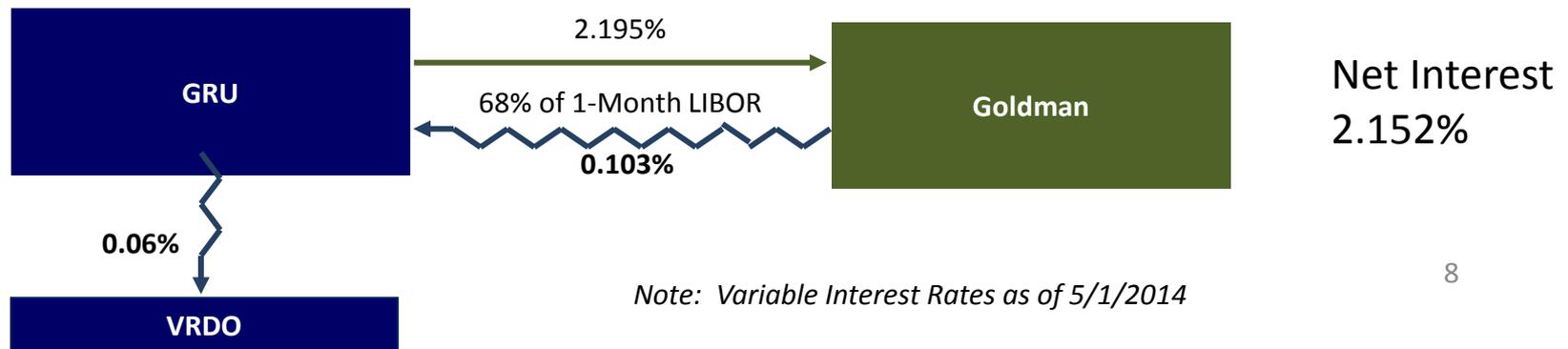
Swap No. 1 – Proposed Conversion

1. Current Notional Amount: \$41.145 Million
2. Maturity Date: 10/1/2026
3. Counterparty: Goldman Sachs MMDP (“Goldman”)
4. Purpose: The Swap Hedges the Variable Rate Debt to a Fixed Rate

Current Status:



Proposed Conversion:



Note: Variable Interest Rates as of 5/1/2014

Swap No. 1 – Proposed Conversion

Convert From 68% 10Yr LIBOR less 36.5 bps to 68% 1 Month LIBOR

Assuming 5/13/2014 Rates:

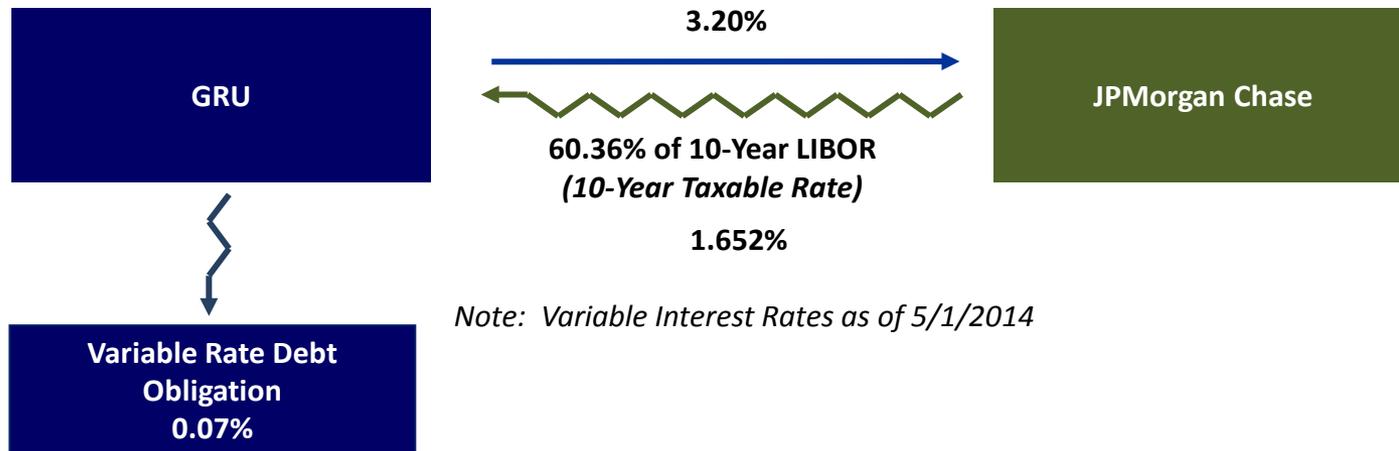
Option	Fixed Rate	Fixed Rate Reduction	First Year Cash Flow Savings
Current	3.224%	N/A	N/A
2-Year Conversion	1.814%	1.410%	\$552,139
3-Year Conversion	1.956%	1.268%	\$496,523
5-Year Conversion	2.195%	1.029%	\$402,703
Full Conversion	2.430%	0.794%	\$310,851
Comparison – 68% 10Yr LIBOR Less 0.365% to 68% 1Mth LIBOR	N/A	5/2014 Rates = 1.37% Historical = 0.88%	N/A

Note: Annual Cash Flow Savings Decrease as Swap Notional Amortizes

- The table shows the impact of converting the CMS rate (68% * 10-year LIBOR less 0.365%) back to the swaps original index of 68% of 1-month LIBOR.
 - Depending on the period picked the new fixed rate will be reduced by an amount which can be included in GRU’s budget for each year.
- Converting back to 1-month LIBOR reduces the expected benefit to GRU while reducing the yield curve risk in the transaction for the period picked.
- **RECOMMENDATION** – Amend Swap Agreement to convert to 68% of 1-month LIBOR index for a five year conversion to lock-in lower fixed interest rate paid by GRU.

Swap No. 2 – Current

1. Current Notional Amount: \$42.525 Million
2. Maturity Date: 10/1/2026
3. Counterparty: JPMorgan Chase Bank NA (“JPMorgan)
4. Associated Debt: 2005C Revenue Bond



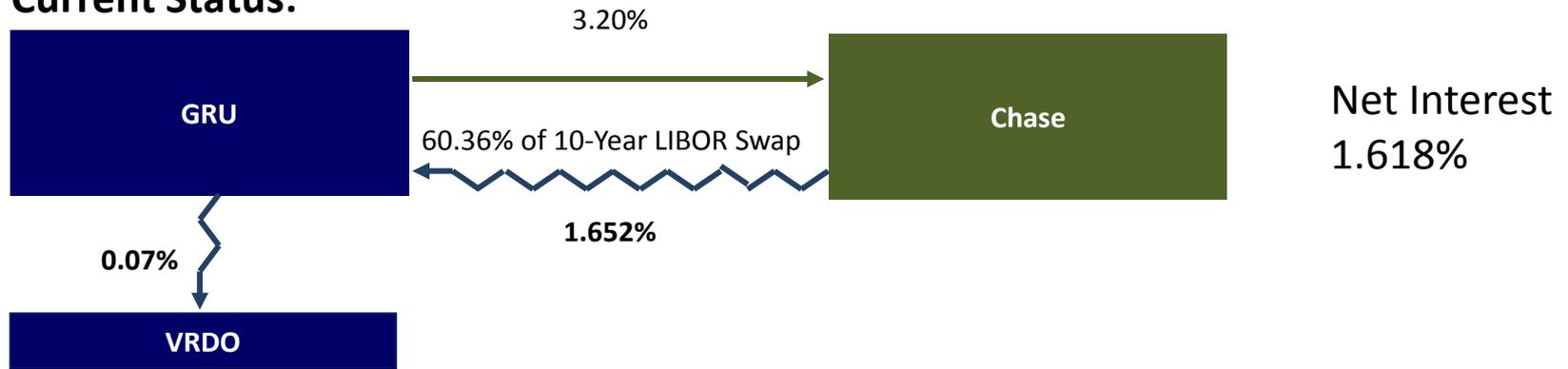
Note: Variable Interest Rates as of 5/1/2014

- In September 2005 GRU entered a fixed-payer swap with JPMorgan
 - Pay 3.200% vs. receive 68% of 1-month LIBOR
- November 2006 - Swap amendment was done, effective October 2007
 - 60.36% of 10-yr LIBOR replaces 68% 1-M LIBOR
 - Take advantage of historically “flat” yield curve to enter amendment
 - Amendment has saved \$4.53 Million through May 1, 2014

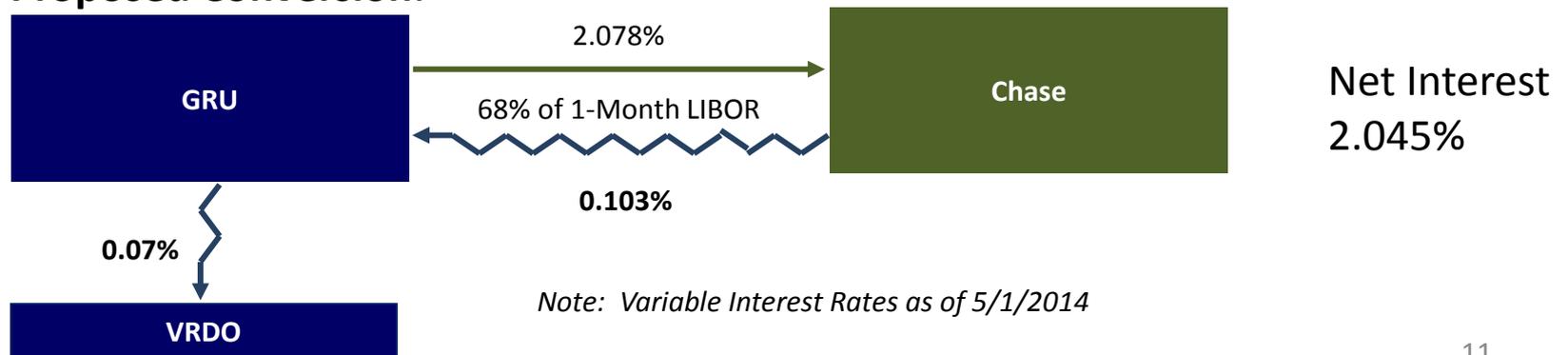
Swap No. 2 – Proposed Conversion

1. Current Notional Amount: \$42.525 Million
2. Maturity Date: 10/1/2026
3. Counterparty: JP Morgan Chase Bank NA (“JPMorgan”)
4. Purpose: The Swap Hedges the Variable Rate Debt to a Fixed Rate

Current Status:



Proposed Conversion:



Note: Variable Interest Rates as of 5/1/2014

Swap No. 2 – Proposed Conversion

Convert the CMS Rate Back to the Original Index of 68% of 1-Month LIBOR

Assuming 5/13/2014 Rates:

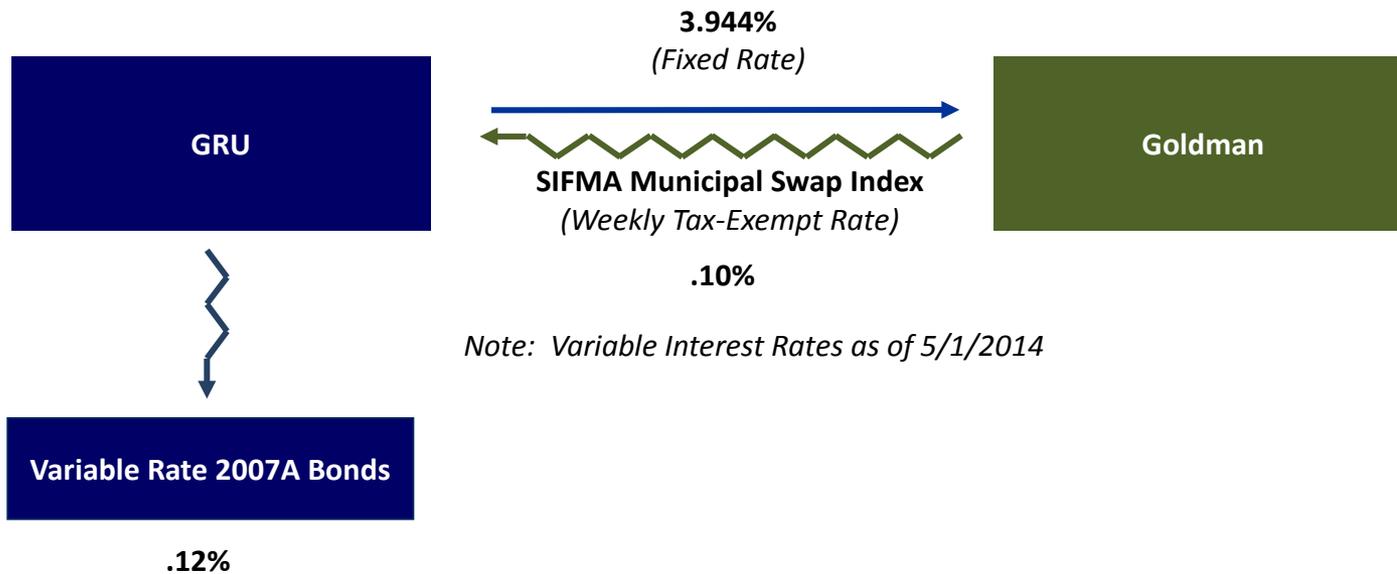
Option	Fixed Rate	Fixed Rate Reduction	First Year Cash Flow Savings
Current	3.200%	N/A	N/A
2-Year Conversion	1.666%	1.534%	\$620,504
3-Year Conversion	1.819%	1.381%	\$558,532
5-Year Conversion	2.078%	1.122%	\$453,767
Full Conversion	2.328%	0.872%	\$352,913
Comparison	N/A	5/2014 Rates = 1.53% Historical = 0.82%	N/A

Note: Annual Cash Flow Savings Decrease as Swap Notional Amortizes

- The table shows the impact of converting the CMS rate (60.36% * 10-year LIBOR) back to the swaps original index of 68% of 1-month LIBOR.
 - Depending on the period picked the new fixed rate will be reduced by an amount which can be included in GRU’s budget for each year.
- Converting back to 1-month LIBOR reduces the expected benefit to GRU while reducing the yield curve risk in the transaction for the period picked.
- **RECOMMENDATION** – Amend Swap Agreement to convert to 68% of 1-month LIBOR for a five-year conversion to lock-in lower fixed interest rate paid by GRU.

Swap No. 3 - Current

- 1. Current Notional Amount: \$137.875 million
- 2. Maturity Date: 10/1/2036
- 3. Counterparty: Goldman Sachs MMDP
- 4. Associated Debt: 2007A Revenue Bonds



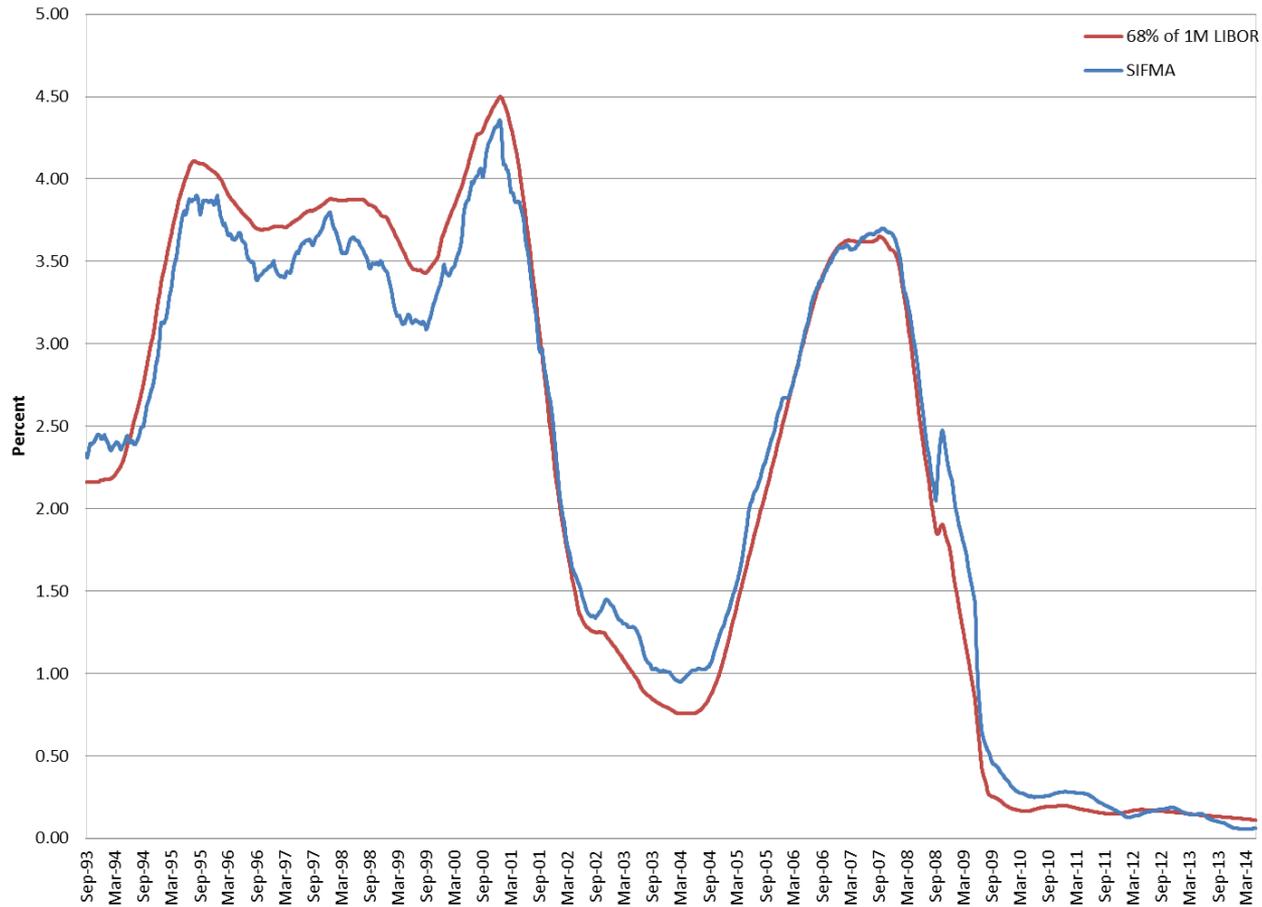
Note: Variable Interest Rates as of 5/1/2014

SIFMA Swap Index vs. 68% of LIBOR

- Historically 68% of 1-Month LIBOR has Traded Closely to the SIFMA Index

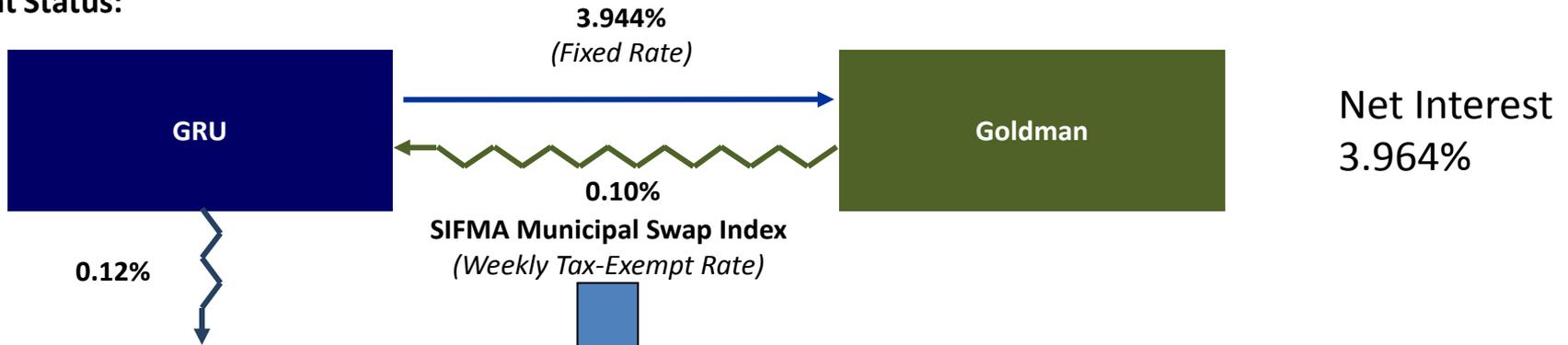
SIFMA vs. 68% LIBOR

180-Day Moving Average, Daily Data, September 1993 – May 2014

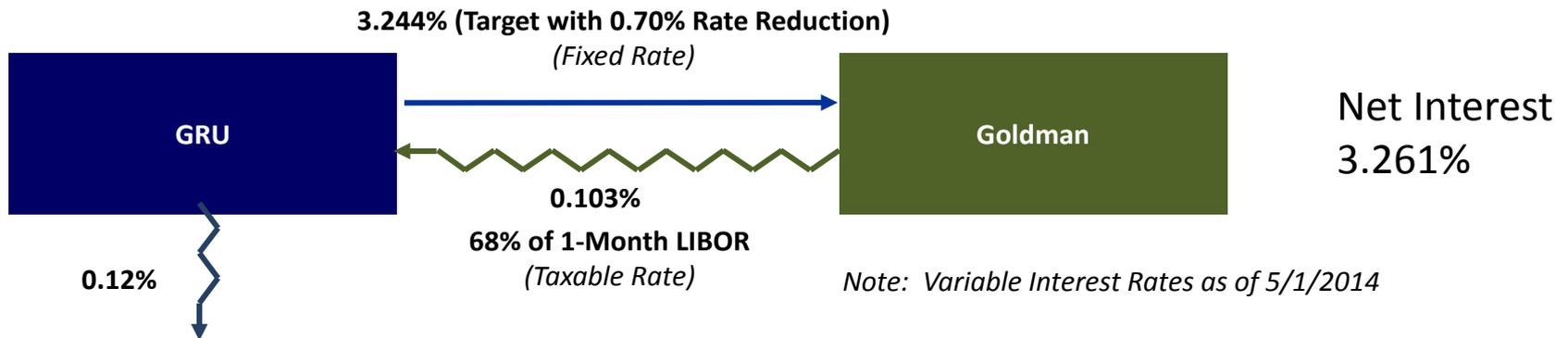


Swap No. 3 – Proposed Conversion

Current Status:



Proposed Conversion:

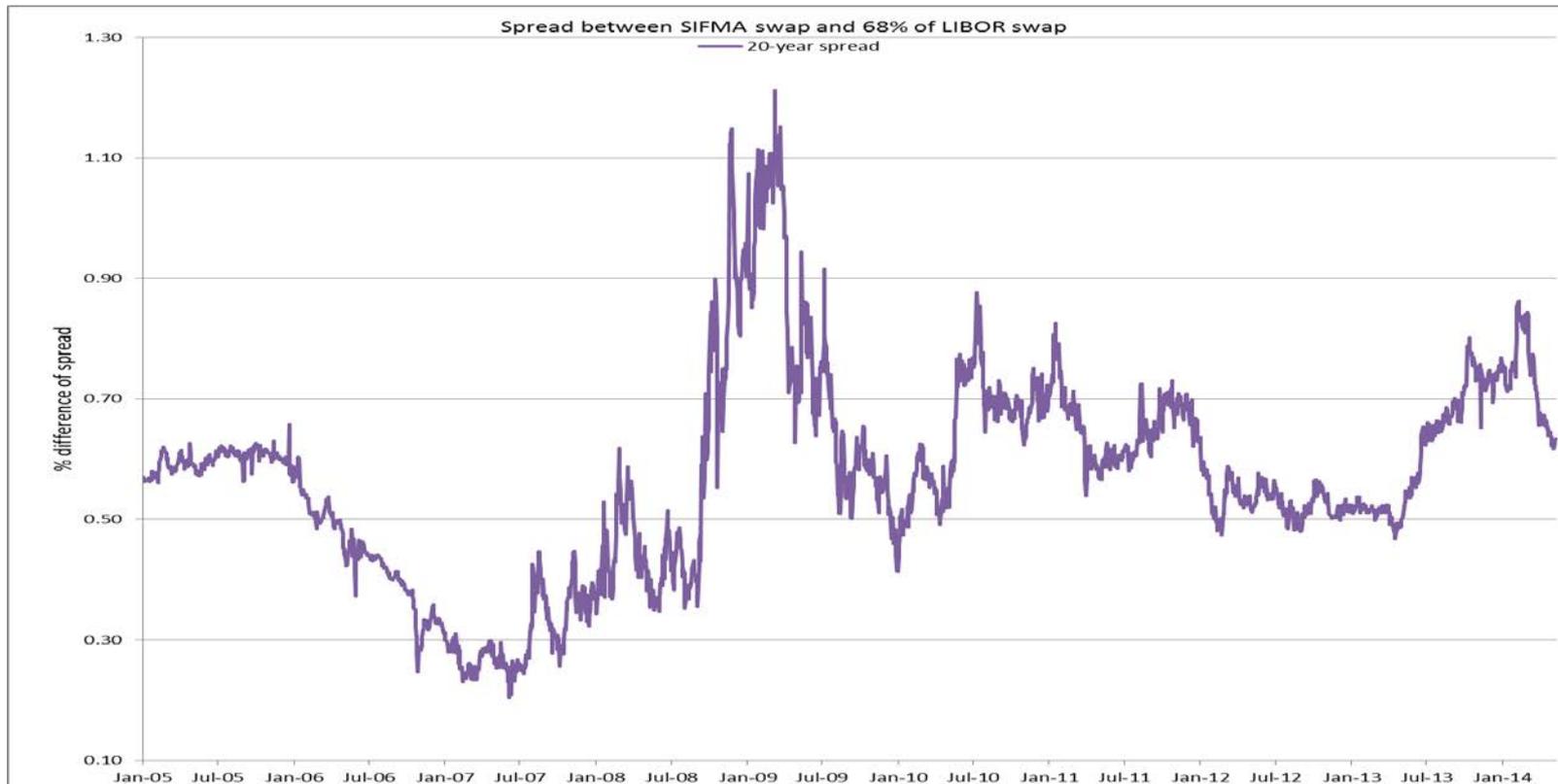


Conversion of the swap index from SIFMA to 68% of 1-month LIBOR for the full term:

- Lower debt service costs *but* basis risk arises.
- Fixed rate reduction target of 70bps, or \$13.3 million in present value (current market is ~63.5bps or 0.635% rate reduction).

Historical SIFMA and 68% LIBOR Swap Rate Spread

- Ratios and the rate difference between SIFMA swaps and 68% of LIBOR swaps have retreated from recent high levels – consider setting a target above current levels?



Summary of Swap Index Amendment Benefits and Risks

- Swap No. 1 and Swap No. 2 Conversions

- A conversion of long-term 10-year LIBOR to short-term 1-month LIBOR is risk reducing and provides better matching for underlying debt.
- A conversion for the next two years locks in current market's favorable conditions as compared to historical averages; the conversion to maturity locks the benefit at close to the historic average difference for the full life of the swap.
- Benefit can be taken in the form of reduced fixed rate.

- Swap No. 3 Conversion

- Replacing the SIFMA index with 68% of 1-month LIBOR locks in favorable market conditions for SIFMA-to-LIBOR ratios.
- 68% of 1-month LIBOR still provides a good hedge of tax-exempt variable rate debt.
- Substantial rate reduction acts as buffer for potential mismatch between 68% of 1-month LIBOR and underlying debt.
- Suggest GRU target a fixed rate reduction of 70 bps in exchange for basis risk.



Short-Term Prepayment

Overview of a Short-Term Prepayment (“STPP”)

- GRU agrees to prepay for roughly 1-year of expected fixed costs
 - Fixed costs = Non fuel energy charge + fixed op & maint costs = availability charge
 - GRU currently pays monthly availability charge in arrears, due within 10-days of billing
 - Base payment on ~90% availability (GRU’s budget numbers based on 90% availability)
- GRU will pursue a discount for prepayment – target discount = 3%
 - Annual availability charge approximately \$64,000,000
 - At 3% discount, savings of roughly \$1.9 million (less costs and funding interest)
- Reasons for GREC to consider STPP
 - ~3% discount should be an improvement on GREC funding costs
 - Establishes working relationship for future prepay and other savings opportunities
- Several financing options exist – commercial paper, short-term notes, bank loan

Short-Term Prepayment Agreement and Risks

- STPP agreement governs:
 - Price/cost, amount, schedule
 - Delivery timing and discount adjustments (delay = more discount)
 - Termination events and costs
- Operational risk - limited
 - Potential prepay of cost related to 90% availability (~\$64MM/yr.)
 - Reduced availability would delay application of prepay \$\$, but increase discount
 - Prolonged/permanent GREC outage places entire prepayment amount at risk
 - But would allow GRU to replace GREC at likely lower costs
- Credit risk - limited
 - Rating agencies would evaluate increased debt, versus
 - Increased operational risk discussed above
- Interest rate risk - limited
 - If STPP is funded with variable-rate debt, there is added interest rate exposure
- Little cost involved in drafting an initial Term Sheet to be delivered to GREC

Recommended City Commission Action

- Authorize GRU to:
 - Proceed with negotiations with GREC for a one year prepay at a target discount of 3% on the “Availability Charge” with appropriate terms and conditions to fairly account for risk during the term of the contract; and
 - If GREC is interested in pursuing a transaction that delivers savings for GRU ratepayers, authorize GRU to spend not more than \$100,000 for costs related to developing the STPP Agreement.
 - Return to the City Commission with a draft agreement agreeable to GRU, the City Attorney, and GREC for review and execution by the City Commission; and
 - Return to the City Commission for authorization for GRU to issue debt to fund the prepayment amount.



Debt

Objective and Debt Options

- Provide near-term rate relief (FY15 – FY20), exploring debt management as a tool, and accomplished through either:

2
Options
Evaluated

1. “Accelerate and Upsize” planned Capital Improvement Plan borrowings to address capital needs while increasing use of Utility Plant Improvement Fund to pay existing near term debt service.
2. Restructure upcoming maturities (FY15-20) of commercial paper, tax-exempt and taxable debt.

Debt: Background

- Traditional refundings/restructurings for interest savings are not available to GRU in the current market
- Transactions for debt service relief can generate rate relief in the target years but typically result in a negative total NPV transaction for GRU
- Newly issued debt, with either option, will have back-loaded amortization that provides:
 - Rate relief in targeted years
 - Increases in debt service beyond the targeted years

Assumptions

- The January 2014 financial model projected the following electric residential bill changes for customers using 1,000 kWh per month.

TOTAL RESIDENTIAL BILL PROJECTED CHANGE PER 1,000 kWh						
	2015	2016	2017	2018	2019	2020
Estimated bill change per model	9.85	3.75	2.75	2.00	1.75	1.75

Risks of These Options

- **Financial Risk:** While options create near term savings for GRU, the cost will be deferred to the years in which the new/restructuring principal will be amortized.
- **Future Operating Risk:** Other operational considerations could impact the utility that will eliminate the benefit created through implementing any of these options (future legislation).
- **Credit Risk:** The rating agencies will play a critical role in this transaction, rating the new series of bonds and reviewing GRU's current debt portfolio.
- **Interest Rate Risk:** Some options detailed impact GRU's variable rate debt and swap portfolio. If GRU elects to restructure its variable rate portfolio by issuing variable rate restructuring debt, it would have greater, unhedged exposure to fluctuating short-term interest rates.
- **Liquidity Risk:** In the event of sudden increases in short-term interest rates, as seen during the 2008 financial crisis, unhedged variable rate bonds and commercial paper could see a rapid increase in required debt service.

Risks (Continued)

- **Legal Review:** All options would require traditional bond council reviews, analysis, and opinion.
- **Swap Risk:** Several of the series of bonds identified as potential options were initially swapped to create synthetically fixed rate debt. In general, the swaps were matched, in terms of notional amortization, to the amortization of the original series of bonds. A restructuring transaction that impacts GRU's swapped portfolio will create an imbalance. In general, GRU will have "short swaps" matched against "long debt". As these shorter swaps amortize, GRU's debt portfolio will transition to more variable rate debt.

Option 1: Accelerate & Upsize Planned CIP Transactions Estimated Impact

ESTIMATED IMPACT OF OPTION 1							
	2015	2016	2017	2018	2019	2020	2021-2040
Estimated bill change @ 1,000 kWh	(5.25)	(4.85)	(5.25)	(5.25)	(5.25)	(4.85)	1.61

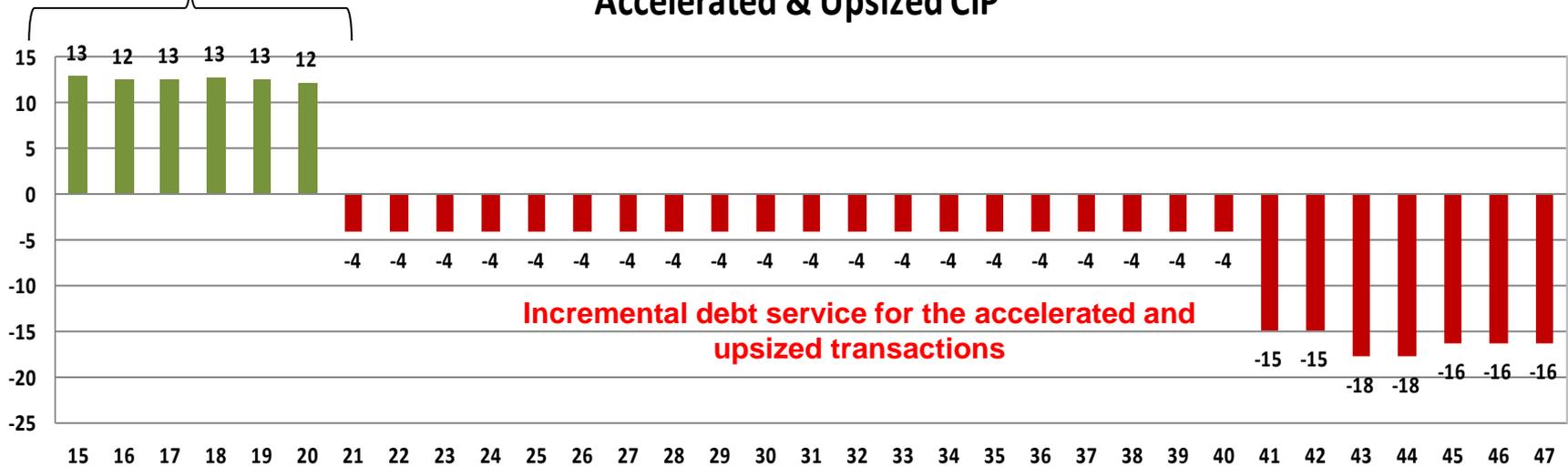
Option 1:

Accelerate & Upsize Planned CIP Transactions

- Two sources of funds historically have financed CIP: bond proceeds & UPIF
- Current CIP calls for \$34.98M borrowing in 2016 and \$31.53M borrowing in 2018
- Accelerate planned transactions: from 2016 & 2018 to 2014 & 2017, respectively
- Increase the size of borrowings and capitalize the interest
- Reduces use of UPIF as source of funds for CIP, replaces it with bond proceeds, mitigating rate pressure
- Allows UPIF funds to be utilized to pay debt service

Debt Service relief
addressed with UPIF

D/S Relief (Cost) 000,000s Accelerated & Upsized CIP



Compared to Current Debt Structure (including the 2 currently planned transactions in 2016 and 2018)

Average Annual Relief 2015-2020
\$ 12.5 million

Average Annual Net Cost 2021-2047
-\$ 7.3 million

Total Cost 2015-2047¹
-\$123.1 million

NPV Cost²
-\$ 7.7 million

1. Represents the value of rate relief in 2015-2020 (including capitalized interest) less the incremental cost of debt service for the “Accelerate and Upsize” option. “Accelerate” moves transactions to 2015 and 2017 compared to current plan in 2016 and 2018. “Upsize” represents an increase in the amount borrowed by ~\$74 million.
2. Discount rate for NPV calculation is 4.5%, an approximation for GRU’s cost of capital. NPV impact of cashflow restructuring transactions is quite sensitive to the discount rate. Use of a higher discount rate will result in a higher NPV savings amount.

Option 1: Accelerate & Upsize Planned CIP Transactions

- Achieves \$12.5M in savings per year FY15 through FY20
- Represents a policy change in the use of internal funds vs. issuing debt to finance CIP projects. Policy change would be within industry standards and would require a communication effort with all stakeholders.
- Flexible since degree of upsizing can vary depending on annual savings target
- Requires much larger bond transactions on an accelerated timeline: combined \$140M borrowings vs \$66.5M
- Increases percentage of CIP to be financed from bond proceeds from 17% to 36%
- Gross net cost compared to existing debt structure \$123M

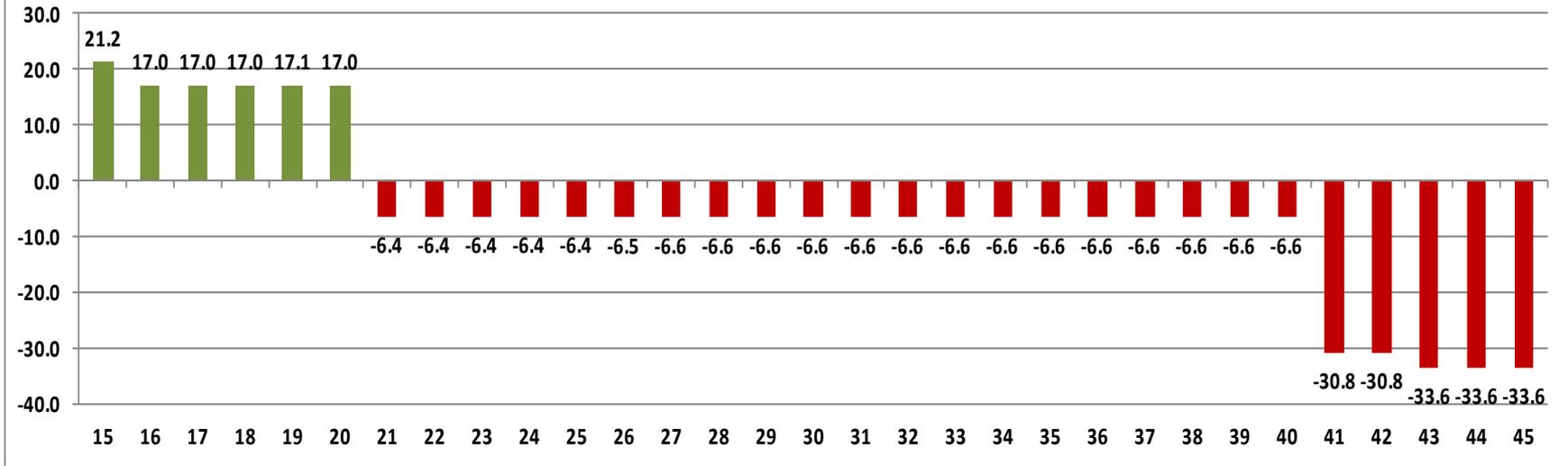
Option 2: Restructure All Series with Principal Payments Between FY15 – FY20 Estimated Impact

ESTIMATED IMPACT OF OPTION 2							
	2015	2016	2017	2018	2019	2020	2021-2040
Estimated bill change @ 1,000 kWh	(8.57)	(6.87)	(6.87)	(6.87)	(6.92)	(6.87)	2.67

Option 2: Restructure All Series with Principal Payments Between FY15 – FY20

- Restructure the following bond series:
 - 2005B
 - 2005C
 - 2006A
 - 2007A
 - 2008A
 - Taxable Commercial Paper
 - 2009A
 - 2010C

D/S Relief(-Cost) 000,000s Restructure All Series w/ Principal Payments FY15-FY20



Compared to Current Debt Structure

Average Annual Relief 2015-2020
\$ 17.7 million

Average Annual Net Cost 2021-2047
-\$ 11.8 million

Total Cost 2015-2047¹
\$ 187.7 million

NPV Cost²
-\$19.0 million

1. Represents the value of rate relief in 2015-2020 less the debt service on the restructuring transaction.
2. Discount rate for NPV calculation is 4.5%, an approximation for GRU's cost of capital. Due to pattern of cashflows, any change in the timing of those flows or the discount rate will have a material impact on the NPV. Use of higher discount rate will result in a higher NPV savings amount.

Option 2: Restructure Upcoming Maturities (FY15-20) of Commercial Paper, Tax-Exempt and Taxable Debt

- Achieves \$17.7M in average annual savings FY15 through FY20
- Series can be eliminated from transaction to adjust the average annual rate relief to the desired level
- Additional debt service cost of \$188M, 2015 – 2047
- Significant step-up in debt service costs in 2021
- Complex bond transaction requiring significant communication with stakeholders to include rating agencies

Summary of Debt Option Metrics

	Average Annual Rate Relief 2015-2020	Average Annual Cost 2021-2047	Gross Cost 2015-2047	NPV Cost ¹
Option 1: Accelerate & Upsize CIP borrowings	\$ 12.5 million	-\$ 7.3 million	-\$ 123.1 million	-\$ 7.7 million
Option 2: Restructure All Series w/Principal Payments Between FY15 - FY20	\$ 17.7 million	-\$ 11.8 million	-\$ 187.7 million	-\$ 19. million

1. Discount rate for NPV calculation is 4.5%, an approximation for GRU's cost of capital. Due to pattern of cashflows, any change in the timing of those flows or the discount rate will have a material impact on the NPV.

Financial Options Summary

Staff Recommended Actions

Financing Option		Requested City Commission Action
Swap Alternatives:		
Swap No. 1	Goldman Sachs Swap Conversion	Reaffirm Authorization of Swap Conversion
Swap No. 2	JPMorgan Swap Conversion	Reaffirm Authorization of Swap Conversion
Swap No. 3	SIFMA Basis Swap Conversion	Authorize Execution of Swap Amendment Upon Rates Reaching Desired Thresholds
GREC Short-Term Prepay		Authorize Proposal of Short-Term Prepay to GREC
Debt Restructurings:		
Debt Option 1	Accelerate and Upsize Planned CIP Transactions	Provide Policy Direction
Debt Option 2	Restructure All Series with Principal Payments FY15-FY20	Provide Policy Direction