

RECOMMENDATION:

It is recommended that the Commission receive and file the June 30, 2016 Debt and Interest Rate Management Report.

BACKGROUND:

In accordance with the “Debt and Interest Rate Management Policy” approved by the Commission in May 2015, the following semi-annual report is submitted for your information and acceptance.

Fixed Rate Debt – No new fixed rate debt was issued and no fixed rate refunding occurred during the last six months. Due to the sequestration of federal budget dollars, the Build America Bond (BAB) Subsidies related to the Lodi Energy Center (LEC) BAB issues were reduced by 6.8% or \$227,505 for the June 1, 2016 debt service payments. This amount was billed to the LEC participants. Other highlights are included in the attached report, page i.

Interest Rate Swaps – As of June 30, 2016, NCPA had \$86.7 million of outstanding interest rate swaps, all related to the Hydroelectric Project bonds. The fair value of these interest rate swaps on the same date was negative \$25.2 million. This amount has changed from the December 31, 2015 fair value, which was negative \$21.0 million. Details of the swap agreements are provided in the attached report. No new swaps or defaults have occurred in the last six months. Interest rate swaps now make up approximately 23% of the outstanding Hydroelectric Project debt portfolio.

Counterparties – Subsequent to the July 9, 2008 termination of most of the swaps in the portfolio, only two swaps and one counterparty remain. There was no change in the credit ratings for Citigroup (swap counterparty) over the last six months. They remain highly rated with all other rating agencies and no collateral calls were required under the swap terms.

FISCAL IMPACT:

Total projected savings over the life of the related bonds (23 years) was \$13.9 million at the inception of these agreements. Total savings projected to occur through June 30, 2016 was \$4,603,187 with actual results at \$8,040,753. The difference between expected savings and actual savings is due to “basis risk”, or the difference between what NCPA pays for underlying variable rate bonds and the index rate used in the swap transaction. Total basis risk to date is positive, resulting in additional savings over those expected of \$3,437,566. Staff continues to monitor the potential for refinancing these bonds and terminating the swaps, however, with current low treasury rates causing a large mark to market payment due to Citigroup of over \$25.2 million, refunding is not feasible at this time.

ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

COMMITTEE REVIEW:

This report was reviewed by the Finance Committee on September 14, 2016 and with X members present it was their unanimous recommendation to accept this report as filed.

Respectfully submitted,

RANDY S. HOWARD
General Manager

Attachments: June 30, 2016 Debt and Interest Rate Management Report



Debt and Interest Rate Management Report

As of June 30, 2016

June 30, 2016

Highlights

- No new debt or or any new swap agreements were entered into during the last six months and no new issues are planned.
- No fixed or variable rate debt or interest rate swaps were refinanced or terminated in the last six months.
- No material changes to any fixed rate debt, variable rate debt or outstanding swap agreements occurred during the last six months.
- The last six months included a reduction in the amount of reimbursement received from the Federal government for Build America Bond (BAB) subsidies related to the Lodi Energy Center BAB issues. Total reduction for the June 1, 2016 debt service payment was 6.8% or \$227,505 due to sequestration of federal budget dollars.
- Notices and financial statements were filed with the bond reporting depository (EMMA) as required for annual filing of continuing disclosure documents by NCPA
- No changes in bond ratings occurred during the last six months. Fitch affirmed current ratings for all the projects in May.
- Fees paid to Citi for remarketing the Variable Rate bonds remained the same. Fees paid to the provider of the letter of credit support (Bank of Montreal) remained the same.
- Citigroup, our swap counterparty, maintained their current credit rating; no collateral posting was required by any counterparty during the last six months.
- No defaults under any swap agreements have occurred during the last six months.
- Fair value on remaining outstanding swaps changed from a negative value of \$21.0 million on December 31, 2015 to a negative value of \$25.2 million on June 30, 2016.
- Interest rate swaps continue to perform better than expected despite the increase in short term variable rates since the Fed ended the “zero” rate era in December 2015 and raised rates for the first time in almost a decade. The impact to date is a flattening of the yield curve as short term rates increased and long-term rates fell due to global economics. Short-term taxable rates increased to their highest level since 2009 due to the 25 basis point (bps) Fed rate hike. NCPA short-term tax-exempt debt has increased over the last six months from 1 bp to 41bp, while the variable taxable debt increased from around 20 bps to 47 bps. Further gradual increases are expected in late 2016 and in 2017.
- Upcoming events:

NCPA is working on a refinancing of certain 2009A Geothermal bonds with an expected savings of almost \$1.0 million. The proposed refinancing is expected to close in October.

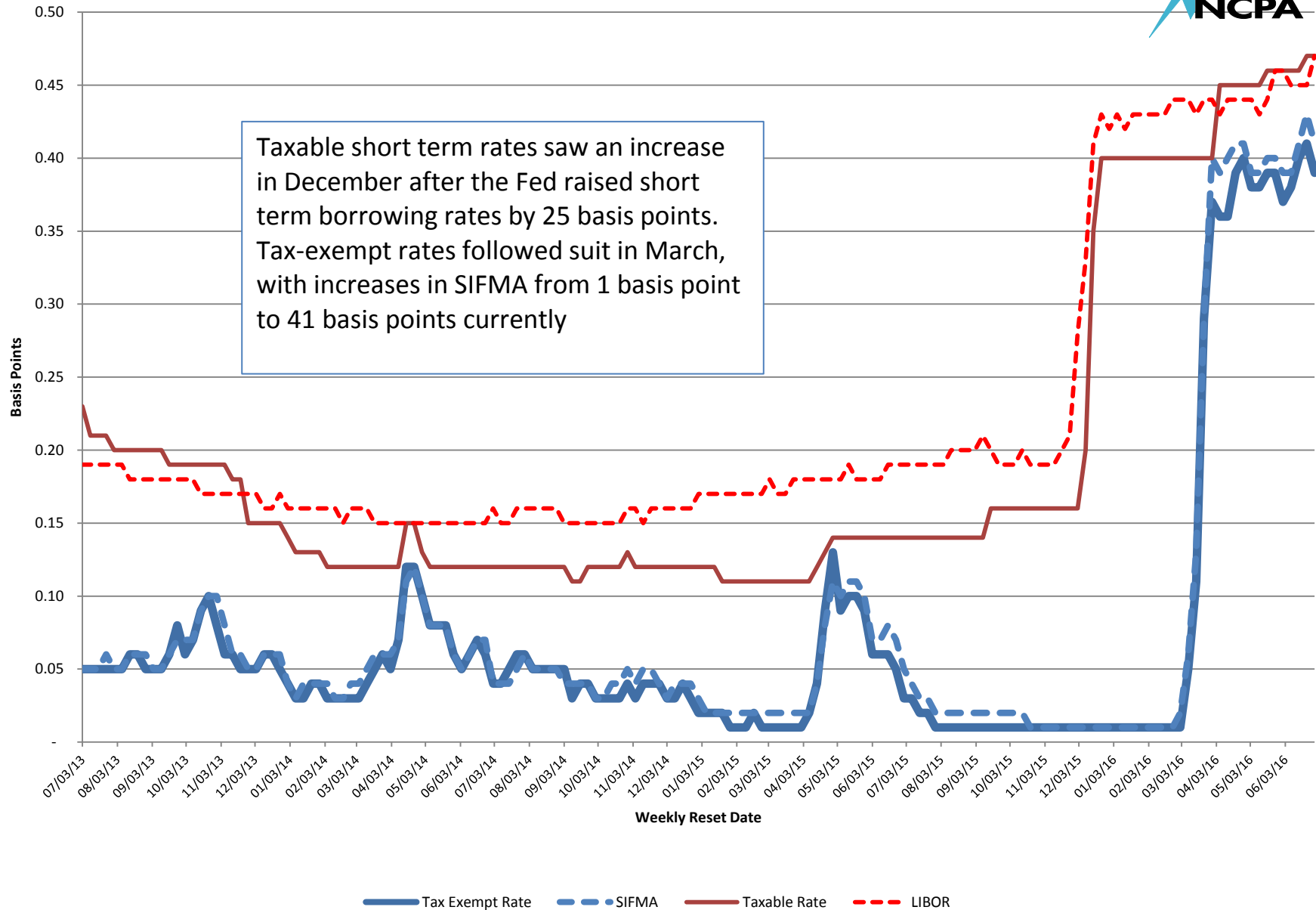
Northern California Power Agency

Hydroelectric Project VRDO Bonds and Related Interest Rate Swaps



		Hydro 2008A	Hydro 2008B
Variable Rate Debt			
Amount		\$85,160,000	\$1,574,000
Priced		Weekly	Weekly
Payment		Monthly	Monthly
Swap Counter-party:		Citigroup	Citigroup
Payments	NCPA	2 components Fixed @ 3.819%	2 components Fixed @ 5.291%
	Counterparty	Floating rate (based on 54% of monthly Libor+.54%)	Floating rate (based on monthly Libor)
Payment terms:	NCPA	Semi-Annual (net)	Semi-Annual (net)
	Counterparty	Semi-Annual (net)	Semi-Annual (net)
Liquidity/Letter of Credit Provider ¹		Bank of Montreal	Bank of Montreal
	Annual Fee	39.0 bp	39.0 bp
	Expiration Date	9/9/2019	9/9/2019
	Credit Ratings	Aa3/A+/AA-	Aa3/A+/AA-
Bond Insurer		None, Option with MBIA	None, Option with MBIA
	Credit Ratings	N/A	N/A
1 Effective 9/10/14 Citibank N.A. was replaced as the LOC provider with Bank of Montreal.			

NCPA Variable Rate Debt Performance Versus Indices



Northern California Power Agency Hydroelectric Project Swaps Performance to Date

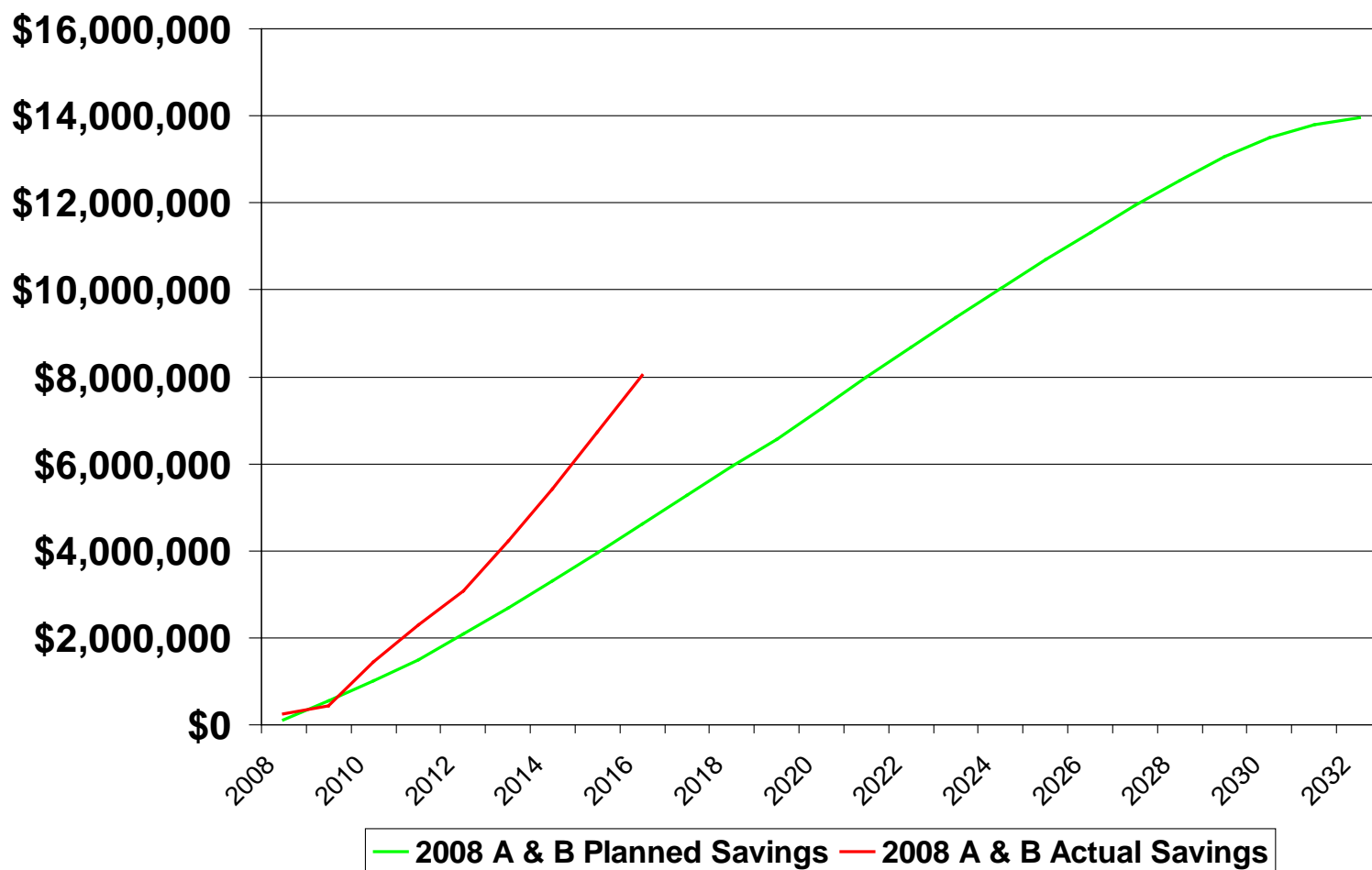
June 30, 2016

Total Projected Savings over life of bonds: \$13.9 million

Total Projected Savings to date: \$4,603,000

Actual Savings to date: \$8,041,000

Basis risk incurred (99 months) positive \$3,438,000





Northern California Power Agency
Valuation Report as of 6/30/2016

Transaction Type	Project	Associated Bonds	NCPA Pays	NCPA Receives	Trade Date	Effective Date	Maturity Date	Remaining Life	Initial Notional	Bank Counterparty	Moody's	S&P	Fitch	Weighted Avg Life	Fair Value @ 6/30/2016	Impact on Value of 50 bp swing
Swap	Hydro	Series 2008A	3.8190%	54% of USD-LIBOR + .54%	11/24/2004	11/24/2004	7/1/2032	16.0	\$85,160,000	Citibank, N.A., New York	A1	A	A+	12.40	(\$25,547,214)	\$3,377,322
Swap	Hydro	Series 2008B	USD-LIBOR	5.2910%	11/24/2004	11/24/2004	7/1/2032	16.0	\$1,574,000	Citibank, N.A., New York	A1	A	A+	7.20	\$367,749	(\$48,265)
Total all swaps									\$86,734,000						(\$25,179,465)	\$3,329,058

Highlights:

No material changes to any outstanding swap agreements or any new swap agreements were entered into during the last six months

Counterparty ratings remained the same; no collateral posting by any counterparty has been required and they remain highly rated

No defaults under the above swap agreements have occurred

No planned swap transactions at this time

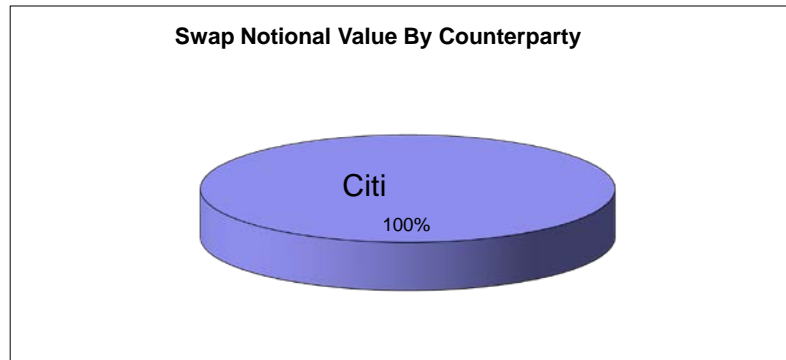
Fair value on remaining outstanding swaps changed from a negative value of \$21.3 million on December 31, 2015 to a negative value of \$25.2 million on June 30, 2016.

The valuations of derivatives transactions provided by PFM are indicative values based on mid-market levels as of the close of business on the date they are provided. These valuations are provided for information purposes only and are intended solely for internal use. These valuations do not represent the actual terms at which new transactions could be entered into or the actual terms at which existing transactions could be liquidated. The valuations provided are derived from proprietary models based upon well-recognized financial principles and reasonable estimates about relevant future market conditions. Valuations based on other models or different assumptions may yield different results. PFM believes its valuation methodology to be consistent with accepted practice in the market for interest rate swaps. Additional information is available on request. Information herein is believed to be reliable, but PFM does not warrant its completeness or accuracy. PFM does not hold a position or act as a market maker in the financial instruments of any issuer discussed herein.

Northern California Power Agency **Counterparty Report as of 6/30/2016**

Transaction Type	Project	Associated Bonds	Initial Notional	Bank Counterparty	Last ratings as of 12/31/2015			Current ratings as of 6/30/2016		
					Moody's	S&P	Fitch	Moody's	S&P	Fitch
Swap	Hydro	Series 2008A	\$85,160,000	Citibank, N.A., New York	A1	A	A+	A1	A	A+
Swap	Hydro	Series 2008B	\$1,574,000	Citibank, N.A., New York	A1	A	A+	A1	A	A+
			<u>\$86,734,000</u>							
			<u>\$86,734,000</u>							

Due to termination of all other swaps on 7/9/08, Citibank is now the only swap provider with which NCPA has outstanding transactions.



Northern California Power Agency
Valuation Report as of
By Participant

6/30/2016



Fair Value at 6/30/2016															
Transaction Type	Project	Associated Bonds	Maturity Date	Initial Notional	Bank Counterparty	Fair Value @ 6/30/16	Alameda 10.00%	Healdsburg 1.66%	Lodi 10.37%	Lompoc 2.30%	Palo Alto 22.92%	Plumas-Sierra 1.69%	Roseville 12.00%	Santa Clara 37.02%	Ukiah 2.04%
Swap	Hydro	Series 2008A	7/1/2032	\$85,160,000.00	Citibank, N.A., New York	(\$25,547,214.00)	(\$2,554,721)	(\$424,084)	(\$2,649,246)	(\$587,585.92)	(\$5,855,421.45)	(\$431,747.92)	(\$3,065,665.68)	(\$9,457,578.62)	(\$521,163.17)
Swap	Hydro	Series 2008B	7/1/2032	\$1,574,000.00	Citibank, N.A., New York	\$367,749.00	\$36,775	\$6,105	\$38,136	\$8,458.23	\$84,288.07	\$6,214.96	\$44,129.88	\$136,140.68	\$7,502.08
Total all swaps						(\$25,179,465)	(\$2,517,947)	(\$417,979)	(\$2,611,111)	(\$579,128)	(\$5,771,133)	(\$425,533)	(\$3,021,536)	(\$9,321,438)	(\$513,661)

Impact on Value of 50 BP Swing in swap rates															
Transaction Type	Project	Associated Bonds	Maturity Date	Initial Notional	Bank Counterparty	Impact on Value of 50 bp swing	Alameda 10.00%	Healdsburg 1.66%	Lodi 10.37%	Lompoc 2.30%	Palo Alto 22.92%	Plumas-Sierra 1.69%	Roseville 12.00%	Santa Clara 37.02%	Ukiah 2.04%
Swap	Hydro	Series 2008A	7/1/2032	\$85,160,000.00	Citibank, N.A., New York	\$3,377,322	\$337,732	\$56,064	\$350,228	\$77,678	\$774,082	\$57,077	\$405,279	\$1,250,285	\$68,897
Swap	Hydro	Series 2008B	7/1/2032	\$1,574,000.00	Citibank, N.A., New York	(\$48,265)	(\$4,826)	(\$801)	(\$5,005)	(\$1,110.08)	(\$11,062.22)	(\$815.67)	(\$5,791.74)	(\$17,867.52)	(\$984.60)
Total all swaps						\$3,329,058	\$332,906	\$55,262	\$345,223	\$76,568	\$763,020	\$56,261	\$399,487	\$1,232,417	\$67,913

Northern California Power Agency

Hydroelectric Project Swaps Value Trend

Extreme market volatility and low treasury rates have greatly impacted the mark to market value of the swaps over the last several years. Rates are again close to all time lows, increasing the negative mark to market value.



Northern California Power Agency
Hydroelectric Project No. One 2008 A & B Variable Rate Debt Obligation
Comparison of Actual vs Planned Interest Rate Swaps Savings (Cost)
As of June 30, 2016



	Planned		Actual	
	Savings (Cost)		Savings (Cost)	
	Annual	Cumulative	Annual	Cumulative
FY2008	\$ 117,580	\$ 117,580	\$ 254,188	\$ 254,188
FY2009	438,768	556,348	189,800	443,988
FY2010	443,387	999,735	1,005,458	1,449,446
FY2011	484,319	1,484,054	849,010	2,298,456
FY2012	596,774	2,080,828	775,362	3,073,818
FY2013	609,640	2,690,469	1,146,750	4,220,568
FY2014	623,059	3,313,528	1,200,879	5,421,447
FY2015	637,299	3,950,827	1,297,694	6,719,140
FY2016	652,361	4,603,187	1,321,612	8,040,753
FY2017	668,244	5,271,431		
FY2018	684,949	5,956,380		
FY2019	605,117	6,561,497		
FY2020	710,041	7,271,538		
FY2021	710,434	7,981,972		
FY2022	699,418	8,681,390		
FY2023	686,782	9,368,172		
FY2024	671,372	10,039,544		
FY2025	651,414	10,690,959		
FY2026	630,888	11,321,846		
FY2027	607,900	11,929,746		
FY2028	582,392	12,512,138		
FY2029	554,257	13,066,395		
FY2030	432,154	13,498,548		
FY2031	298,202	13,796,750		
FY2032	150,869	13,947,620		
Total	\$ 13,947,620		\$ 8,040,753	
Cumulative Additional Savings through 6/30/16	3,437,566			
Projected Savings	<u>\$ 17,385,185</u>			
	124.65%			

Revised Savings

Note: Above cumulative actual interest includes \$197,143 of bank bond interest.