



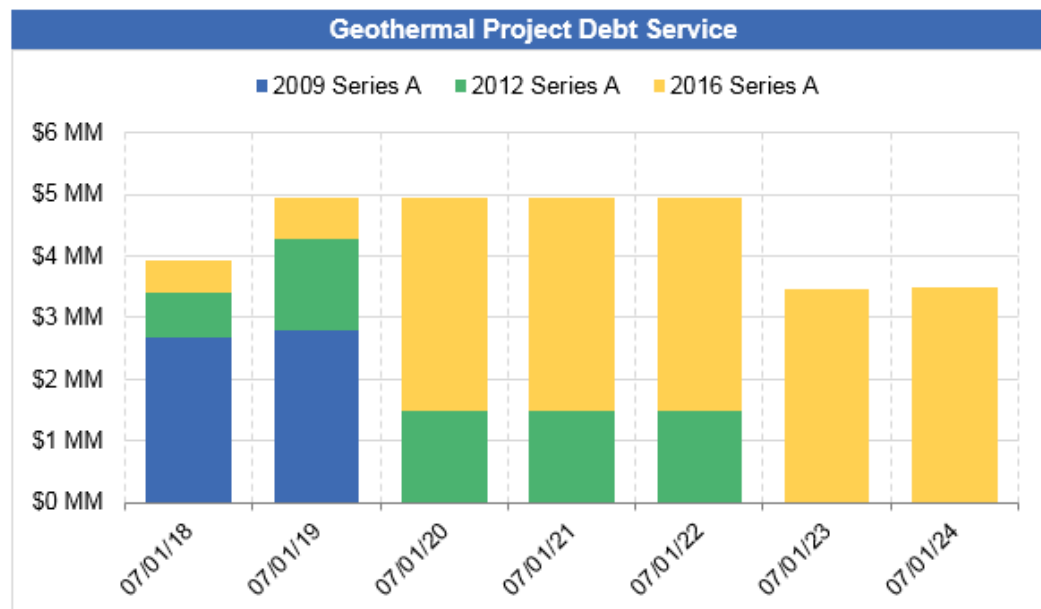
# **Debt and Interest Rate Management Report**

## **As of June 30, 2018**

# DEBT OVERVIEW BY PROJECT

# Geothermal Project Debt Overview

Geothermal Project Participation Percentages		
Member	Entitlement Share (%)	Beneficiary Share (%)
Alameda	16.8825	16.8825
Biggs	0.2270	0.2270
Gridley	0.3950	0.3360
Healdsburg	3.6740	3.6740
Lodi	10.2800	10.2800
Lompoc	3.6810	3.6810
Palo Alto	6.1580	0.0000
Plumas-Sierra	0.8145	0.7010
Roseville	7.8830	7.8830
Santa Clara	44.3905	44.3905
TID	0.0000	6.3305
Ukiah	5.6145	5.6145



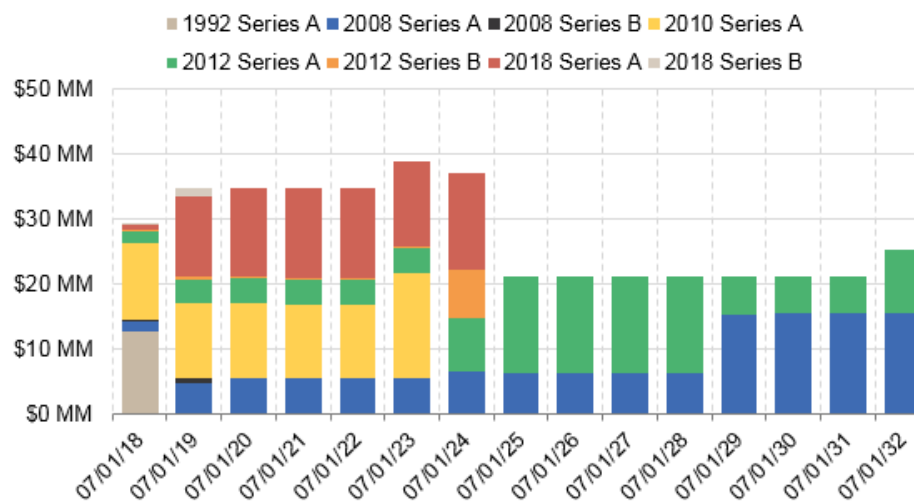
Summary of Outstanding Geothermal Project Debt							
Ratings (M/S/F): A1/A-/A+, Stable Outlooks							
Series	Tax Status	Coupon Type	Issue Size	Outstanding Par	Coupon Range	Call Date	Final Maturity
2009 Series A	Tax-Exempt	Fixed-Rate	\$35,610,000	\$5,220,000	5.000%	-	7/1/2019
2012 Series A	Tax-Exempt	Fixed-Rate	\$12,910,000	\$6,285,000	2.289%	7/1/2017	7/1/2022
2016 Series A	Tax-Exempt	Fixed-Rate	\$17,530,000	\$17,265,000	1.670%	-	7/1/2024

# Hydroelectric Project Debt Overview

## Hydroelectric Project Participation Percentages

Member	Entitlement Share (%)
Alameda	10.000
Biggs	0.100
Gridley	1.060
Healdsburg	1.660
Lodi	10.370
Lompoc	2.300
Palo Alto	22.920
Roseville	12.000
Santa Clara	35.860
Ukiah	2.040
Plumas-Sierra	1.690

## Hydroelectric Project Debt Service



## Summary of Outstanding Hydroelectric Project Debt

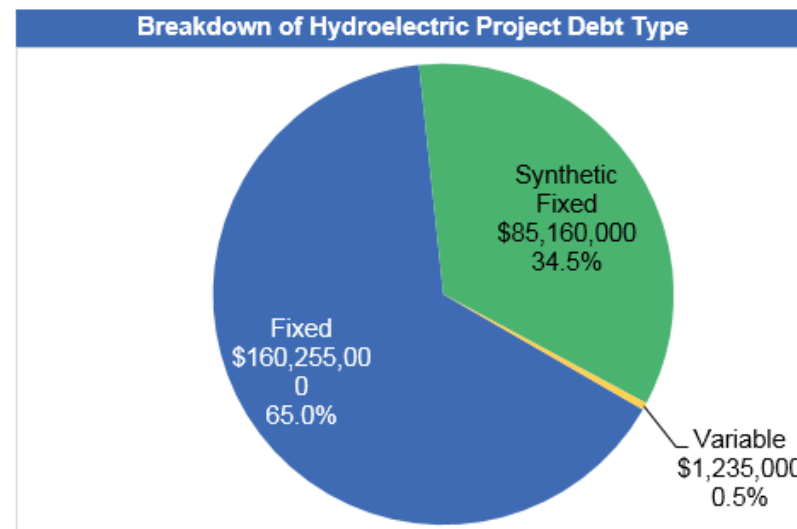
Ratings (M/S/F): Aa3/-/AA-, Stable Outlooks

Series	Tax Status	Coupon Type	Issue Size	Outstanding Par	Coupon Range	Call Date	Final Maturity
1992 Series A	Tax-Exempt	Fixed-Rate	\$195,610,000	\$12,155,000	6.300%	Non-Callable	7/1/2018
2008 Series A	Tax-Exempt	Variable-Rate	\$85,160,000	\$85,160,000	Var. (3.819%) <sup>(S)</sup>	Current	7/1/2032
2008 Series B	Taxable	Variable-Rate	\$3,165,000	\$1,235,000	Variable <sup>(V)</sup>	Current	7/1/2020
2010 Series A	Tax-Exempt	Fixed-Rate	\$101,260,000	\$62,975,000	5.000%	7/1/2019	7/1/2023
2012 Series A	Tax-Exempt	Fixed-Rate	\$76,665,000	\$76,665,000	5.000%	7/1/2022	7/1/2032
2012 Series B	Taxable	Fixed-Rate	\$7,120,000	\$7,120,000	4.320%	Make-Whole	7/1/2024
2018 Series A	Tax-Exempt	Fixed-Rate	\$68,875,000	\$68,875,000	5.000%	Non-Callable	7/1/2024
2018 Series B	Taxable	Fixed-Rate	\$1,340,000	\$1,340,000	2.350%	Non-Callable	7/1/2019

# Hydroelectric Project Debt Overview

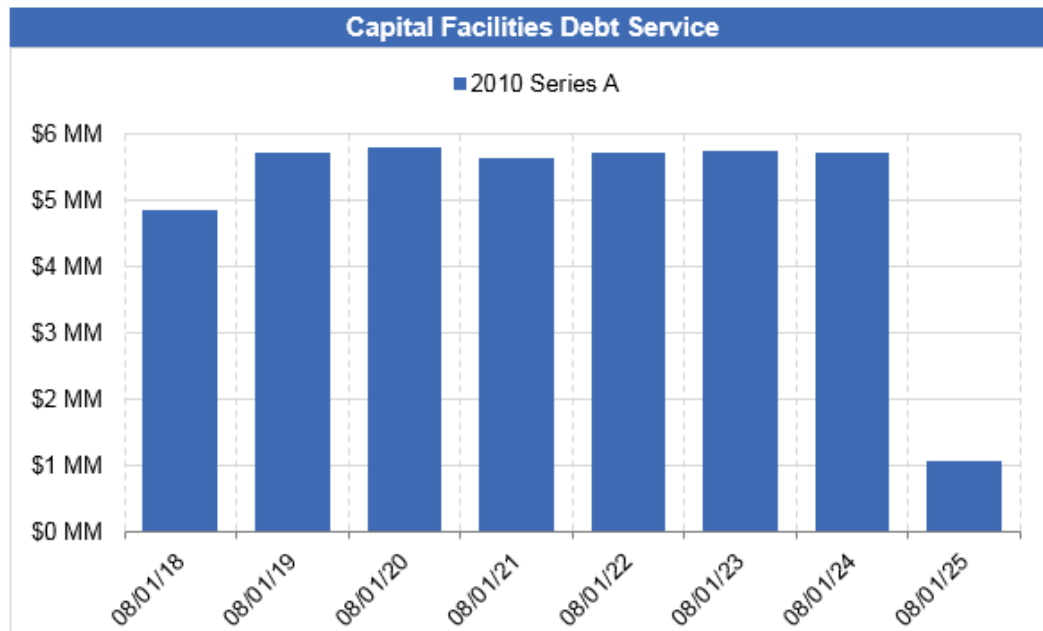
Hydroelectric Project Swap Summary									
Series	NCPA Pays	NCPA Receives	Trade Date	Effective Date	Maturity Date	MTM Value (As of 6/29/18)	Initial Notional	Current Notional	Bank Counterparty
2008 Series A	3.8190%	54% of USD-LIBOR + 0.54%	11/24/04	11/24/04	7/1/32	(\$13,928,704)	\$85,160,000	\$85,160,000	Citibank, N.A., New York (A1/A+/A+)
2008 Series B	USD-LIBOR	5.2910%	11/24/04	11/24/04	7/1/32	\$161,739	\$1,574,000	\$1,073,895	Citibank, N.A., New York (A1/A+/A+)

Hydroelectric Project Liquidity Summary			
Series	LOC Provider	LOC Expiry	Reset (as of 06/26/18)
2008 Series A	Bank of Montreal (A1/A+/AA-)	September 09, 2019	1.30%
2008 Series B	Bank of Montreal (A1/A+/AA-)	September 09, 2019	2.05%



# Capital Facilities Debt Overview

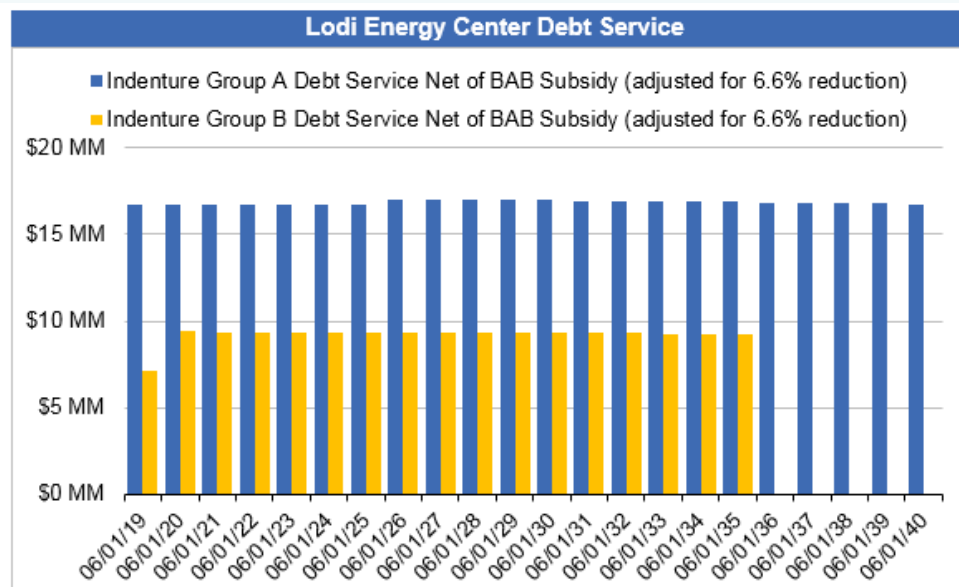
Capital Facilities Participation Percentages	
Member	Entitlement Share (%)
Alameda	19.00
Lodi	39.50
Lompoc	5.00
Roseville	36.50



Summary of Outstanding Capital Facilities Debt							
Ratings (M/S/F): A2/A-/ , Stable Outlooks							
Series	Tax Status	Coupon Type	Issue Size	Outstanding Par	Coupon Range	Call Date	Final Maturity
2010 Series A	Tax-Exempt	Fixed-Rate	\$55,120,000	\$33,640,000	4.000% - 5.250%	2/1/2020	8/1/2025

# Lodi Energy Center Debt Overview

LEC Participation Percentages		
Member	Entitlement Share (%)	Ind. Group A Cost Share (%)
CDWR	33.5000	-
Azusa	2.7857	4.9936
Biggs	0.2679	0.4802
Gridley	1.9643	3.5212
Healdsburg	1.6428	2.9448
Lodi	9.5000	17.0295
Lompoc	2.0357	3.6491
Santa Clara	25.7500	46.1588
Ukiah	1.7857	3.2010
MID	10.7143	-
Plumas-Sierra	0.7857	1.4084
PWRPA	2.6679	4.7824
SFBART	6.6000	11.8310



Summary of Outstanding Lodi Energy Center Debt							
Series	Tax Status	Coupon Type	Issue Size	Outstanding Par	Coupon Range	Next Call	Final Maturity
<b>Indenture Group A   Ratings (M/S/F): A1/A-/A, Stable Outlooks</b>							
2010 Series A	Tax-Exempt	Fixed-Rate	\$78,330,000	\$12,125,000	5.000%	6/1/2020	6/1/2020
2010 Series B	Taxable BABs	Fixed-Rate	\$176,625,000	\$176,625,000	7.311% <sup>(T)</sup>	Make-Whole	6/1/2040
2017 Series A	Tax-Exempt	Fixed-Rate	\$38,635,000	\$38,970,000	2.270%	-	6/1/2025
<b>Indenture Group B—CADWR   Ratings (M/SF): Aa2/AAA/ , Stable Outlooks</b>							
2010 Series A	Tax-Exempt	Fixed-Rate	\$30,540,000	\$4,960,000	5.000%	Non-Callable	6/1/2019
2010 Series B	Taxable BABs	Fixed-Rate	\$110,225,000	\$110,225,000	4.630%-5.679% <sup>(T)</sup>	Make-Whole	6/1/2035

<sup>(T)</sup> Taxable Build America Bonds; Interest rate gross of BAB subsidy

# FIXED RATE DEBT OVERVIEW



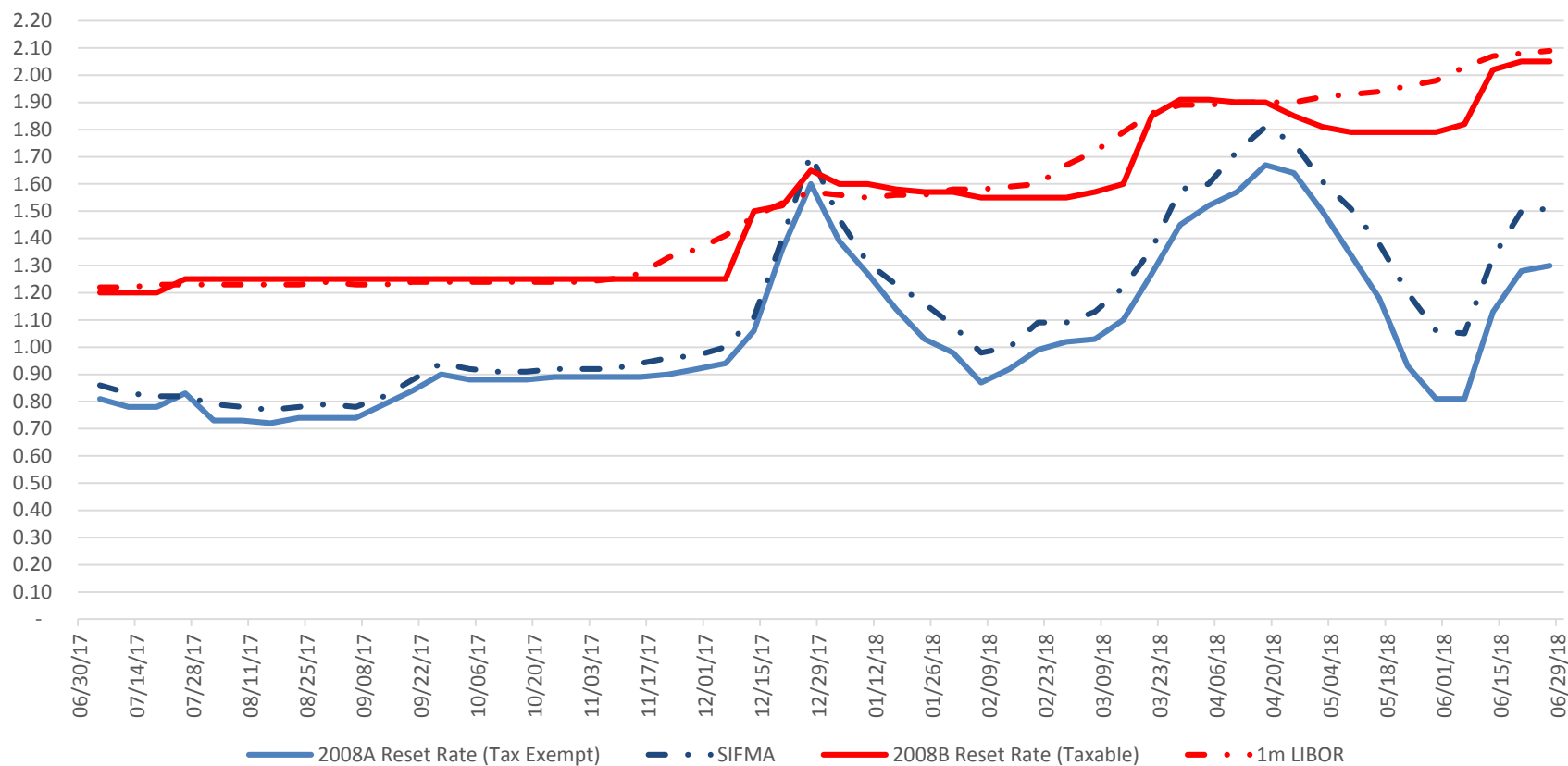
# Fixed Rate Debt Overview

- While no new fixed rate debt was issued, staff refunded the 2008 Hydroelectric Series C bonds. Final numbers for the project participants include the following:
  - NPV Savings: \$7.6 million through final maturity of 2024
  - Percentage savings of refunded bonds: 10%
  - Average annual savings: approx. \$1.37 million per year
- February 2018, Fitch Ratings:
  - Upgraded the rating on NCPA's Hydroelectric Revenue Bonds to AA- from A+ with a rating outlook of stable

# VARIABLE RATE DEBT OVERVIEW

# Variable Rate Debt Overview

## NCPA Variable Rate Debt Performance Versus Indices

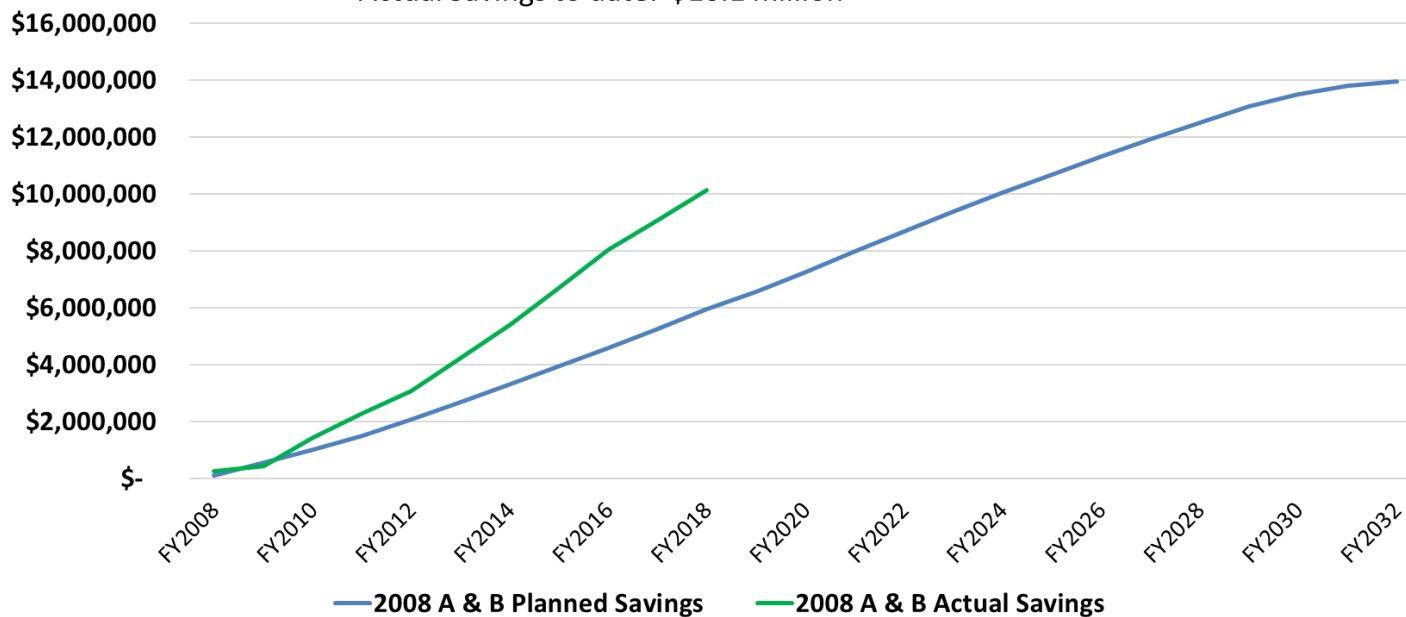


# INTEREST RATE SWAPS OVERVIEW

# Interest Rate Swaps Overview

## Northern California Power Agency Hydroelectric Project Swaps Performance to Date June 30, 2018

Total Projected Savings over life of bonds: \$13.9 million  
Total Project Savings to date: \$6.0 million  
Actual Savings to date: \$10.1 million



# Interest Rate Swaps Overview

