

Debt and Interest Rate Management Report As of June 30, 2019



		<u>Page</u>
•	Key Highlights	3
•	Debt Overview by Project	4
	– Geothermal Project	5
	 Hydroelectric Project 	6-7
	 Capital Facilities 	8
	 Lodi Energy Center 	9
•	Fixed Rate Debt Overview	10-11
•	Variable Rate Debt Overview	12
	 Critical Terms 	13
	 Performance Versus Indices (inception, fiscal year) 	14-15
•	Interest Rate Swaps Overview	16
	- Swap Performance	17
	 Swap Summary and Valuation 	18
	 Fair Value by Participant 	19
	 Fair Value Historical Trend 	20



Key Highlights

January 2019 – June 2019

- In March. (April 2nd closing), staff refunded the 2010 Hydroelectric, Series A bonds with the 2019 Hydroelectric, Series A bonds generating \$3.6 million of Net Present Value savings (approx. \$1.6 million annually) for project participants.
- On April 30th, staff terminated the 2008 Hydroelectric, Series B swap with Citigroup and received a termination payment of \$169,400. On May 14th, the outstanding principal, \$910,000, on the 2008 Hydroelectric, Series B bonds was called for redemption.
- In June, staff completed the Letter of Credit substitution for the 2008 Hydroelectric, Series A bonds replacing Bank of Montreal with Bank of America.
- No negative material changes to any fixed or variable rate debt or outstanding swap agreements occurred since the last report.
- On May 30th, Moody's upgraded the rating on NCPA's Capital Facility Project to A1 from A2 with an outlook of stable. Ratings on all other projects remained the same.
- No defaults under the above swap agreements, fixed rate or variable rate debt have occurred.
- Counterparty ratings remained the same; no collateral posting by the counterparty has been required and the counterparty remains highly rated.
- The MTM* on the outstanding swaps changed from a negative value of \$14.2 million on December 31, 2018 to a negative value of \$15.8 million on June 28, 2019.

* Doesn't reflect the GASB 72 Fair Value risk profile of NCPA.

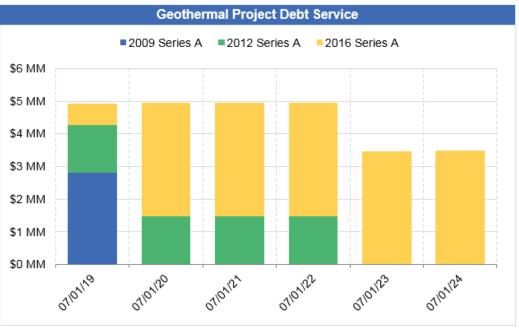


DEBT OVERVIEW BY PROJECT



Geothermal Project Debt Overview

Geothermal Project Participation Percentages						
Entitlement Share (%)	Beneficiary Share (%)					
16.8825	16.8825					
0.2270	0.2270					
0.3950	0.3360					
3.6740	3.6740					
10.2800	10.2800					
3.6810	3.6810					
6.1580	0.0000					
0.8145	0.7010					
7.8830	7.8830					
44.3905	44.3905					
0.0000	6.3305					
5.6145	5.6145					
	Entitlement Share (%) 16.8825 0.2270 0.3950 3.6740 10.2800 3.6810 6.1580 0.8145 7.8830 44.3905 0.0000					

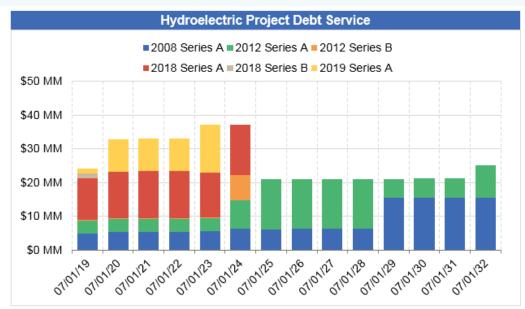


Summary of Outstanding Geothermal Project Debt								
	Ratings (M/S/F): A1/A-/A+, Stable Outlooks							
Series	Tax Status	Coupon Type	Issue Size	Outstanding Par	Coupon Range	Call Date	Final Maturity	
2009 Series A	Tax-Exempt	Fixed-Rate	\$35,610,000	\$2,675,000	5.000%	-	7/1/2019	
2012 Series A	Tax-Exempt	Fixed-Rate	\$12,910,000	\$4,945,000	2.289%	7/1/2017	7/1/2022	
2016 Series A	Tax-Exempt	Fixed-Rate	\$17,530,000	\$16,900,000	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			



Summary of Outstanding Hydroelectric Project Debt

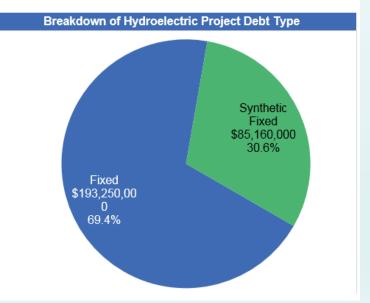
	Ratings (Wi/S/F). Rasi-/AA-, Stable Outlooks						
Series	Tax Status	Coupon Type	Issue Size	Outstanding Par	Coupon Range	Call Date	Final Maturity
2008 Series A	Tax-Exempt	Variable-Rate	\$85,160,000	\$85,160,000	Var. (3.819%) (S)	Current	7/1/2032
2012 Series A	Tax-Exempt	Fixed-Rate	\$76,665,000	\$76,665,000	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
2019 Series A	Tax-Exempt	Fixed-Rate	\$39,250,000	\$39,250,000	4.000%-5.000%	Non-Callable	7/1/2023



Hydroelectric Project Debt Overview

	Hydroelectric Project Swap Summary								
Series	NCPA Pays	NCPA Receives	Trade Date	Effective Date	Maturity Date	MTM Value (As of 6/28/19)	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	(\$17,115,940)	\$85,160,000	\$85,160,000	Citibank, N.A., New York (Aa3/A+/A+)

Hydroelectric Project Liquidity Summary							
Series	LOC Provider	LOC Expiry	Reset (as of 07/30/18)				
2008 Series A	Bank of America, N.A. (Aa2/A+/AA-)	June 21, 2024	1.32%				





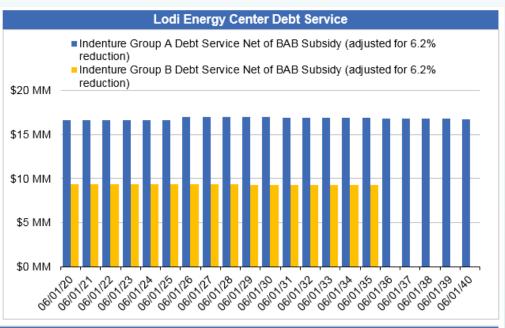
Capital Facilities Debt Overview

Capital Faci	lities Participatio	Capital Facilities Debt Service							
Member Alameda	Enti	itlement Share (%) 19.00			2	010 Series A			
Lodi		39.50	\$6 MM						
Lompoc		5.00	\$5 MM						
Roseville		36.50	3 3 MIM						
			\$4 MM		_				
			\$3 MM						
			\$2 MM		-				
			\$1 MM		-				
			\$0 MM						
			50 MM - 081011	08/011	08/011	081011	081011	081071	081011
			y of Outstanding			t			
		Ratir	ngs (M/S/F): A2/A						
Series	Tax Status	Coupon Type	Issue Size	Outstandin Pa	ar Coup	oon Range	Call [Date	Final Maturity
2010 Series A	Tax-Exempt	Fixed-Rate	\$55,120,000	\$29,645,00	11.1	.000% - 5.250%	2/1/2	020	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				



Summar	v of Outst	anding	Lodi Ener	av Cen	ter Debt
ounnu	y or outs	unung	LOUI LING	99 001	

Series	Tax Status	Coupon Type	Issue Size	Outstanding Par	Coupon Range	Next Call	Final Maturity	
Indenture Group A Ratings (M/S/F): A1/A-/A, Stable Outlooks								
2010 Series A	Tax-Exempt	Fixed-Rate	\$78,330,000	\$6,210,000	5.000%	6/1/2020	6/1/2020	
2010 Series B	Taxable BABs	Fixed-Rate	\$176,625,000	\$176,625,000	7.311% 🗇	Make-Whole	6/1/2040	
2017 Series A	Tax-Exempt	Fixed-Rate	\$38,970,000	\$38,030,000	2.270%	-	6/1/2025	
Indenture Group B—CADWR Ratings (M/SF): Aa2/AAA/ , Stable Outlooks								
2010 Series B	Taxable BABs	Fixed-Rate	\$110,225,000	\$110,225,000	4.630%-5.679% ^(T)	Make-Whole	6/1/2035	

^(T) Taxable Build America Bonds; Interest rate gross of BAB subsidy



FIXED RATE DEBT OVERVIEW



Fixed Rate Debt Overview

- Fixed Rate Debt
 - While no new fixed rate debt was issued, staff refunded the 2010 Hydroelectric Series A bonds with the 2019 Hydroelectric Series A bonds. Final numbers for the project participants include the following:
 - NPV Savings: \$3.6 million through final maturity of 2024
 - Percentage savings of refunded bonds: 6.84%
 - Average annual savings: approx. \$1.6 million per year
- Ratings
 - Moody's upgraded the rating on NCPA's Capital Facility Project to A1 from A2 with an outlook of stable



VARIABLE RATE DEBT OVERVIEW



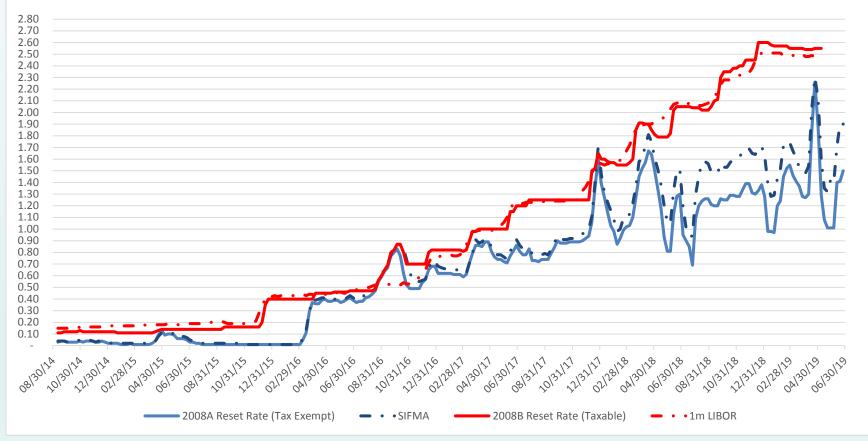
Variable Rate Debt Overview

	Hydro 2008A	Hydro 2008B
Variable Rate Debt		TERMINATED - APRIL 30TH
Amount	\$85,160,000	\$910,000
Priced	Weekly	Weekly
Payment	Monthly	Monthly
Swap Counter-party:	Citigroup	Citigroup
Payments	NCPA Pays	Rec
	Fixed @ 3.819%	@ !
	NCPA Receives	
From/To: Counterparty	Floating rate (based on 54%	Floati ed on
	of monthly Libor+.54%)	r oor)
Payment terms:		
NCPA	Semi-Annual (net)	Sr Pt)
Counterparty	Semi-Annual (net)	5
Liquidity/Letter of Credit Provider ¹	Bank of America	of Mo
Annual Fee	35.0 bp	39.0 bp
Expiration Date	6/21/2024	9/9/2019
Credit Ratings	Aa2/A+/AA-	A1/A+/AA-
¹ Effective 6/24/19 Bank of Montreal	was replaced as the LOC pro	vider with Bank of America.
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Variable Rate Debt Overview

NCPA Variable Rate Debt Performance Versus Indices





Variable Rate Debt Overview

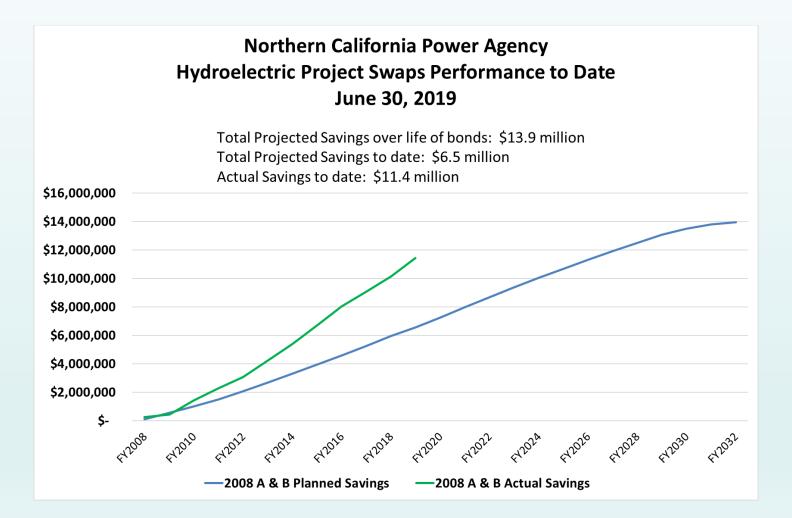
NCPA Variable Rate Debt Performance Versus Indices





INTEREST RATE SWAPS OVERVIEW









Phone: 215 567-6100 Fax: 215 567-4180

Transaction Type	Name	Associated Bonds	Client Pay	Client Receives	Trade Date	Effective Date (Initial Calc)	Maturity Date
Swap	NCPA 200411240001	Series 2008A	3.8190%	54% of USD-LIBOR + 0.54%	11/24/2004	4/2/2008	7/1/2032
Initial Notional	Current Notional	Bank Counterparty	Counterparty Ratings Moody's / S&P / Fitch	MTM Value 6/30/2019			
\$85,160,000	\$85,160,000	Citibank, N.A., New York	A1 / A+ / A+	(\$15,800,973)			



PFM Swap Advisors LLC	Transaction Type	Name	Associated Bonds	Client Pay	Client Receives	Trade Date	Maturity Date	Current Notional
Phone: 215 567-6100 Fax: 215 567-4180	Swap	NCPA 200411240001	Series 2008A	3.8190%	54% of USD-LIBOR + 0.54%	11/24/2004	7/1/2032	\$85,160,000
								\$85,160,000
Total MTM Value	Alameda 10%	Healdsburg 1.66%	Lodi 10.37%	Lompoc 2.30%	Palo Alto 22.92%	Plumas-Sierra 1.69%	Roseville 12.00%	Santa Clara 37.02%
\$15,800,973)	(\$1,580,097)	(\$262,296)	(\$1,638,561)	(\$363,422)	(\$3,621,583)	(\$267,036)	(\$1,896,117)	(\$5,849,520)



