

Commission Staff Report - Draft

January 31, 2018

COMMISSION MEETING DATE: February 22, 2018

SUBJECT: Debt and Interest Rate Management Report – December 31, 2017

AGENDA CATEGORY: Consent

| FROM: | Monty Hanks | METHOD OF SELECTION: |
|-------|----------------------------------|----------------------|
| | Assistant General Manager/CFO | N/A |

Division: Administrative Services

Department: Accounting & Finance

| IMPACTED MEMBERS: | | | | |
|---|-------------|--------------------------|---------------------|--|
| All Members | \boxtimes | City of Lodi | City of Shasta Lake | |
| Alameda Municipal Power | | City of Lompoc | City of Ukiah | |
| San Francisco Bay Area Rapid Transit | | City of Palo Alto | Plumas-Sierra REC | |
| City of Biggs | | City of Redding | Port of Oakland | |
| City of Gridley | | City of Roseville | Truckee Donner PUD | |
| City of Healdsburg | | City of Santa Clara | Other | |
| | | If other, please specify | | |
| | | | | |
| | | | | |

SR: xxx:18

RECOMMENDATION:

It is recommended the Commission accept the Debt and Interest Rate Management Report for the period ending December 31, 2017.

BACKGROUND:

In accordance with the Debt and Interest Rate Management Policy, Section 20, *Monitoring and Reporting Requirements*, approved by the Commission in May 2017, the Finance team will provide a written report regarding the status of all fixed and variable rate debt and the Agency's interest rate swaps on a semi-annual basis to the Finance Committee and to the Commission.

The report, for the period ending December 31, 2017, is attached for your information and acceptance. Listed below is a summary of the report.

<u>Fixed Rate Debt</u> – While no new fixed rate debt was issued, staff took advantage of a limited opportunity to do an advance refunding of the Lodi Energy Center, Issue One, 2010 Series A bonds. The debt was refunded as Lodi Energy Center Revenue Refunding Bonds, Issue One, 2017 Series A into a Direct Placement with Bank of America securing a fixed rate of 2.27% through final maturity in 2025. Project participants will realize a Net Present Value (NPV) savings of over \$2 million which includes over \$300,000 in average annual debt service savings.

Staff is also currently working on refunding the Hydro Project Number One Revenue Bonds, 2008 Refunding Series C. The tentative schedule is to seek the Finance Committee's recommendation to request Commission authorization at the February 2018 meetings with an anticipated closing in early April.

Other highlights are included in the attached report.

<u>Variable Rate Debt</u> – The Agency has a total of \$86.4 million of outstanding variable rate debt (\$85.16 million for Hydro 2008 Series A and \$1.24 million Hydro 2008 Series B). The Agency's variable rate debt is structured with a Letter of Credit with the Bank of Montreal. On average, the reset rates continue to trade at or better than the Securities Industry and Financial Markets Association (SIFMA) for the Series A bonds (tax-exempt) and 1-month London Interbank Offered Rate (LIBOR) for Series B bonds (taxable). The reset rates and index comparisons are included in the attached report.

Interest Rate Swaps – As of December 31, 2017, NCPA had \$86.3 million of outstanding swaps, all related to the Hydroelectric Project bonds, which act as a hedge against the variable rate debt. The total market value of the interest rate swaps was a net liability of \$16.995 million (negative). This amount has improved from the June 30, 2017 net liability of \$18.312 million (negative) due to a rise in interest rates and time value. No new swaps or defaults have occurred in the last six months. The interest rate swaps make up approximately 27% of the outstanding Hydroelectric Project debt portfolio. Additional details of the swap agreements are provided in the attached report.

<u>Counterparties</u> – The counterparty for both interest rate swaps is Citibank, N.A. The credit ratings for Citibank, N.A., are A+/A1/A+ by S&P, Moody's, and Fitch, respective. There have been no changes since the last report.

SR: xxx:18

[Title] [Date] Page 3

Rating Changes

In October 2017, Moody's Investor Services notified NCPA that they were upgrading both Hydro and LEC bonds. Moody's met with staff back in June to review the status and key metrics of each project. Moody's rating committee has decided to:

- Upgrade the rating on NCPA's Hydroelectric Revenue Bonds to Aa3 from A1. The rating outlook is stable.
- Upgrade the rating on NCPA's Indenture A (Issue One) Lodi Energy Center (LEC) Revenue Bonds to A1 from A2. The rating outlook is stable.

FISCAL IMPACT:

The total projected savings over the life of the interest rate swaps was \$13.9 million at the inception of these agreements. Total projected savings through December 31, 2017 was \$5.6 million with actual results at \$9.6 million. The difference between expected savings and actual savings is due to "basis risk", or the difference between what NCPA pays on the 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 \$4.0 million. Staff continues to monitor the potential for refinancing these bonds and terminating the swaps, however, with rates still near historical lows, this is causing a large mark-to-market payment due to Citibank, N.A. of over \$16.995 million (net) making a potential refund not a feasible option 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:

Pending

Respectfully submitted,

RANDY S. HOWARD General Manager

Attachments:

Debt and Interest Rate Management Report, as of December 31, 2017

SR: xxx:18



Debt and Interest Rate Management Report As of December 31, 2017



| | | <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 | 14 |
| • | Interest Rate Swaps Overview | 15 |
| | Swap Performance | 16 |
| | Swap Summary and Valuation | 17 |
| | Fair Value by Participant | 18 |
| | Fair Value Historical Trend | 19 |



Key Highlights

- In December 2017, staff refunded the Lodi Energy Center, Issue One, 2010 Series A bonds into a Direct Purchase with Bank of America securing a fixed rate of 2.27% through final maturity in 2025.
- No negative material changes to any fixed or variable rate debt or outstanding swap agreements occurred since the last report.
- In October 2017, Moody's Investor Services upgraded the rating on NCPA's Hydroelectric Revenue Bonds to Aa3 from A1 with a rating outlook of stable.
- In October 2017, Moody's Investor Services upgraded the rating on NCPA's Lodi Energy Center, Issue One, Series 2010 A bonds to A1 from A2 with a rating outlook of stable.
- No defaults under the above swap agreements, fixed rate or variable rate debt have occurred.
- Counterparty rating 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 \$18.3 million on June 30, 2017 to a negative value of \$17.0 million on December 31, 2017.

^{*} Doesn't reflect the GASB 72 Fair Value risk profile of NCPA. This calculation is done at fiscal year-end.

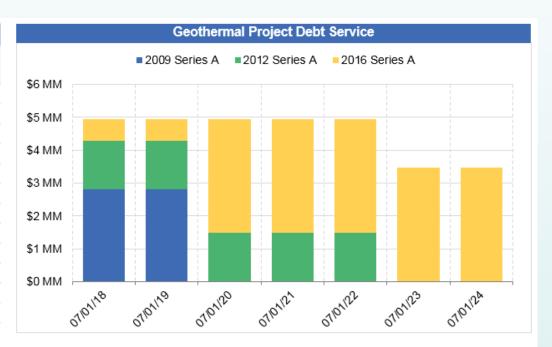


DEBT OVERVIEW BY PROJECT



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 | | | |

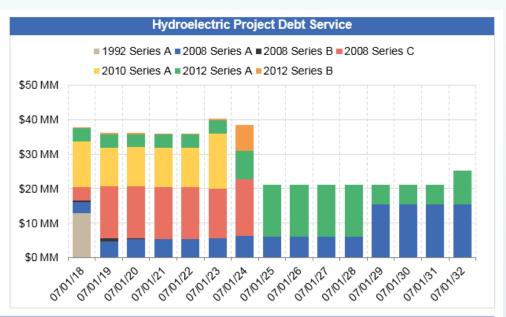


| | Summary of Outstanding Geothermal Project Debt | | | | | | |
|--|--|------------|--------------|--------------|--------|----------------|----------|
| | Ratings (M/S/F): A1/A-/A+, Stable Outlooks | | | | | | |
| Series Tax Status Coupon Type Issue Size Outstanding Coupon Range Call Date Final Maturity | | | | | | 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 | \$6,945,000 | 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 | | | | |



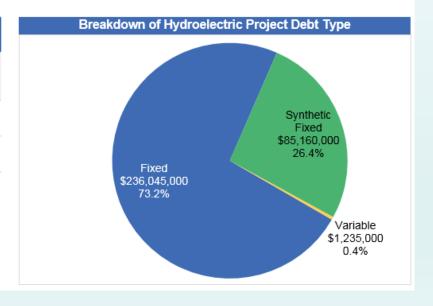
| | Summary of Outstanding Hydroelectric Project Debt | | | | | | |
|---------------|---|---------------|--------------------|--------------------|-------------------|--------------|----------------|
| | | Ratin | gs (M/S/F): Aa3/A+ | A+, Stable Out | looks | | |
| Series | Tax Status | Coupon Type | 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%) (S) | Current | 7/1/2032 |
| 2008 Series B | Taxable | Variable-Rate | \$3,165,000 | \$1,235,000 | Variable (√) | Current | 7/1/2020 |
| 2008 Series C | Tax-Exempt | Fixed-Rate | \$128,005,000 | \$77,130,000 | 5.000% | 7/1/2018 | 7/1/2024 |
| 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 |



Hydroelectric Project Debt Overview

| | Hydroelectric Project Swap Summary | | | | | | | | |
|---------------------|------------------------------------|---------------------------------|---------------|-------------------|------------------|-------------------------------|---------------------|---------------------|---|
| Series | NCPA Pays | NCPA Receives | Trade Date | Effective Date | Maturity Date | MTM Value (As of 12/29/17) | 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 | (\$17,210,366) | \$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 | \$215,149 | \$1,574,000 | \$1,108,537 | Citibank, N.A., New York (A1/A+/A+) |

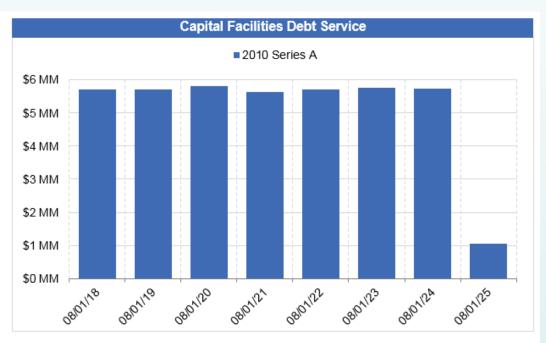
| Hydroelectric Project Liquidity Summary | | | | | | |
|---|---------------------------------|--------------------|------------------------------|--|--|--|
| Series | LOC Provider | LOC Expiry | Reset (as of 12/26/17) | | | |
| 2008 Series A | Bank of Montreal (A1/A+/AA-) | September 09, 2019 | 1.60% | | | |
| 2008 Series B | Bank of Montreal (A1/A+/AA-) | September 09, 2019 | 1.65% | | | |





Capital Facilities Debt Overview

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

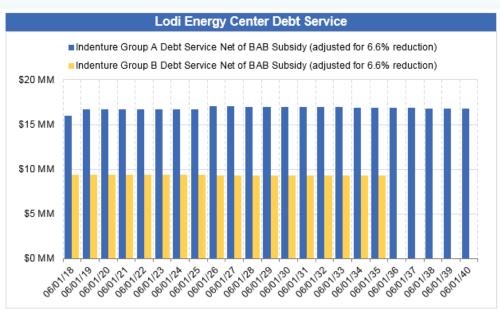


| Summary of Outstanding Capital Facilities Debt | | | | | | | |
|--|------------|-------------|--------------|--------------------|--------------------|-----------|----------------|
| Ratings (M/S/F): A2/A-/ , Stable Outlooks | | | | | | | |
| Series | Tax Status | Coupon Type | Issue Size | Outstanding 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 | | |
| Indenture Group A Ratings (M/S/F): A1/A-/A, Stable Outlooks | | | | | | | | | |
| 2010 Series A | Tax-Exempt | Fixed-Rate | \$78,330,000 | \$17,755,000 | 5.000% | 6/1/2020 | 6/1/2020 | | |
| 2010 Series B | Taxable BABs | Fixed-Rate | \$176,625,000 | \$176,625,000 | 7.311% (T) | Make-Whole | 6/1/2040 | | |
| 2017 Series A | Tax-Exempt | Fixed-Rate | \$38,970,000 | \$38,970,000 | 2.270% | - | 6/1/2025 | | |
| Indenture Group B—CADWR Ratings (M/SF): Aa2/AAA/ , Stable Outlooks | | | | | | | | | |
| 2010 Series A | Tax-Exempt | Fixed-Rate | \$30,540,000 | \$9,685,000 | 5.000% | Non-Callable | 6/1/2019 | | |
| 2010 Series B | Taxable BABs | Fixed-Rate | \$110,225,000 | \$110,225,000 | $4.630\% - 5.679\% \ ^{(T)}$ | Make-Whole | 6/1/2035 | | |

⁽¹⁾ 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 took advantage of a limited opportunity to do an advance refunding of the Lodi Energy Center, Issue One, 2010 Series A bonds into a Direct Purchase with Bank of America securing a fixed rate of 2.27% through final maturity in 2025.
- October 2017, Moody's Investor Services:
 - Upgraded the rating on NCPA's Hydroelectric Revenue Bonds to Aa3 from A1 with a rating outlook of stable
 - Upgraded the rating on NCPA's Lodi Energy Center, Issue One,
 Series 2010 A bonds to A1 from A2 with a rating outlook of stable.
- Refunding in progress
 - 2008 Hydroelectric Refunding Bonds, Series C
 - Callable July 1, 2018 but can refund as early as April 3, 2018
 - Lead UW: Citigroup with Goldman Sachs as co-manager



VARIABLE RATE DEBT OVERVIEW



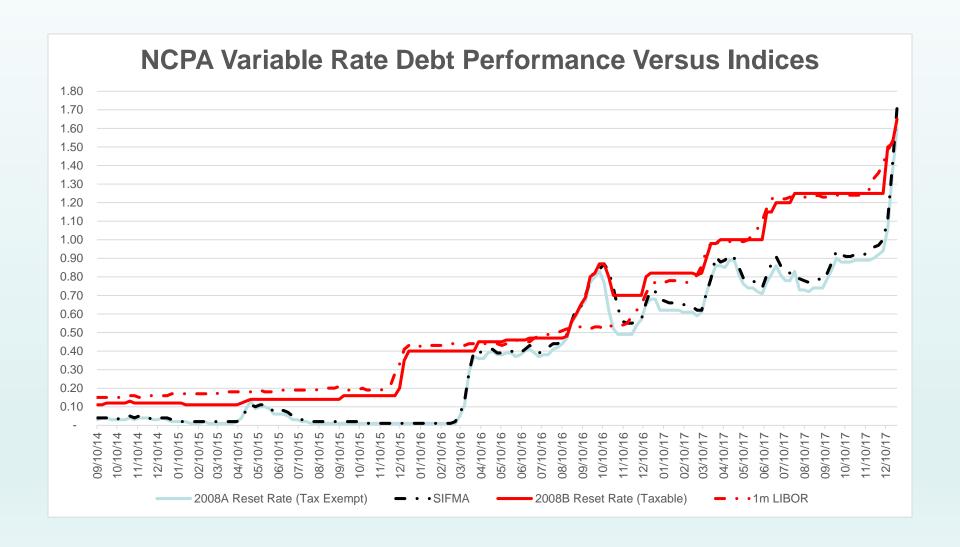
Variable Rate Debt Overview

| | 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 Pays | NCPA Receives |
| , | Fixed @ 3.819% | Fixed @ 5.291% |
| | NCPA Receives | NCPA Pays |
| From/To: Counterparty | Floating rate (based on 54% | Floating rate (based on |
| | of monthly Libor+.54%) | monthly Libor) |
| Payment terms: | | |
| NCPA | Semi-Annual (net) | Semi-Annual (net) |
| Counterparty | ` ' | Semi-Annual (net) |
| Liquidity/Letter of Credit Provider ¹ | Bank of Montreal | Bank of Montreal |
| Annual Fee | | 39.0 bp |
| Expiration Date | | 9/9/2019 |
| - | | |
| Credit Ratings ² | A1/A+/AA- | A1/A+/AA- |
| | | |
| ¹ Effective 9/10/14 Citibank N.A. was | s replaced as the LOC provide | r with Bank of Montreal. |

² Effective 5/10/17 Moody's downgraded the Bank of Montreal from Aa3 to A1



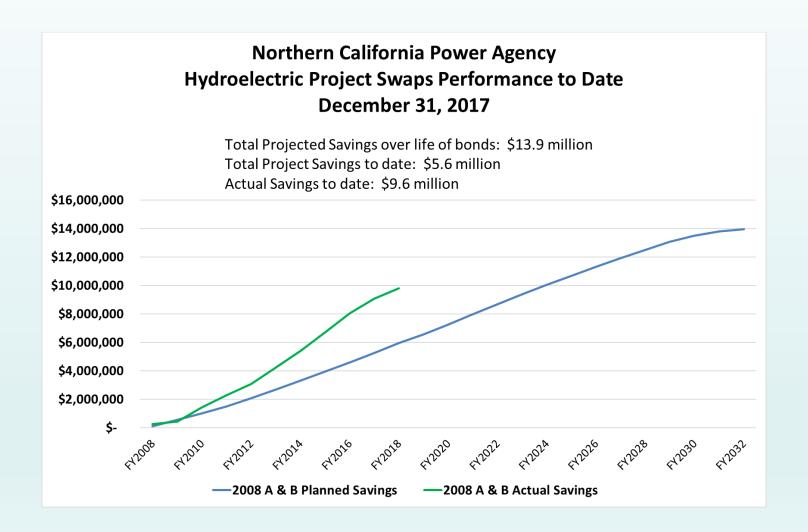
Variable Rate Debt Overview





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 | Maturity Date |
|---------------------|----------------------|-----------------------------|---|-----------------------------|---|-------------------|------------------|
| Swap | NCPA 200411240001 | Series 2008A | 3.8190% | 54% of USD-LIBOR + 0.54% | 11/24/2004 | 11/24/2004 | 7/1/2032 |
| Swap | NCPA 200411240002 | Series 2008B | USD-LIBOR | 5.2910% | 11/24/2004 | 11/24/2004 | 7/1/2032 |
| | | | | | | | |
| Initial Notional | Current Notional | Bank Counterparty | Counterparty Ratings Moody's / S&P / Fitch | MTM Value 12/29/2017 | Impact on MTM Value - 50 bp swing | | |
| \$85,160,000 | \$85,160,000 | Citibank, N.A., New York | A1 / A+ / A+ | (\$17,210,366) | \$2,601,371 | | |
| \$1,574,000 | \$1,108,537 | Citibank, N.A., New York | A1 / A+ / A+ | \$215,149 | (\$34,835) | | |
| \$86,734,000 | \$86,268,537 | | | (\$16,995,217) | \$2,566,536 | | |



| pfm 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 | |
| | Swap | NCPA 200411240002 | Series 2008B | USD-LIBOR | 5.2910% | 11/24/2004 | 7/1/2032 | \$1,108,537 | |
| | | | | | | | | \$86,268,537 | |
| 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% | Ukiah 2.04% |
| (\$17,210,366) | (\$1,721,037) | (\$285,692) | (\$1,784,715) | (\$395,838) | (\$3,944,616) | (\$290,855) | (\$2,065,244) | (\$6,371,277) | (\$351,091) |
| \$215,149 | \$21,515 | \$3,571 | \$22,311 | \$4,948 | \$49,312 | \$3,636 | \$25,818 | \$79,648 | \$4,389 |
| (\$16,995,217) | (\$1,699,522) | (\$282,121) | (\$1,762,403) | (\$390,890) | (\$3,895,304) | (\$287,219) | (\$2,039,427) | (\$6,291,629) | (\$346,702) |
| Total Impact on MTM Value - 50 bp swing | 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% | Ukiah 2.04% |
| \$2,601,371 | \$260,137 | \$43,183 | \$269,762 | \$59,832 | \$596,234 | \$43,963 | \$312,165 | \$963,028 | \$53,068 |
| (\$34,835) | (\$3,484) | (\$578) | (\$3,612) | (\$801) | (\$7,984) | (\$589) | (\$4,180) | (\$12,896) | (\$711) |
| \$2,566,536 | \$256,654 | \$42,604 | \$266,150 | \$59,030 | \$588,250 | \$43,375 | \$307,984 | \$950,132 | \$52,357 |



