Northern California Power Agency
Summary of Direct Purchase Refunding Proposals


## Northern California Power Agency

Summary of Direct Purchase Refunding Proposals

| Coldman Sachs |  | Morgan U.S. Bank |  |
| :---: | :---: | :---: | :---: |
| Key Contacts |  |  |  |
| Primary Contacts | Chris Higgins | Heather Talbott and Allyson Goetschius | Scott Allison and Bhala Mehendale |
| Lender's Counsel | Jim Burr at Chapman and Cutler | Neil Rust at McGuire Woods | Rick Rosgrove at Chapman and Cutler |
| Proposal Type |  |  |  |
| Description | Private Placement | Direct Purchase | Direct Purchase |
|  |  |  |  |
| Project | Geo | Geo | Geo |
| Tax Status | Tax-Exempt | Tax-Exempt | Tax-Exempt |
| Estimated Amount | Approximately $\$ 62 \mathrm{~mm}$ | \$15,705,000 | Not to exceed \$80 million |
|  |  |  |  |
| Interest Rates as of June 10, 2016 |  |  |  |
| Mechanism | Will float until private placement is priced -- proposes 1Q 2017 timing to minimize staff time and get benefit of fresh disclosure. <br> Private is -10 bps premium to Public. | Current market conditions | Market conditions |
| Rate | 2017: 0.73\% (+15 bps) <br> 2018: 0.88\% (+20 bps) <br> 2019: 102\% (+24 bps) <br> 2020: 117\% (+28 bps) <br> 2021: 1.32\% (+32 bps) <br> 2022: 146\% (+35 bps) <br> 2023: 159\% (+38 bps) <br> 2024: 171\% (+40 bps) | $2.10 \%$ <br> $\mathbf{2 . 2 0 \%}$ with call option on 7/1/2019 | 195\% |
| Estimated Savings (as/if provided) | Aug 16 Public Offering vs. Feb 17 Private Placement. Private is -10 bps premium to Public. |  |  |
| Private Placement | \$1.51mm/ 9.61\% | - | - |
| Public Offering | \$1.47mm/ 9.33\% | - | - |
|  |  |  |  |
| Other Items |  |  |  |
| Optional Redemption | At a minimum, a make-whole call at MMD + 0 bps. Depending on pricing, $G$ S will work to explore added flexibility. | For direct purchase options with call optionality, the bonds are subject to optional prepayment in full or in part on or after the call date. No breakage costs would apply. <br> For Direct Purchase options without call optionality and the Delayed Draw Option, customary breakage costs would apply. | Rates shown do not include prepayment option. Can offer prepayment waiver at per annum cost ( 5 bps for prepayment in up to 3 years and 30 bps for up to 7 years). Given very low interest rate environment NCPA may choose not to purchase a waiver. Nonetheless, if NCPA decides later to prepay which is an option at its discretion it may be subject to breakage costs. |
| -Disclosure | Private Placement Memorandum | No | No |
| Origination Fees | \$2.50/ bond | No | \$25,000 |

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| BAML |  |  |  |  | BBVA Compass | Capital One |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Key Contacts |  |  |  |  |  |  |
| Primary Contacts | Brent Riley and Barbara Miller |  |  |  | William Pope and James Manning | Jeffrey Sharp, Jonathan Lewis, Brenda Barnes |
| Lender's Counsel | Christopher Preston and Bill Hunter at Chapman and Cutler |  |  |  |  | - |
| Proposal Type |  |  |  |  | Private placement of a non-bank qualified, tax-exempt, non-revolving advance term loan under a direct purchase structure. NCPA will be required to enter swap to synthetically fix the interest rate. | Direct Purchase |
| Description | Term Loan | Term Loan | Term Loan | Term Loan |  |  |
| Project | Geo | LEC | Hydro |  | Geo | LeC |
| Tax Status | Tax-Exempt | Tax-Exempt | $\begin{aligned} & \text { Tax-Exempt } \\ & \$ 10,010,000 \end{aligned}$ | $\begin{gathered} \text { Taxable } \\ \$ 72,985,000 \end{gathered}$ | $\begin{aligned} & \text { Tax-Exempt } \\ & \text { Up to } \$ 16 \text { million } \end{aligned}$ |  |
| Estimated Amount | \$17,795,000 | \$41,605,000 |  |  |  | $\$ 36,020,000$ |
| Interest Rates as of June 10, 2016 |  |  |  |  |  |  |
| Mechanism | Option 1: Actual fixed-rate will be determined two business days prior to Closing. Option 2: Index Rate will be prevailing LIBOR Swap Rate (Bloomberg LIBOR Curve 23) determined by WAM plus applicable margin |  |  |  | $65 \%$ of $1 \mathrm{~mL}+1.10 \%$ <br> NCPA will be required to enter swap to synthetically fix the interest rate | - |
| Rate | $1.68 \%$ $1.75 \%$ $1.65 \%$ $2.58 \%$ <br> Option 2: LIBOR Swap Option 2: LIBOR Swap Option 2: LIBOR Swap Option 2: LIBOR Swap <br> Rate @ WAM $(1.22 \%)+$ Rate @ WAM (1.30\%) + Rate @ WAM (1.21\%) + Rate @ WAM (1.21\%) + <br> $0.46 \%$ $0.44 \%$ $0.44 \%$ $1.37 \%$ |  |  |  | $1.40 \%$ <br> Unused Line Fee: $0.50 \%$ of tax-exempt obligation during the three year draw period. | 2.45\% |
| Estimated Savings (as/if provided) -- See next page for savings comparison run between top offers |  |  |  |  |  |  |
| Private Placement | - | - | - | - | - | - |
| Public Offering | - | - | - | - | - | - |
| Other Items |  |  |  |  |  |  |
| Optional Redemption | Pricing provided at non-callable. A 5 -year call option would result in $20-25$ bps increase to provided rates. |  |  |  | May partially or wholly prepay with no prepayment fee. But any prepayment subject to potential swap breakage fee to the applicable amount prepaid. | No call until 6/1/22, then in whole at par on any interest payment date |
| Disclosure | Implicit No |  |  |  | Implicit No20 bps (up to \$32,000) | $\begin{aligned} & \text { Implicit No } \\ & \text { No } \end{aligned}$ |
| Origination Fees |  |  |  |  |  |  |  |  |




| Key Contacts |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Contacts | Adam Woodard and Monica Balters |  |  |  |  |  |  |  |  |
| Lender's Counsel | Nate Odem at Chapman and Cutler |  |  |  |  |  |  |  |  |
| Proposal Type |  |  |  |  |  |  |  |  |  |
| Description | Private Placement | Private Placement | Private Placement | Direct Purchase | Direct Purchase | Cancellable Synthetic Fixed | Cancellable Synthetic Fixed | Cancellable Synthetic Fixed | Forward Synthetic Fixed |
| Project | Geo | LEC | Hydro | Geo | LEC | Geo | LEC | Hydro |  |
| Tax Status | Tax-Exempt | Tax-Exempt | Taxable | Tax-Exempt | Tax-Exempt | Tax-Exempt | Tax-Exempt | Taxable | Taxable |
| Estimated Amount | \$15,705,000 | \$36,020,000 | \$77,130,000 | \$15,705,000 | \$36,020,000 | \$15,705,000 | \$36,020,000 | \$77,130,000 | \$77,130,000 |
| Interest Rates as of June 10, |  |  |  |  |  |  |  |  |  |
| Mechanism | Spread to benchmark | Spread to benchmark | Spread to benchmark | Sum of the Bank Cost of Funds Rate and Spread to Bank Cost of Funds | Sum of the Bank Cost of Funds Rate and Spread to Bank Cost of Funds | Prevailing market rates | Prevailing market rates | Prevailing market rates | Prevailing market rates |
| Rate | 2017: 0.66\% (+8 bps) 2018: 0.76\% (+8 bps) 2019: 0.88\% (+10 bps) 2020: 1.01\% (+12 bps) 2021: 1.15\% (+15 bps) 2022: 1.29\% (+18 bps) 2023: 1.41\% (+20 bps) 2024: 1.56\% (+25 bps) | 2017: $0.68 \%$ (+10 bps) 2018: 0.80\% (+12 bps) 2019: $0.93 \%$ (+15 bps) 2020: 1.09\% (+20 bps) 2021: 1.25\% (+25 bps) 2022: 1.39\% (+28 bps) 2023: 1.51\% (+30 bps) 2024: 1.64\% (+33 bps) 2025: 1.76\% (+35 bps) | 2018: 1.24\% (+47 bps) 2019: 1.39\% (+47 bps) 2020: 1.68\% (+47 bps) 2021: 1.93\% (+72 bps) 2022: 2.20\% (+72 bps) 2023: 2.45\% (+97 bps) 2024: $2.70 \%$ ( +102 bps ) | 1.73\% | 1.75\% | 1.67\% | 1.71\% | 2.16\% | 1.58\% |
| Estimated Savings (aslif prov |  |  |  |  |  |  |  |  |  |
| Private Placement | \$1.28mm / 8.17\% | \$2.5mm / 7.03\% | \$4.89mm / 6.34\% | \$967k/6.16\% | \$2.09mm / 5.81\% | \$1.03mm/6.55\% | \$2.20mm / 6.11\% | \$4.97mm / 6.45\% | \$8.66mm / 11.23\% |
| Public Offering | - | - | - | - | - | - | - | - | - |
| Other Items |  |  |  |  |  |  |  |  |  |
| Optional Redemption | Make Whole |  |  | Make Whole |  | - - |  | - | - |
| Disclosure | Private Placement Memorandum |  |  | No |  | Enter in swap governed by ISDA |  |  |  |
| Origination Fees | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |  |  |  |  |


| Project | Geo |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Tax Status | Tax-Exempt | Tax-Exempt | Tax-Exempt | Tax-Exempt |
| Offer | BAML Direct Purchase | GS Private Placement | WF Private Placement | Public Sale |
| Interest Rate | Offered by BAML | Assumed by GS | Assumed by WF | Assumed by PFM |
| Interest Rate (as of 6/10) | 1.68\% | Scale | Scale | Scale |
| All-in TIC (as of 6/10) | 1.84\% | 1.73\% | 1.64\% | 1.75\% |
| Assumed Delivery Date | 9/1/2016 | 9/1/2016 | 9/1/2016 | 9/1/2016 |
| Par Refunded | \$15,705,000 | \$15,705,000 | \$15,705,000 | \$15,705,000 |
| PV Savings (\$) | \$1,077,552 | \$1,191,063 | \$1,286,439 | \$1,179,741 |
| PV Savings (\%) | 6.86\% | 7.58\% | 8.19\% | 7.51\% |
| Negative Arbitrage (\$) | \$380,883 | \$287,780 | \$226,409 | \$235,321 |
| Escrow Efficiency (\%) | 73.88\% | 80.54\% | 85.03\% | 83.37\% |
| Assumed Issuance Expenses (\$) | \$150,000 | \$200,000 | \$200,000 | \$325,000 |
| Loan Origination / Takedown (\$) | \$0 | \$37,300 | \$75,000 | \$37,338 |
| Disclosure | No | Private Placement Memo | Private Placement Memo | Official Statement |

1 is $\sim \$ 10,000$. Interest rates have moved by an average of $\sim 13$ bps (in maturity range) since June 10, 2016. PV Savings should have improved by $\sim \$ 130,000 / \sim 0.83 \%$

| Project | LEC |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tax Status | Tax-Exempt | Tax-Exempt | Tax-Exempt | Tax-Exempt | Tax-Exempt |
| Offer | BAML Direct Purchase | WF Direct Purchase | GS Private Placement | WF Private Placement | Public Sale |
| Interest Rate | Offered by BAML | Offered by WF | Assumed by GS | Assumed by WF | Assumed by PFM |
| NIC (as of 6/10) | 1.75\% | 1.75\% | Scale | Scale | Scale |
| All-in TIC (as of 6/10) | 1.81\% | 1.84\% | 1.74\% | 1.67\% | 1.67\% |
| Assumed Delivery Date | 9/1/2016 | 9/1/2016 | 9/1/2016 | 9/1/2016 | 9/1/2016 |
| Par Refunded | \$36,020,000 | \$36,020,000 | \$36,020,000 | \$36,020,000 | \$36,020,000 |
| PV Savings (\$) | \$2,045,803 | \$1,970,803 | \$2,230,551 | \$2,414,532 | \$2,415,767 |
| PV Savings (\%) | 5.68\% | 5.47\% | 6.19\% | 6.70\% | 6.71\% |
| Negative Arbitrage (\$) | \$1,078,283 | \$1,078,283 | \$906,519 | \$813,724 | \$740,443 |
| Escrow Efficiency (\%) | 65.48\% | 64.64\% | 71.10\% | 74.79\% | 76.54\% |
| Assumed Issuance Expenses (\$) | \$150,000 | \$150,000 | \$200,000 | \$200,000 | \$325,000 |
| Loan Origination / Takedown (\$) | \$0 | \$75,000 | \$85,475 | \$75,000 | \$86,038 |
| Disclosure | No | No | Private Placement Memo | Private Placement Memo | Official Statement |

PV01 is $\sim \$ 25,000$. Interest rates have moved by an average of $\sim 14$ bps (in maturity range) since June 10, 2016. PV Savings should have improved by $\sim \$ 350,000 / \sim 0.97 \%$

| Project | Hydro |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tax Status | Tax-Exempt / Taxable | Tax-Exempt/ Taxable | Tax-Exempt / Taxable | Tax-Exempt / Taxable | Tax-Exempt / Taxable |
| Offer | BAML Direct Purchase | KeyBank | GS Private Placement | WF Private Placement | Public Sale |
| Interest Rate | Offered by BAML | Offered by KeyBank | Assumed by GS | Assumed by WF | Assumed by PFM |
| NIC (as of 6/10) | 1.65\% / 2.58\% | 1.68\% / 2.59\% | Scale | Scale | Scale |
| All-in TIC (as of 6/10) | 2.50\% | 2.03\% | 2.35\% | 2.16\% | 2.26\% |
| Assumed Delivery Date | 9/1/2016 | 9/1/2016 | 9/1/2016 | 9/1/2016 | 9/1/2016 |
| Par Refunded | \$77,130,000 | \$77,130,000 | \$77,130,000 | \$77,130,000 | \$77,130,000 |
| PV Savings (\$) | \$3,815,199 | \$5,848,585 | \$4,445,758 | \$5,261,421 | \$4,850,953 |
| PV Savings (\%) | 4.95\% | 7.58\% | 5.76\% | 6.82\% | 6.29\% |
| Negative Arbitrage (\$) | \$2,506,547 | \$1,797,868 | \$2,211,974 | \$1,985,320 | \$2,036,617 |
| Escrow Efficiency (\%) | 60.35\% | 76.49\% | 66.78\% | 72.60\% | 70.43\% |
| Assumed Issuance Expenses (\$) | \$150,000 | \$150,000 | \$200,000 | \$200,000 | \$325,000 |
| Loan Origination / Takedown (\$) | \$0 | \$108,407 | \$204,663 | \$75,000 | \$204,838 |
| Disclosure | No | No | Private Placement Memo | Private Placement Memo | Official Statement |

PV01 is $\sim \$ 40,000$. Interest rates have moved by an average of $\sim 15$ bps (in maturity range) since June 10, 2016. PV Savings should have improved by $\sim \$ 600,000 / \sim 0.78 \%$

Interest Rate Movement Since June 10, 2016 (to July 7, 2016)

| AAA MMD Movement |  |  |  |
| :---: | :---: | :---: | :---: |
| Maturity | 6/10/2016 | 7/7/2016 | Delta |
| 1 | 0.58\% | 0.52\% | -0.06\% |
| 2 | 0.68\% | 0.59\% | -0.09\% |
| 3 | 0.78\% | 0.66\% | -0.12\% |
| 4 | 0.89\% | 0.75\% | -0.14\% |
| 5 | 1.00\% | 0.86\% | -0.14\% |
| 6 | 1.11\% | 0.98\% | -0.13\% |
| 7 | 1.21\% | 1.06\% | -0.15\% |
| 8 | 1.31\% | 1.14\% | -0.17\% |
| 9 | 1.41\% | 1.22\% | -0.19\% |
| 10 | 1.52\% | 1.31\% | -0.21\% |
| 11 | 1.63\% | 1.41\% | -0.22\% |
| 12 | 1.68\% | 1.45\% | -0.23\% |
| 13 | 1.74\% | 1.50\% | -0.24\% |
| 14 | 1.80\% | 1.55\% | -0.25\% |
| 15 | 1.86\% | 1.59\% | -0.27\% |
| 16 | 1.91\% | 1.64\% | -0.27\% |
| 17 | 1.96\% | 1.69\% | -0.27\% |
| 18 | 2.00\% | 1.74\% | -0.26\% |
| 19 | 2.04\% | 1.78\% | -0.26\% |
| 20 | 2.07\% | 1.82\% | -0.25\% |
| 21 | 2.10\% | 1.85\% | -0.25\% |
| 22 | 2.13\% | 1.87\% | -0.26\% |
| 23 | 2.15\% | 1.88\% | -0.27\% |
| 24 | 2.16\% | 1.89\% | -0.27\% |
| 25 | 2.17\% | 1.90\% | -0.27\% |
| 26 | 2.18\% | 1.91\% | -0.27\% |
| 27 | 2.19\% | 1.92\% | -0.27\% |
| 28 | 2.20\% | 1.93\% | -0.27\% |
| 29 | 2.21\% | 1.94\% | -0.27\% |
| 30 | 2.22\% | 1.95\% | -0.27\% |


| UST Movement |  |  |  |
| :---: | :---: | :---: | :---: |
| Maturity | 6/10/2016 | 7/7/2016 | Delta |
| 1 | 0.54\% | 0.45\% | -0.09\% |
| 2 | 0.74\% | 0.59\% | -0.15\% |
| 3 | 0.88\% | 0.68\% | -0.20\% |
| 5 | 1.16\% | 0.96\% | -0.20\% |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| 10 | 1.64\% | 1.39\% | -0.25\% |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| 15 | 2.04\% | 1.76\% | -0.28\% |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| 20 | 2.24\% | 1.95\% | -0.29\% |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |
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|  |  |  |  |
|  |  |  |  |
| 30 | 2.45\% | 2.14\% | -0.31\% |

