

POLICIES & PROCEDURES MANUAL

No. 200-100 Owner:

Acctg. & Finance

Effective: 9-1993 Updated 11-2018

SUBJECT:

Investment Policy and Guidelines

APPROVED:

RANDY S. HOWARD, GENERAL MANAGER

TABLE OF CONTENTS

Policy	1
Purpose and Scope	1
Reference	1
Responsibility	1
Prudence, Indemnification and Ethics	2
General Objectives	2
Portfolio Risk Management	3
Authorized Investment Securities	4
Authorized Financial Institutions and Dealers	
Delegation	6
Internal Control	6
Safekeeping and Collateralization	7
Reporting Requirements	7
Investment Operations Guidelines	
Attachments:	

- 1. Glossary of Investment Terms
- 2. Investment Fund Objectives
- 3. Table of Authorized Investments
- 4. Table of Bond Indenture Permitted Investments
- 5. Credit Rating Comparison



No. 200-100	Page 1 of 7		
Owner:	Effective: 9-1993		
Acctg. & Finance	Updated 11-2018		

POLICY

It is the policy of the Agency to secure, protect and manage the funds of Agency and invest surplus funds in a manner which will:

- comply with applicable California state laws and bond indenture provisions;
- ensure safety of the principal;
- provide an appropriate level of liquidity so that money is available when reasonably expected to be required for payment of obligations; and,
- attain a market yield with no undue risks taken to maximize income at the expense of safety, liquidity, or investment quality.

PURPOSE AND SCOPE

The purpose of this policy is to establish general guidelines for the management of cash and investments of the Agency. The policy pertains to all financial assets of the Agency and any other funds under the control of the Treasurer-Controller and concerns the deposit, investment, maintenance, and safekeeping of all such assets.

Proceeds of debt issuance and other indentured funds shall be invested in accordance with the Agency's general investment philosophy as set forth in this policy; however, such monies are to be invested in accordance with permitted investment provisions of their specific bond indentures. See attachment 4.

This Policy does not apply to any pension moneys or deferred compensation funds.

REFERENCE

- California Government Code Section 53600 et seg.
- Joint Powers Agreement, Article II, Section 4.5 (as amended)
- NCPA Resolution No. 12-72, Authorized Officers for Transactions with the State of California Local Agency Investment Fund (LAIF)
- NCPA Resolution No. 83-103, Establishing the position of Treasurer-Controller

RESPONSIBILITY

The Treasurer-Controller is responsible for establishing proper safeguards, controls, and procedures to maintain Agency funds in a lawful, rational, and prudent manner. The Treasurer-Controller is responsible for the development of the overall investment policy as well as for the development and ongoing administration of the various portfolio strategies, tactics, performance monitoring and monthly reporting to the Commission.

The Assistant General Manager/Chief Financial Officer (CFO) is responsible for overseeing the development and implementation of investment policy review and approval of the portfolio investment strategies, and policy compliance.



No. 200-100	Page 2 of 7
Owner:	Effective: 9-1993
Acctg. & Finance	Updated 11-2018

PRUDENCE, PERSONAL RESPONSIBLITY, AND ETHICS

Prudence: Management of Agency's investments is governed by the Prudent Investor Standard as set forth in California Government Code Section 53600.3:

"...all governing bodies of local agencies or persons authorized to make investment decisions on behalf of those local agencies investing public funds pursuant to this chapter are trustees and therefore fiduciaries subject to the prudent investor standard. When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired as authorized by law."

Personal Responsibility: The Treasurer-Controller and other authorized persons responsible for managing Agency funds, acting in accordance with the Investment Policy and exercising due diligence, will be relieved of personal responsibility for an individual security's credit risk or market price changes, provided appropriate action is taken to control adverse developments.

Ethics: The Treasurer-Controller and other authorized persons involved in the investment process (1) will refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions and (2) shall not accept honoraria, gifts or gratuities from any advisor, broker, dealer, banker, or other person with whom the Agency conducts business, which has an aggregate value in excess of \$50.00 in any 12-month period.

GENERAL OBJECTIVES

The overriding objectives of the investment program are to preserve principal, provide sufficient liquidity, and achieve a reasonable rate of return. The specific objectives for the program are ranked in order of importance:

- Safety: Safety of principal is the foremost objective of the investment program.
 Investments will be undertaken in a manner that seeks to ensure the preservation of capital.
- 2. **Liquidity**: The investment portfolio will remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated.
- 3. **Return on Investments**: The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles taking into account the investment risk constraints for safety and liquidity needs.



No. 200-100	Page 3 of 7
Owner:	Effective: 9-1993
Acctg. & Finance	Updated 11-2018

PORTFOLIO RISK MANAGEMENT

Factors that can lead to an unexpected financial loss can be broadly grouped into the following categories; credit risk, market risk, and liquidity risk.

Mitigating credit risk in the portfolio: Credit risk is the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt. Agency will mitigate credit risk by adopting the following strategies:

- 1. Diversify the investment portfolio to mitigate losses due to failure of individual issues or issuers:
- 2. Limit the amount of the total portfolio that may be invested in securities of a particular type and any single issuer. Authorized investment limitations under this policy are shown in Attachment 3; and,
- 3. If securities owned by the Agency are downgraded by at least one Nationally Recognized Statistical Rating Organization (NRSRO) to a level below the quality required by this Investment Policy, it will be the Agency's policy to review and document the credit situation and make a determination as to whether to sell or retain such securities in the portfolio.
 - a. The Treasurer-Controller will use discretion in determining whether to sell or hold the security based on its maturity, the economic outlook for the issuer, and other relevant factors.
 - b. If a decision is made to retain a downgraded security in the portfolio, its presence in the portfolio will be monitored and reported monthly to the governing board.

Mitigating market risk in the portfolio: Market risk, also referred to as interest rate risk, is the risk that the portfolio value will fluctuate due to changes in interest rates. The Agency recognizes that, over time, longer-term portfolios have the potential to achieve higher returns. On the other hand, longer-term portfolios have higher volatility when marked-to-market. The Agency will mitigate interest rate risk by providing adequate liquidity for short-term cash needs, and by making longer-term investments only with funds that are not needed for current cash flow purposes. The Agency, therefore, shall adopt the following strategies to control and mitigate its exposure to market risk:

- 1. The Agency will maintain working capital reserves for budgeted operating expenditures in short-term investments to provide sufficient liquidity for expected disbursements;
- 2. The maximum time from investment to maturity of individual securities in the portfolio will be five years, except as otherwise stated in this policy.

Mitigating liquidity risk in the portfolio: Liquidity risk is the inability to convert a security to cash on a given date prior to maturity. It refers to the inability to sell a security for its cost and therefore it may have to be sold at a loss. The Agency shall employ the following strategies to control and mitigate its exposure to liquidity risk:

- 1. To the extent possible, match investment maturities with anticipated cash demands.
- 2. Since all possible cash demands cannot be anticipated, maintain portfolios largely of securities with active secondary or resale markets.
- 3. The Agency will maintain working capital reserves for budgeted operating expenditures in short-term investments to provide sufficient liquidity for expected disbursements.



No. 200-100	Page 4 of 7
Owner:	Effective: 9-1993
Acctg. & Finance	Updated 11-2018

<u>AUTHORIZED INVESTMENT SECURITIES</u>

All investments will be made in accordance with Sections 53600 *et seq.* of the Government Code of the State of California and as described within this Investment Policy. Authorized investments under this policy are shown in Attachment 3.

AUTHORIZED FINANCIAL INSTITUTIONS AND DEALERS

The Treasurer-Controller shall establish a list of approved brokers, dealers, banks and direct issuers of commercial paper to provide investment services to the Agency. The Agency shall conduct security transactions only with approved institutions and firms.

To be eligible for approval all broker/dealer firms must qualify under SEC Rule 15C3-1 (Uniform Net Capital Rule), must be registered with the Financial Industry Regulatory Authority (FINRA) and must be licensed to do business in the State of California and institutions shall have one or more of the following attributes:

- be recognized as a primary government dealer as designated by the Federal Reserve Bank;
- be a regional broker/dealer headquartered in the State of California; or
- be a national or state chartered bank which is a member of the FDIC; or
- be a direct issuer of securities eligible for purchase by the Agency.

Deposits will be made only in qualified public depositories within the state of California as established by State law. Deposits will be insured by the Federal Deposit Insurance Corporation, or, to the extent the amount exceeds the insured maximum, will be collateralized in accordance with State law.

A pool of qualified financial institutions and dealers will be maintained by the Treasurer-Controller using criteria based upon capitalization, credit worthiness, experience, reference checks and services offered. Selection of financial institutions and broker/dealers authorized to engage in transactions with the Agency will be at the sole discretion of the Agency.

INTERNAL CONTROL AND ACCOUNTING

Authority to manage Agency's investment program is derived from the California Government Code Sections 53600 *et seq.* Management responsibility for the investment program is delegated to the Treasurer-Controller by Agency Commission Resolution No. 83-103. Pursuant to Government Code section 53607 such delegation may be granted for a period of one-year and must be renewed annually. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Treasurer-Controller or his/her designee.

The Treasurer-Controller shall establish and maintain a system of internal controls, designed to: ensure adherence to this investment policy, the prevention and detection of errors and fraud, the accuracy and completeness of accounting records and the timely preparation of reliable financial information.



No. 200-100	Page 5 of 7			
Owner:	Effective: 9-1993			
Acctg. & Finance	Updated 11-2018			

The Agency maintains its records on the basis of Plant/Program account groups, each of which may include one or more investment funds. All investment transactions shall be recorded in the various funds of the Agency in accordance with Generally Accepted Accounting Principles as promulgated by the Government Accounting Standards Board.

SAFEKEEPING AND COLLATERALIZATION

All security transactions, including collateral for repurchase agreements, entered into by the Agency shall be conducted on a delivery-versus-payment (DVP) basis. Securities will be held in the name of the Agency by a third party custodian designated by the Treasurer-Controller and evidenced by trade confirmations and safekeeping holdings report.

Collateralization will be required on two types of investments: certificates of deposit and repurchase agreements. In order to anticipate market changes and provide a level of security for all funds, a minimum collateralization level measured at specified times is required.

REPORTING REQUIREMENTS

Monthly Reports: A monthly report will be provided to the Commission by the Treasurer-Controller. The report shall state compliance of the investment portfolio to the investment policy and a statement that the Agency has adequate cash flow and investment maturities to meet next month's cash requirements and such other information as may be required by State law.

The report will disclose, at a minimum, the following information:

- An asset listing showing par value, cost adjusted for amortization of premiums and accretion of discounts and market value of each security, type of investment, issuer, and interest rate:
- 2. The Treasurer-Controller's report shall also provide:
 - a. an analysis of investment maturities;
 - b. a summary of cash and investment activity; and,
 - c. an analysis of interest rates/yields with a comparison to benchmark interest rates.

Annually: The Treasurer-Controller shall annually submit to the Commission a statement of Investment Policy and any recommended changes to the policy.

INVESTMENT OPERATIONS GUIDELINES

The following general operating guidelines shall be used in performing all investment functions:

- All investments will be made in the name of the Northern California Power Agency.
- All investments will be made in compliance with the NCPA Investment Fund Objectives (Attachment 2) and the NCPA Table of Authorized Investments (Attachment 3) unless otherwise required by bond indenture.
- Investments or collateral for all outside trusteed accounts must be delivered to the trustee.
- Investments or collateral for all accounts held by NCPA will be delivered to and held in the safekeeping of an authorized financial institution.
- All investment transactions will be recorded in the accounts of the Agency in accordance with Generally Accepted Accounting Principles as promulgated by the Government Accounting Standards Board.



No. 200-100	Page 6 of 7
Owner:	Effective: 9-1993
Acctg. & Finance	Updated 11-2018

- All accrued interest on purchased securities will be charged to the appropriate interest income account.
- Funds deposited in banks or savings and loan associations must be held under a written contract between the Agency and the institution, which requires collateralization as prescribed by law and/or this investment policy.
- Whenever practical Agency cash is to be consolidated and invested on a pooled concept basis. Interest earnings are allocated monthly according to monthly weighted average balance for each fund.
- Unless otherwise restricted, all holdings will be of sufficient size and held in issues which are actively traded to facilitate transactions at a minimum cost and accurate market valuation.
- Passive management portfolio strategies are preferred for all operating projects or other Agency programs, unless otherwise prohibited or restricted.
- When practicable, competitive bidding will be utilized for all investment and reinvestment activities not involving escrowed or other funds covered by a separate contract or agreement.

Prohibited investment vehicles and practices:

- 1. Notwithstanding that any such investment is permitted under State Law, any investment not specifically described herein is prohibited, including, but not limited to derivatives, futures and options.
- 2. In accordance with California Government Code Section 53601.6, investment in inverse floaters, range notes, or mortgage derived interest-only strips is prohibited.
- 3. Investment in any security that could result in a zero interest accrual if held to maturity is prohibited.
- 4. Trading securities for the sole purpose of speculating, whether on the future direction of interest rates or otherwise, is prohibited.
- 5. Purchasing or selling securities on margin is prohibited.
- 6. The use of reverse repurchase agreements, securities lending or any other form of borrowing or leverage is prohibited.
- 7. The purchase of foreign currency denominated securities is prohibited.

ATTACHMENTS

Attachment 1 - Glossary

Attachment 2 - Investment Fund Objectives

Attachment 3 - Table of Authorized Investments

Attachment 4 - Table of Bond Indenture Permitted Investments

Attachment 5 – Credit Rating Comparison



No. 200-100 Page 7 of 7			
Owner:	Effective: 9-1993		
Acctg. & Finance	Updated 11-2018		

VERSION HISTORY

No.	Explanation	Date	Author
7	Annual review, no changes	11/18	MH/SA
6	Minor language clean-up; updates to the Permitted Investments; and changes to the Investment Fund Objectives	8/17	MH
5	Revised a resolution reference Updated maximum investment permitted by LAIF Added Authorized Financial Institution	11/16	SA
4	Annual review, no changes	11/15	SA
3	Annual review, no changes	11/14	KWW
2	Combined prior policies 200-97 and 200-98; updated to include more information on allowable investments, delegations, authorized financial institutions, and operations practices, Includes expanded attachments and glossary.	11/13	KWW
1	Updated	9/95	DBL
0	Original Policy	9/93	DBL

GLOSSARY OF INVESTMENT TERMS

Agencies - Shorthand market terminology for any obligation issued by a government sponsored enterprise (GSE), or a federally related institution. Most obligations of GSEs **are not guaranteed** by the full faith and credit of the US government. Examples are:

- FFCB. The Federal Farm Credit Bank System provides credit and liquidity in the agricultural industry. FFCB issues discount notes and bonds.
- FHLB. The Federal Home Loan Bank provides credit and liquidity in the housing market. FHLB issues discount notes and bonds.
- FHLMC. Like FHLB, the Federal Home Loan Mortgage Corporation provides credit and liquidity in the housing market. FHLMC, also called "Freddie Mac" issues discount notes, bonds and mortgage pass-through securities.
- FNMA. Like FHLB and Freddie Mac, the Federal National Mortgage Association was established to provide credit and liquidity in the housing market. FNMA, also known as "Fannie Mae," issues discount notes, bonds and mortgage pass- through securities.

Certain GSE obligations **are guaranteed** by the full faith and credit of the US government. An example is:

• GNMA. The Government National Mortgage Association, known as "Ginnie Mae," issues mortgage pass-through securities.

Callable - A callable security gives the issuer the option to call it from the investor prior to its maturity. The main cause of a call is a decline in interest rates. If interest rates decline since an issuer issues securities, it will likely call its current securities and reissue them at a lower rate of interest. Callable securities have reinvestment risk as the investor may receive its principal back when interest rates are lower than when the investment was initially made.

Certificate of Deposit (CD) - A time deposit with a specific maturity evidenced by a certificate. Large denomination CDs may be marketable.

Collateral - Securities or cash pledged by a borrower to secure repayment of a loan or repurchase agreement. Also, securities pledged by a financial institution to secure deposits of public monies.

Commercial paper - Short-term unsecured debt of corporations.

Coupon - The rate of return at which interest is paid on a bond.

Current yield - The annual income from an investment divided by the current market value. Since the mathematical calculation relies on the current market value rather than the investor's cost, current yield is unrelated to the actual return the investor will earn if the security is held to maturity.

Dealer - A dealer acts as a principal in security transactions, selling securities from and buying securities for his own position

Delivery vs. payment (DVP) - A securities industry procedure whereby payment for a security must be made at the time the security is delivered to the purchaser's agent.

Demand Deposit – Sometimes referred to as a sight or on call deposit, can be withdrawn at any time (on demand) without notice or penalty; e.g., deposits into checking or savings accounts.

Derivative - Any security that has principal and/or interest payments which are subject to uncertainty (but not for reasons of default or credit risk) as to timing and/or amount, or any security which represents a component of another security which has been separated from other components ("Stripped" coupons and principal). A derivative is also defined as a financial

instrument the value of which is totally or partially derived from the value of another instrument, interest rate or index.

Discount - The difference between the par value of a bond and the cost of the bond, when the cost is below par. Some short-term securities, such as T-bills and banker's acceptances, are known as **discount securities**. They sell at a discount from par, and return the par value to the investor at maturity without additional interest. Other securities, which have fixed coupons, trade at a discount when the coupon rate is lower than the current market rate for securities of that maturity and/or quality.

Diversification - Dividing investment funds among a variety of investments to avoid excessive exposure to any one source of risk.

Duration - The weighted average time to maturity of a bond where the weights are the present values of the future cash flows. Duration measures the price sensitivity of a bond to changes in interest rates. (See modified duration).

Federal funds rate - The rate of interest charged by banks for short-term loans to other banks. The Federal Reserve Bank through open-market operations establishes it.

Financial Industry Regulatory Authority (FINRA) - A self-regulatory organization for brokerage firms doing business in the United States. FINRA operates under the supervision of the SEC. The organization's objectives are to protect investors and ensure market integrity. Liquidity - refers to the requirement that some portion of cash assets be invested in securities readily convertible into cash without loss of capital.

Make whole call - A type of call provision on a bond allowing the issuer to pay off remaining debt early. The issuer has to make a lump sum payment derived from a formula based on the net present value (NPV) of future coupon payments that will not be paid because of the call. Investors will be compensated, or "made whole."

Market value - The price at which a security can be traded.

Mark to market - The process of posting current market values for securities in a portfolio. **Maturity -** The final date upon which the principal of a security becomes due and payable. **Money market -** The market in which short term debt instruments (Tbills, discount notes, commercial paper and banker's acceptances) are issued and traded.

Nationally Recognized Statistical Rating Organization (NSRSO) - Is a credit rating agency (CRA) that issues credit ratings that the U.S. Securities and Exchange Commission (SEC) permits other financial firms to use for certain regulatory purposes. The largest NSROs are Moody's, Standard and Poor's and Fitch.

Portfolio Re-Optimization - Refers to the process wherein investment broker(s) re-evaluate a given dedicated investment portfolio using sophisticated computer programs based on the updated program or project estimated cash flows. This is usually done to increase or protect the portfolio's overall rate of return as a result of changing liability amounts or dates, changing market or credit risk condition, or a change in investment policy restrictions, etc.

Portfolio Strategy – Determining investment practices to best achieve the investors' primary goals. Strategies may be either passive or active. Passive strategies include: <u>buy and hold</u>, which includes the laddering of maturities; and <u>bullet structure</u>, which is designed to invest to a particular date or portfolio horizon; and benchmarking, which is done to mirror a particular segment of the market. Active strategies employ additional risk to take advantage of conditions in the fixed income markets that change as economic and financial conditions change.

Premium - The difference between the par value of a bond and the cost of the bond, when the cost is above par.

Primary Dealer - a firm that buys government securities directly from a government, with the intention of reselling them to others, thus acting as a market maker of government securities. The government may regulate the behavior and numbers of its primary dealers and impose conditions of entry.

Repurchase agreement (RP, Repo) - Short term purchases of securities with a simultaneous agreement to sell the securities back at a higher price. From the seller's point of view, the same transaction is a **reverse repurchase agreement**.

Risk - refers to the degree of probability of incurring a monetary loss as a result of investing in a particular security. Three general kinds of investment risks are:

- Credit Risk risk that an issuer of a security cannot meet its obligations.
- Market Risk risk from fluctuations in the market prices for individual securities over a period of time.
- Liquidity Risk- risk of an inability to sell a security at its fair market value.

Safety - refers to the varying degrees and types of risks associated with different types of investment securities and individual issues. Safety is a matter of degree, not an absolute. **Safekeeping** - A service to bank customers whereby securities are held by the bank (as custodian) in the customer's name.

Total rate of return - A measure of a portfolio's performance over time. It is the internal rate of return, which equates the beginning value of the portfolio with the ending value; it includes interest earnings, realized and unrealized gains, and losses in the portfolio.

U.S. Treasury obligations - Securities issued by the U.S. Treasury and backed by the full faith and credit of the United States. Treasuries are considered to have no credit risk, and are the benchmark for interest rates on all other securities in the US and overseas. The Treasury issues both discounted securities and fixed coupon notes and bonds.

Treasury bills - All securities issued with initial maturities of one year or less are issued as discounted instruments, and are called Treasury bills. The Treasury currently issues three- and six-month T-bills at regular weekly auctions. It also issues "cash management" bills as needed to smooth out cash flows.

Treasury notes - All securities issued with initial maturities of two to ten years are called Treasury notes, and pay interest semi-annually.

Treasury bonds - All securities issued with initial maturities greater than ten years are called Treasury bonds. Like Treasury notes, they pay interest semi-annually.

Uniform Net Capital Rule - An SEC rule that requires broker-dealers to maintain sufficient liquidity to protect securities customers, counterparties, and creditors. Broker-dealers must maintain net capital (net worth adjusted by certain deductions for illiquid assets and reserves against possible market losses on securities positions) such that the liabilities incurred by the broker-dealer (aggregate indebtedness) do not exceed certain specified levels.

Volatility - The rate at which security prices change with changes in general economic conditions or the general level of interest rates.

Yield to Maturity - The annualized internal rate of return on an investment which equates the expected cash flows from the investment to its cost.

INVESTMENT FUND OBJECTIVES

	Primary Maximum Investment Term of		
Fund Type	Objective	Investment 1	
Bond Financed Project Funds: 2			
Construction Fund (Geo)	С	1 year	
Construction Revolving Acct (LEC)	Α	90 days	
Debt Service Fund	С	1 year	
Debt Service Reserve	B, D	15 years	
Reserve Fund	B, C, D	5 years	
Rebate Fund	С	5 years	
O&M Reserve (LEC)	A, B, D	5 years	
Revenue Fund	A, B, C	1 year	
Additional Operating Funds:			
Operating Account	A, C	5 years	
General Operating Reserve	A, B, C	5 years	
SCPA Balancing Account	A, B	5 years	
Capital Development Account (Hydro)	A, C	5 years	
Decommissioning Account (Geo)	C, D	10 years	

Notes:

- A. Provide liquidity
- B. Provide reserves against uncertain liabilities
- C. Match prescribed cash flow
- D. Maximize long-term return on investment
- Investments shall mature not later than such times as shall be necessary to provide monies when reasonably expected to be needed for payments to be made from such fund.
- Proceeds of debt issuance and other funds held under a bond indenture shall be invested in accordance with the Agency's general investment philosophy as set forth in this policy; however, such moneys are to be invested in accordance with permitted investment provisions of their specific bond indentures.

TABLE OF PERMITTED INVESTMENTS

Type of Investment	Maximum % of Portfolio	Rating Requirement	Maximum Maturity	Other Restrictions
US Treasury Securities	100%	n/a		
Federal Agencies	100%	n/a		
Local Agency Investment Fund (LAIF)	Up to maximum permitted by LAIF, currently \$65,000,000	n/a	n/a	n/a
Medium-term Corporate Notes	30%	By a NRSRO; A or its equivalent or better	5 years	
California Asset Management Program (CAMP)	100%	n/a	n/a	n/a
Time Deposits (Non- negotiable CDs)	20%	By a NRSRO; Long- term of A or short- term of A-1 or better	5 years	No more than 5% per issuer
Negotiable CDs	30%	By a NRSRO; Long- term of A or short- term of A-1 or better	5 years	No more than 5% per issuer
Bankers Acceptances	40%	By a NRSRO; Long- term of A or short- term of A-1 or better	180 days	No more than 5% per issuer
Commercial Paper	40%	By a NRSRO; Long- term of A or short- term of A-1 or better	270 days	Assets >\$500MM No more than 5% per issuer
Money Market Funds	20%	By a NRSRO; Highest ranking or highest letter/numerical rating		Must be registered with SEC; Assets > \$500MM; No more than 5% per fund
Repurchase Agreements	100%		1 year	Collateral of at least 102% of market value required
Municipal Bonds	10%	By a NRSRO; Highest ranking or highest letter/numerical rating		Fully secured as to principal and interest by an escrow consisting of cash or direct obligations of the US government

TABLE OF BOND INDENTURE PERMITTED INVESTMENTS

Project	Geo/Hydro ²			Cap Facilities/LEC ³		
Securities ¹	Debt Service Acct.	Debt Service Reserve Acct.	All Other	Debt Service Acct.	Debt Service Reserve Acct.	All Other
Direct obligations of the United Stated of America.	х	Х	Х	х	Х	Х
Bonds issued or guaranteed by federal Agencies, which are backed by the full faith and credit of the United States of America.	х	х	х	x	х	х
Bonds issued or guaranteed by federal Agencies, which are not backed by the full faith and credit of the United States of America.	х	х	х	х	х	х
New Housing Authority bonds or notes of public agencies or municipalities secured by a pledge of annual contributions to be paid by the United States or agency thereof.	х	х	х			х
Direct and general obligations of the State of California or political subdivision rated A or higher.	х		х			
General obligation of any state rated A2 or higher.						Х
Time deposits, FDIC insured or collateralized.			Х			Х
Repurchase agreements, insured or collateralized.			Х			х
Money Market Funds rated AAAm G or AAAM or better.						х
Commercial Paper rated P-1 or A1+.						Х
UD dollar denominated deposit accounts, federal funds or bankers' acceptances with ratings of A-1, A-1+ or P-1.						х
Prefunded municipal obligations rated highest rating category by S&P or Moody's, based on an irrevocable escrow.						х
Investment Agreements & GICS, supported by opinion of counsel.				х	х	х
California LAIF.						Х
Shares in a California common law trust which invests exclusively in investment permitted under CA Code section 56635.						х
Any other form of investment.						Х

¹ Investment types are detailed in each project bond Indenture of Trust. Generally, investment securities include those listed above, if and to the extent the same are legal for investment of Agency funds. The securities, as listed above, are summarized and may have additional limitations as to specific issuers, ratings, term of investment, or other requirements.

² The Geothermal Project bond indenture dated November 1, 1983 and the Hydroelectric Project bond indenture dated March 1, 1985 have the same definition for investment securities.

³ The Capital Facilities Project bond indenture dated January 1, 2010 and the Lodi Energy Center Issues One and Two, dated June 1, 2010 have the same definition for investment securities.

CREDIT RATINGS COMPARISON

			Standard			
Description	Moody's		& Poors		Fitch	
	Long-	Short-	Long-	Short-	Long-	Short-
	term	term	term	term	term	term
Prime:						
Extremely Strong	Aaa		AAA		AAA	
High Grade:						
Very Strong	Aa1		AA+	A-1+	AA+	F1+
	Aa2	P-1	AA		AA	
	Aa3		AA-		AA-	
Upper Medium						
Grade:						
Strong	A1		A+	A-1	A+	F1
	A2		Α		Α	
	A3		A-		A-	
Lower Medium						
Grade:		P-2		A-2		F2
Adequate	Baa1		BBB+		BBB+	
	Baa2	P-3	BBB	A-3	BBB	F3
	Baa3		BBB-		BBB-	
Non-investment						
Grade speculative:						
Vulnerable	Ba1		BB+		BB+	
		Not				
	Ba2	Prime	BB	В	BB	В
	Ba2		BB-		BB-	

Credit ratings are opinions about credit risk published by a rating agency. They express opinions about the ability and willingness of an issuer, such as a corporation, state or city government, to meet its financial obligations in accordance with the terms of those obligations. Credit ratings are also opinions about the credit quality of an issue, such as a bond or other debt obligation, and the relative likelihood that it may default.

The Agency shall not invest in any security rated less than single A.