

Memorandum

To: ISO Board of Governors
From: Ryan Seghesio, Chief Financial Officer and Treasurer
Date: February 9, 2012
Re: 2011 Annual Investment Report

This memorandum does not require Board action.

EXECUTIVE SUMMARY

The investment policy of the California Independent System Operator Corporation requires the Chief Financial Officer to submit an annual investment report to the ISO Board of Governors. This report provides the Board with unaudited information about the 2011 investment performance and year-end unrestricted and restricted fund balances related to operations and debt issuance. In general, the funds we invest are ISO corporate funds from bond offerings or general business operations and market related funds associated with generation interconnection deposits, collateral and other funds held for market accounts. Because of the nature of the funds, we pursue a very conservative investment approach focused on principal preservation and liquidity.

- As of December 31, 2011, all portfolios were in compliance with the ISO's Investment Policy¹.
- The ISO achieved a total return of 0.92% on the unrestricted cash and investment balance during 2011, which was \$149.7 million at the end of the year. Total return information on other portfolios will be described in the report.
- Interest rates continued to decline in 2011 in a year that saw a stagnant US economy, concerns over European sovereign defaults, and the downgrade of US Treasury credit ratings impact the bond markets. The following table shows the level of US Treasury interest rates at end of the previous two years:

¹ The Board approved revisions to the Investment Policy at its March 25-26, 2010 meeting:
<http://www.caiso.com/Documents/100325DecisiononInvestmentPolicy-Attachment1-ProposedPolicy.pdf>

US Treasury Bond	Yield as of 12/31/10	Yield as of 12/31/11
2 – year	0.61%	0.25%
3 – year	1.02%	0.36%
5 – year	2.01%	0.83%
10 – year	3.30%	1.89%

While the ISO is able to invest certain reserves in fixed income securities with slightly longer maturities (within five years), the majority of the assets must be maintained in highly liquid money market type securities (maturities within one year). The impact of declining rates is therefore felt immediately in lower portfolio yields.

A brief summary of key portfolio characteristics follows and all data is summarized in the tables of Attachment 1.

DISCUSSION AND ANALYSIS

Unrestricted portfolio

The market value of the ISO's unrestricted portfolio as of December 31, 2011 was \$149.7 million. This portfolio contains the funds received by the ISO related to the grid management charge collections for the annual revenue requirement (operations and maintenance budget, debt service and debt service reserve, capital expenditure reserve, and operating reserve). The ISO always ends the year with its largest unrestricted cash and investment balance due to the collections through the grid management charge of large expenses that are disbursed in the first two months of the next year. This is primarily the debt service payment due on the outstanding bonds.

The portfolio's total return for 2011 was 0.92% and, as of December 31, had a duration of 0.7 years. Duration is one measure of risk to a fixed income portfolio and is highly correlated to weighted average days to maturity. Essentially, duration indicates the approximate percentage price movement of the portfolio given a 100 basis point (1%) move in interest rates.

In 2011, the ISO constructed a benchmark portfolio in a style similar to the ISO's unrestricted portfolio. This provides a useful benchmark for Management to assess the performance of the ISO's investment strategies. For comparison, the

benchmark index returned 1.56% during 2011. There are several reasons why the benchmark was able to outperform the ISO's portfolio including:

- Longer duration: The benchmark averaged a duration of 1.4 years during the year versus the ISO's average of 1.0 year.
- Treasury and agency exposure: The benchmark was more exposed to US treasuries and government agency debt which saw a large rally in the summer during the height of European sovereign fears.
- Less money market exposure: The benchmark contains a 50% weighting in the money market sector, however the ISO held a larger percentage in the fourth quarter as liquidity was increased to fund the Q1 expenses mentioned above.

It is common in the investment industry to remove the variable effects of operating cash flow from the performance comparison. While Management recommends maintaining the overall view with the effects of cash, the ISO's portfolio return versus the benchmark was reviewed with all effects of the money market sector removed from both sides. This comparison was closer, as the ISO portfolio returned 2.31% versus the benchmark return of 2.86%.

Bond proceeds

The ISO manages two pools of bond proceeds: the 2008 bonds (primarily for the implementation of the new market and refunding of earlier bond issues) and the 2009 bonds (primarily for the construction of the Iron Point site and other capital expenditures). The investment of bond proceeds is primarily restricted to US treasury and government agency securities and the yield that the ISO can earn is restricted by IRS arbitrage rules.

As of December 31, 2011, the market value of the 2008 bond proceeds was \$20 million, all of which is related to the reserve fund that must be held until final maturity. The total return on investments was 3.50% and the duration of the portfolio was 2.0 years.

The 2009 bond proceeds had a market value of \$48.6 million (\$15 million related to the reserve fund). The total return on investments was 0.86% and the duration of the portfolio was 2.0 years.

Large and small generation interconnection project related funds

The ISO maintains a pool of funds related to generation interconnection projects. As of December 31, 2011, the market value of these funds was \$100.9 million. The

funds are currently invested in money market funds and therefore, have no duration risk. The total return on these funds was 0.12% in 2011.

Market collateral funds

The ISO manages restricted funds for market participants, which consist of amounts held to be remitted to market participants or others on their behalf. The majority of these funds are the required collateral deposits that the ISO collects as part of its credit policy to reduce the impact of defaults. As of December 31, 2011, the market value of the collateral was \$173.8 million. Due to their liquid nature, these funds are invested in money market funds and therefore, have no duration risk. The average return on these funds was 0.12% in 2011.

Retiree Medical Plan VEBA Trust

The ISO sponsors the California ISO Retiree Medical Plan, a defined benefit plan, to provide post-employment health care benefits to eligible employees who retire from the ISO. A trust was established for the purposes of funding the plan and all assets of the trust are to be used for the exclusive benefit of the participants and beneficiaries of the plan. As of December 31, 2011, the market value of the trust was \$5.3 million. The total return on investments was 4.93% and the duration of the portfolio was 3.6 years.

Similar to the unrestricted portfolio, a customized benchmark was created in 2011 to compare the investment performance of these assets. The ISOs performance (4.93%) was very comparable to the benchmark's return of 5.06%. The slight difference resulting from the ISO averaging a 2.9 year duration versus the benchmark's 3.6 year duration.

Attachment 1 to this document contains various displays of the portfolio characteristics discussed above. A detailed listing of investment holdings can be found in Attachment 2.