UTILITY CASH RESERVE POLICY FOR ELECTRIC

Purpose

To help ensure financial stability, timely completion of capital improvements and enable the utility to meet requirements for large unexpected expenditures, a targeted cash reserve policy should be established. The cash reserve policy establishes a target as well as a bandwidth amount of cash the utility should keep in reserve to address the operational and financial risks of the utility. Actual cash reserves may vary substantially above the minimum and is dependent on the life cycle of assets, future capital plan, rate setting polices, and debt policies.

Funds available for the Cash reserve target shall not include funds that are legally required for debt service or funds available but designated for other purposes. Those designations include but are not limited to purposes such as collateral posting requirements, customer deposits and advance payments as well as reserves established through power purchase contracts.

Methodology

The methodology outlined in this policy is based on certain assumptions related to:

- Revenue Risk
- Expense Risk
- Working Capital
- Capital Reserve

After the reserve minimum is determined, management should consider the target "in total" and not each individual category.

Calculation and Risk Factors Used

Revenue Risk

General Sales Decrease Economic Recession

Purpose: Cover fixed costs due to large scale economic shock similar to the Great Recession of 2008-2012. The fixed costs represent the total amount of operating expenses historically assumed or experienced to be fixed and add debt service, the necessary 10% coverage of debt service as well as the PILOT to the City.

• The cash reserve policy will include 6.0% of fixed costs over a 12-month period.

Loss of Large (Top12) Customer

Purpose: Cover fixed costs due to loss of one of the Top 12 Customers. Can also represent loss of load due to distributed generation or renewable mandate

• The cash reserve policy will include 2.0% of fixed costs over a 12-month period.

Off System Sales

Purpose: Address risk of loss in the "profit" of off-system sales

• The cash reserve policy will include up to 10% of adjusted margin for power marketing revenues.

Interest Income

Purpose: Address risk of loss of interest income on invested cash.

• The cash reserve policy will include up to 100 basis points (1%) of interest income from short-term investments over a 12-month period.

Expense Risk

Unplanned Outage – Market Exposure

Purpose: Address market risk in Nebraska City Unit 2 has an unplanned outage

• The cash reserve policy will include an assumed outage of 90 days at a capacity factor of 90% and an energy shortfall that IPL can hedge by 50%. The market price of power is assumed to be weekday peak

Planned Outage – Market Exposure

Purpose: Address market risk in Nebraska City Unit 2 has planned outage

• The cash reserve policy will include an assumed outage of 30 days at a capacity factor of 90% and an energy shortfall that IPL can hedge by 50%. The market price of power is assumed to be weekday peak

Fuel (Natural Gas) Exposure

Purpose: Address risk for natural gas purchases

• The cash reserve policy will include assumption that IPL annually needs 1.5 million MMBTu of natural gas and the market price is higher than the budgeted amount by \$1.74 per MMBtu (representing the historical standard deviation in the natural gas market)

Power Purchases and Capacity Expense

Purpose: Address market risk for power and capacity purchases

• The cash reserve policy will include an assumption that IPL needs 1.7 million MWhs annually, that 50% of this need is hedged with long term agreements and the price for the remaining needs is at the "Weekday Off Peak" rate.

Renewable Energy Expense

Purpose: Address risk that wind and solar resources have higher capacity factors

• The cash reserve policy will include an assumption of an assumed wind energy capacity factor of 40% at \$20 per MWh cost differential for 12-months

Working Capital

Purpose: Represents a level of cash on hand to address the billing cycle (up to 60 days to convert MWhs delivered to an account receivable to cash) and uncertainty

• The cash reserve policy will include up to an assumption of 90 days of working capital

Capital Reserve

Purpose: Represents a level of cash on hand to allow for the flexible execution of both routine an unexpected capital projects

• The cash reserve policy will include up to the average annual deprecation levels for previous six years

Targeted Cash Reserve Calculation

The targeted cash reserve calculation considers the risk "in total" and not each individual category.

If certain events occur that results in cash reserves falling below the targeted cash reserve levels, Manager should make recommendations to the City Council to restore cash reserves to the targeted levels over the subsequent three years. These actions may include a number of options:

- rate adjustments
- cost reductions
- issuance of bonds to fund capital improvement programs rather than the use of "PayGo" funds on hand
- modification of the assumptions used to determine the cash reserve levels

It is important to emphasize this is a recommended targeted cash reserve. Actual cash reserves may vary substantially above the target and is dependent of the life cycle of assets, future capital plan, rate setting policies, and debt policies. The cash reserve calculation should be updated annually as part of the budget process.