To: Laura Briefer, Director of Public Utilities
Salt Lake City Department of Public Utilities
From: Rick Giardina, Executive Vice President
Todd Cristiano, Manager
Date: July 31, 2018
Re: County Water Rate Differential

Rate Differential Philosophy

Local government water and wastewater utility service providers often apply a differential or multiplier on user rates to customers served outside their jurisdictional boundaries (outside city rates). This is a customary practice in the rate-setting process and is supported by leading industry organizations such as the American Water Works Association and the Water Environment Federation. For many states, including Utah, state statutes give utilities the legislative authority to set rates including rates for customers outside the jurisdictional boundaries. In addition, states such as Wyoming, Wisconsin, and Florida have statutes defining the criteria for establishing outside city rate differentials.

The primary difference between customers within a utility's jurisdictional boundary (inside city) and outside city is a matter of ownership. Inside city customers are considered owners and outside city customers are non-owners. Non-owners are not responsible for operating the system to regulatory standards, the repayment of debt, or payment of property taxes benefiting the utility. The capital investment and operation and maintenance expenses to serve outside city customers is often greater than the cost to serve city customers, e.g., similar investment but fewer customers per line mile. Finally, non-owners do not have legal standing in the governance of the utility. When a utility agrees to serve outside city customers, they assume several risks. In exchange for those risks, non-owners are required to pay a return on investment on the assets funded by owners to serve non-owners. The return applied to non-owners' rates is typically stated as a differential. Thus, the outside city rates are the product of the inside city rates multiplied by the differential.

For the Salt Lake City Department of Public Utilities (Department), the risk of serving outside city (County) customers includes the legal responsibility for all debt repayments, all insurance risk, and the payment of property taxes by City customers for facilities that benefit all customers. City customers pay property tax to the Metropolitan Water District of Salt Lake and Sandy (MWDSLS). The MWDSLS was formed in 1935 with the goal of firming water supply and building infrastructure for the benefit of its member cities.

Although the City takes on risk to serve County customers, there are mutual benefits for both the City and County. These benefits include:

- Economies of scale of operating one integrated system over two smaller systems. Operating larger facilities typically results in lower costs.
- Avoiding or eliminating redundant facilities to provide the same service as one larger facility. This results in operational and capital savings over time.

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- Consolidated approach to water resource management to ensure efficient use of supply reservoirs, aqueducts, and other facilities to benefit both the City and County customers.

The Department has assessed a differential since the late 1970's to compensate City customers for these risks and investments. This County differential started at 1.5 times (x) City rates and has been as high as 1.63x. The 2018 water rate study affirmed the current County differential of 1.35x City rates.

Utility Basis Rate Setting Methodology

The Department uses the "utility basis" of rate setting to determine the County rate differential. The American Water Works Association, *M1 Manual - Principles of Rates, Fees, and Charges, 7th edition* states:

"…when that utility serves outside of its legal boundaries to nonowner customers, it is often appropriate to develop (or restate) the revenue requirements for the outside retail or wholesale customers on a utility basis, which provides for an appropriate (fair) return to the owners based on the value of the assets devoted to serving the nonowner customer groups. When properly established, the rate of return under the utility-basis approach is considered fair to both the owner (inside) customers and the nonowner (outside) customers. It compensates the owners for the risks incurred in providing services outside its jurisdictional boundaries, while at the same time protecting outside customers from excessive rates and fees."

The utility basis revenue requirement determines the cost to provide service to County customers and includes a return on investment to City customers for undertaking the risk to serve County customers. The formula used to determine utility basis is as follows:

Revenue Requirement = O + Depr + *rRB where:**

O = Operating expenses
Depr = Depreciation expense
r = Rate of return on investment
RB = Rate Base where (V-D-C+WC):
  V = Gross value of plant in service to serve County customers
  D = Accumulated depreciation of plant in service
  C = Contributions in aid of construction
  WC = Working capital

Operating expenses recover the recurring costs to operate and maintain the system on a continuous basis. Depreciation expense represents the loss in value of an asset to due to age and/or obsolescence. This is a proxy for the cost to reinvest in system facilities. In a similar fashion, the return on investment on plant in service is used to reinvest in system facilities. However, a portion of the return is used to compensate City customers for the risk of serving County customers.