



AGENDA ITEM SUMMARY

City Council

STAFF

Adam Bromley, Director, Electrical Engineering
Lance Smith, Sr Director, Utilities Finance
Cyril Vidergar, Legal

SUBJECT

First Reading of Ordinance No. 137, 2022, Appropriating Prior Year Reserves in the Light & Power Fund and the Water Fund for the Purchase of Vendor Services to Support a Major Version Upgrade to the Utilities Meter Data Management System.

EXECUTIVE SUMMARY

The purpose of this item is to bring forward an off-cycle supplemental appropriation of Light & Power and Water Fund reserves to fund vendor services needed to support a major version upgrade to the Utilities Meter Data Management System.

The Meter Data Management System (MDMS) owned and operated by Utilities has been in place since the inception of the Advanced Meter Fort Collins implementation in 2010. It receives water and electric meter data for all advanced meters deployed across Fort Collins Utility Service's territory throughout the day, performs quality checks on that data, and then at the end of the billing cycle it calculates the billing determinants for each customer that are necessary to generate individual customer bills.

Fort Collins Utilities has utilized the same version of the EnergyIP software since it was installed. For the reasons described below, this software must be upgraded to a more current version and the upgrade cannot wait for the new budget cycle to begin (i.e. January 2023). Utilities staff will need vendor support to complete this major software version upgrade.

As the MDMS system supports both the water and electric utilities, the cost of the upgrade will be shared between them. Utilities has historically allocated costs for shared software based on customer counts as determined by the number of deployed meters to establish the cost share for each utility. Applying this method here, the Water Enterprise's share of this expense would be 31.6% and the Electric Utility Enterprise's share would be 68.4%.

The total supplemental appropriation being proposed for your consideration is for \$629,588.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on First Reading.

BACKGROUND / DISCUSSION

Fort Collins staff knew that a version upgrade to the MDMS was needed back in 2018 and had planned to complete the upgrade at that time with the use of internal resources only. Staff attended vendor training specific to this upgrade in order to support it. The staff that were identified to complete this upgrade in 2018 subsequently were taken from this project to devote their expertise on the Utilities Customer Information System (CIS) upgrade project that was a higher priority due to the immediate customer/billing needs for the new Connexion utility. This meant that the MDMS upgrade was put on hold, which may have benefited Utilities in the long run. This is because as other utilities utilizing the same MDMS implemented their own migrations to the newer versions, which included significant architectural changes, the vendor realized that these migrations were much too complicated without third-party assistance.

Now that the organization has stepped back from the engagement with the previous CIS vendor and is planning a new CIS upgrade projected to be initiated in 2023, staff and management identified the window of time prior to the CIS project to complete the previously delayed upgrade to MDMS. There are several reasons that completing this upgrade now is imperative which include:

- Functionality included in the new version will reduce manual work and customizations:
 - More robust data Validation, Editing, and Estimation (VEE) algorithm/process that greatly reduces manual action and intervention;
 - Enables use and storage of more electric meter channels which provides billing determinant calculations for our largest Commercial & Industrial (C&I) customers; this is currently calculated in a third-party software which entails a high volume of manual work; and
 - Reports that were previously custom developed through an external program will now be included inherently to the software.
- Existing version is extremely outdated; extended support for the current 7.2 version is not sustainable.
- New version is much more stable and will eliminate many of the billing issues encountered on a monthly basis.
- Current version of software relies on older versions of browsers (now unsupported) and other no longer supported software technologies which is a cyber security vulnerability.
- Application servers (non-database) for this version are located on a very old version of Linux RedHat because it will not operate on more recent, supported versions.
- The current version of Oracle being utilized will no longer be supported at the end of 2022.

Staff has engaged with vendor support companies and other users of the software to conclude that the most effective way to complete a successful upgrade is to utilize external support that has previously completed upgrades from our current version to the newest version of software. To complete this upgrade prior to the CIS upgrade project, staff has solicited for external support through an RFP process.

CITY FINANCIAL IMPACTS

After completing an RFP process, staff has a better understanding of the full costs involved in obtaining external support. The provided quote for those services was approximately \$630K. As mentioned above in the summary, L&P and Water share the costs of this system depending on their respective meter counts. The total supplemental appropriation being proposed for your consideration is for \$629,588, with the individual appropriations from each utility's reserves as specified below:

Light & Power	\$430,638
Water	\$198,950
Total Cost of MDMS Upgrade	\$629,588

The following table shows where L&P reserves are and where they will be after this supplemental appropriation:

	Light & Power	Water
Year End 2021 Reserve Balance	\$64.6	\$84.3
Minimum Required	(\$8.1)	(\$5.8)
Appropriated Prior to 2022	(\$18.8)	(\$37.2)
2022 Connexion Appropriation	(\$20.0)	
2022 Transformer Appropriation	(\$3.6)	
2023-24 CMO Recommended Budget	(\$0.8)	(\$29.2)
Available Reserves Before This Request	\$13.3	\$12.1
MDMS Upgrade	(\$0.4)	(\$0.2)
Remaining Available Reserves	\$12.9M	\$11.9M

BOARD / COMMISSION / COMMITTEE RECOMMENDATION

Energy Board unanimously supported this supplemental appropriation from Light & Power Fund reserves on April 14, 2022.

Water Commission unanimously supported this supplemental appropriation from Water Fund reserves on April 21, 2022.

Council Finance Committee unanimously supported these supplemental appropriations on October 20, 2022.

PUBLIC OUTREACH

None.

ATTACHMENTS

1. Ordinance for Consideration