

1. Roll Call

Chair Tiffany Mittal called the full IROC meeting to order at 9:30 a.m. Erika Mc Neill conducted roll and a quorum was declared. Attendance is reflected below:

Members:	Present	Absent
Tiffany Mittal, Chair	X	
Robert Weichelt, Vice Chair		X
David Akin	X	
Christopher Dull	X	
Gordon Hess	X	
Jeff Justus	X	
Jack Kubota	X	
Luis Osuna	X	
Jim Peugh	X	
Linh Quach		X
Ex-Officio Members:		
Jerry Jones, Metro JPA	X	
Jim Peasley, Metro JPA Alt.		X
Tony Heinrichs, City-10	X	

City representatives present at dais: Lisa Celaya, Assistant Director of Public Utilities and Tom Zeleny, Chief Deputy City Attorney.

2. Non-Agenda Public Comment – None.

3. Approval of Draft Minutes from Meeting of September 16, 2019

ACTION: Chair Mittal asked for a motion to approve the minutes. Motion by Member Hess to approve. Second by Member Peugh. Member Dull abstained. Motion passed 7–0.

- **4. Chair Updates** Tiffany Mittal, Chair
 - There are no minutes for this item due to an issue with the audio recording.
- 5. <u>Mayor and Council Staff Comments</u> None.
- 6. <u>City Staff Updates</u> Lisa Celaya, Assistant Director
 - Ms. Celaya provided IROC with an Office of the Independent Budget Analyst Report on the Analysis of the Existing Stadium Site Appraisal
- 7. Presentation: Performance Audit of the Public Utilities Department's Advanced Metering
 Infrastructure (AMI) Implementation and PUD Management's Response Andy Hanau, Principal
 Performance Auditor and Jane Arnold, Program Manager
 What is AMI?
 - AMI adds key parts to existing water infrastructure, including an AMI-ready meter and an endpoint
 - AMI reads meters remotely
 - AMI can reduce human error, automatically detect leaks, and improve customer service

^{*} Please note there was an issue with the recording process in October and the audio that is normally used to create the minutes was not recorded. However, we have done our best to capture the essence of the meeting with the handouts that were provided.

How Does AMI Work?

- Endpoints transmit hourly meter readings to the network
- A vendor provides hosted network services for managing the network
- PUD receives reads from the vendor and combines them with in-person reads
- PUD's system produces bills to send to the customers

Audit Objectives

- Past audits identified risks related to the implementation of AMI
- The objectives of this audit were to:
 - Evaluate PUD's management of the Citywide AMI implementation and identify lessons to inform the remainder of the implementation and any future major PUD projects
 - Determine if the efficiency and effectiveness of the AMI implementation can be improved to reduce costs, improve the speed of the implementation, and ensure accurate and timely billing

Finding 1: PUD Did Not Adequately Plan, Budget, or Manage the Citywide AMI Implementation

- AMI is a complex project that affects multiple business areas
- Careful planning, budgeting, and project management are essential
- Projects tend to follow a lifecycle where early effort in planning can help avoid costly changes later

Essential Elements of AMI Project Management

- Project Sponsor, Project Charter, Project Manager, Deployment Plan, Steering Committee, and Risk Assessment & Mitigation Plans
 - o PUD lacked these key elements for successful implementation
- Project Budget and Project Schedule
 - PUD had a project budget and timeline, but these were not based on realistic assumptions

Production Expectations Were Unrealistic

- PUD requested labor funds for meter replacement based on a 30-month timeline
- This would have required employees replace 15 meters per day
- In reality, employees were replacing about 10 meters per day
- Additionally, fewer employees were available to work than anticipated

AMI Implementation Experienced Major Delays and is Far From Completion

- As of November 2018, PUD installed:
 - o 116,000 AMI-ready meters (41%)
 - o 16,000 endpoints (6%)
- PUD put the project on hold and is evaluating options for moving forward

Finding 1 Recommendations

- Designate and empower a project manager to be responsible for all aspects of the project
- Create a formal Executive Steering Committee that meets regularly to review project performance
- Develop a deployment plan supported by analysis and based on realistic assumptions
- Issue a directive applicable to major projects that PUD will manage in-house instead of through the Public Works Department. The directive should:
 - o Require that management document the reason(s) for this decision
 - Require that staff follow generally accepted project management standards
 - Establish an executive authority for approval of key project decisions and documents

Public Utilities Has Taken some Remedial Actions

- In December 2018, we notified PUD management of significant project deficiencies to encourage immediate corrective action
- PUD has made progress in addressing the issues identified since our audit began
 - o Implemented 3 recommendations prior to our final report being published
 - Project Sponsor and Project Manager; Steering Committee; Directive
- PUD is currently planning other areas of the project

Finding 2: PUD Needs to Address Several Staffing Issues to Improve Performance of Citywide AMI Implementation

- PUD's labor budget for meter replacement assumed approximately 24 employees would each install about 15 meters per day
- In reality, only about 15 employees were installing meters, each installing about 10 meters per day
- This means 58% of expected daily output was not met

The Meter Replacement Group Experienced High Vacancies and Turnover

- 22% average monthly vacancy rate
- 31% of filled positions were limited
- 44% annual turnover rate

Some Staffing Problems Are Outside of PUD's Direct Control

- Within PUD's control
 - Regularly reassigning staff based on competing priorities
 - o Instituting a hiring freeze
 - o Not adequately planning for meter site conditions
- Outside PUD's control
 - Pay for Water System Technicians is 30% below the median of 15 benchmark cities which may make it more difficult to recruit qualified employees
 - Laborers may wish to transfer to less demanding positions

Finding 2 Recommendations

- Develop a staffing management plan for meter and endpoint installation
 - Consider dedicating stable work groups with experienced staff
 - o Consider augmenting City forces with third-party provider
- Evaluate the causes and impact of turnover and work with Personnel Department to address causes
 - If low pay is significant driver of turnover, submit a Special Salary Adjustment for affected classifications
 - If job classifications hinder recruitment and retention, modify or create new classifications that are better suited to the AMI implementation project and other PUD business needs

Finding 3: PUD Should Accurately Track Meter Replacement Labor Costs to Improve Project Oversight

- PUD undercharged the AMI project for meter replacement labor by about 27%
- PUD lacked formal policies or directives related to AMI project timekeeping
- Inaccurate cost tracking increases the likelihood of running over budget and diminishes project oversight

Find 3 Recommendations

- PUD management should provide timekeeping instructions to all employees working on the AMI project
- The project manager or an appropriate designee should continuously monitor time entries and/or labor charges to the project for reasonableness and coordinate appropriate corrective actions, if necessary

Finding 4: EAM Work Manager Data Controls Do Not Effectively Prevent Data Entry Errors

- Meter installers must record accurate information to ensure a new meter is connected to the correct location and customer account
- The meter replacement process is supposed to have multiple levels of control, including both preventive and detective controls
- A system including both preventive and detective controls helps ensure accurate and timely data entry

Preventive Device Controls Were Not Effective

- In reality, the EAM Work Manager did not effectively prevent invalid data entries
- As a result, more errors had to be corrected later
- This inefficiency led to at least some customers receiving late bills and multiple bills at once

Finding 4 Recommendations

- PUD and DoIT should evaluate the control environments in the applications used for meter and endpoint installation to ensure they meet PUD's needs for complete, accurate, and timely data entry; The control environments should include device-level controls that prevent incomplete and inaccurate data from entering the meter and endpoint installation workflows
- Additionally, this evaluation should include maintaining, awareness of business processes and associated activities and comprehensive testing of the applications used for meter and endpoint installation
- PUD should track the causes, resolution, and duration of all exceptions cases resulting from AMI
 meter replacements and review the data to perform trending and root cause analyses

Audit Conclusion

- 13 recommendations
- PUD agreed to implement all of them and had already implemented 3 of them by the time we published our final report

PUD Management's Response

- PUD Management agrees with all of the City Auditor's recommendations
- The overall approach to manage the Citywide AMI Implementation has significantly reformed
- PUD will augment City staff with an experienced third-party installation service contract
- PUD Management's targeted implementation of the City Auditor's Recommendations is projected by July 2020

8. <u>Presentation: COSS – Overview of Water and Wastewater Revenues</u> – Charles Modica, Deputy Director Revenue Requirements Overview

- Overall revenue needs are determined through Cost of Service Study (COSS) process
- COSS and Financial Plan detail needed expenditures
- Revenue collected must be sufficient to cover expenditures
- Revenue must be sufficient to meet additional financial metrics and commitments (reserves, bond covenants, Master Installment Purchase Agreement (MIPA) requirements, etc)
- State law prohibits collecting more revenue from rates and fees than is necessary to provide service
 - o Proposition 218
 - Proposition 26
- Rates charged need to have a clear nexus with the services they support
 - o Rates need to be supported by COSS and approved rate cases
- Rate increases needed to account for changes in system costs need to be approved in advance
 - Rate adjustments follow prescribed process, ultimately need to be approved by City Council

Water and Sewer Revenues

- PUD revenues support three enterprise funds:
 - Water Fund
 - Revenue from Water Rates
 - Supports delivery of water to customers
 - Municipal Sewer Fund
 - Revenue from City's Sewer Service Charge
 - Supports collection of wastewater from City residents and customers
 - Metropolitan Sewer Fund
 - Revenue from Sewer Service Charge and Participating Agencies
 - Supports treatment and disposal of wastewater
- Revenues for prescribed functions must be used only for those functions

Water Fund Revenues

- Four significant sources of Water Fund revenue
 - Water Sales
 - Potable Water
 - Reclaimed Water
 - Capacity Fees
 - Land/Building Rentals
 - Services Rendered

Wastewater System Revenues

- Wastewater system includes two enterprise funds:
 - Municipal Wastewater Fund
 - o Metropolitan Wastewater Fund
- Major Revenue Sources include:
 - Sewer Service Charges
 - For SFR, based on winter-monitoring period
 - Capacity Fees
 - Services Rendered Others
 - o Participating Agency (PA) Contributions Metropolitan Wastewater Fund only

Public Utilities Revenues – Key Takeaways

- Majority of revenue come from Water Sales (Water Fund) and Sewer Service Charges (Wastewater Funds)
- Revenues are collected for specific purposes
- Revenue generated from each customer class is in proportion to its demand on the system
- Revenue must be sufficient to cover expenses and to meet financial metrics and commitments
- 9. Discussion: FY19 IROC Annual Report Preparation Tiffany Mittal, Chair
 - The draft report will be provided to the subcommittees for their input
 - This item will be on each subcommittee agenda in November
- **10.** City 10 County Water Authority Tony Heinrichs, City 10 Representative
 - CWA is in the final stages of the selection process for a new General Manager
- **11.** <u>Metro/JPA Report Out</u> None.
- 12. <u>Proposed Agenda Items for Upcoming IROC Meetings</u> Tiffany Mittal, Chair
 - Various COSS presentations will be on the upcoming agendas
 - Deliverables:
 - o PUD will provide IROC with AMI Steering Committee quarterly reports
 - IROC will have the draft FY19 IROC Annual Report ready to be reviewed by the subcommittees at the November meetings
 - Chair Mittal will forward Director Lorance's email containing possible future COSS related agenda items to PUD for distribution to the IROC members (done on 11.8.19)
- **13. IROC Members' Comments** None.
- 14. Meeting adjourned: 11:45 a.m.

Minutes submitted by: Wilson Kennedy