

## Appendix 2 – Advanced Metering Infrastructure Benefits

Advanced Metering Infrastructure (AMI) systems provide the following key benefits:

### 1. Customer Benefits

- Receive accurate monthly billing through actual reads versus estimates.
- Opportunity to track and understand how much electricity and water is being used so changes can be made to save money.
- Receive early warning signs of an issue with the electrical service or leaking plumbing when continuous usage is recorded.
- Reduction in visits by the City for meter reading and tenancy changes. Customers no longer need to submit actual meter reads because they will be done remotely.

### 2. City Benefits

- Automated remote meter reading.
- Consistent accurate reads for billing.
- Reduction in billing concerns by receiving early warnings of issues.
- Operational efficiencies from automated billing, read validation, and remote disconnection and reconnection of meters.

### 3. Environmental Benefits

- Substantially less travel needed for meter reading, customer connection processes, and arrears disconnection/reconnections resulting in greenhouse gas emission reductions.
- Supports efforts to lower community and corporate greenhouse gas emissions through energy use awareness and conservation.

### 4. Smart Grid Benefits

- Supports an Outage Management System which improves electrical service outage management and response times with customers.
- Supports improved electrical and water consumption forecasting which is critical for infrastructure planning.
- Ability to help detect electricity and water theft or losses within the system.
- Supports advanced energy optimization opportunities across the distribution system (e.g. Conservation Voltage Reduction).
- Supports opportunities for advanced power rate structures.
- Improves visibility of distributed generation on the grid.

## 5. Safety Benefits

- Customer homes are visited less frequently, resulting in substantial reduction in exposure to hazardous situations for City personnel such as dogs and slippery surfaces.
- Reduced travel results in fewer vehicle and driving incidents.
- Power theft situations can be detected remotely, and staff are able to prepare in advance of visiting a potential hazardous site.
- Electrical service issues can be detected and reported so proactive and preventive maintenance can be performed which significantly improves the safety for customers.