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August 28, 2025

Mayor Jacque and City Council Members
City of Dyersville
Memorial Building
340 1st Avenue East
Dyersville, IA 52040

Subject: Discussion and Possible Action to Implement the Advanced Metering Infrastructure (AMI) System for the Water Department

Dear Mayor and Members of the City Council:

At our last meeting, we postponed discussion on the Advanced Metering Infrastructure (AMI) project for the Water Department. Since then, staff met with Ferguson representatives, reviewed pricing, and prepared answers to the questions raised by the Council. This letter explains how AMI works, compares costs with our current Automated Meter Reading (AMR) system, and lays out a simple, three- phase path that starts in FY26 at the water tower.

Today, we read meters with a “drive- by” AMR system. Staff drive around town once a month to collect readings. That takes about two and a half hours each month and costs about \$1,572 per year in labor and vehicle use. AMR gives us one reading per month per account, so leaks or unusual use are often found after the bill goes out.

AMI is different. AMI sends usage data to our system throughout the day so staff can see patterns quickly, find the potential for leaks sooner, and help residents avoid surprises on their bills. It also reduces lost staff productivity and truck time because readings come in automatically.

Looking forward, once AMI is fully implemented across the city, we will be able to spot unusual use early, help customers avoid high bills, conserve water more effectively, and use the data to help model with AI technology for more effective and efficient future capital improvement projects. The City Council can also choose to let citizens see their own water use online so they can track daily consumption and plan. I should point out that turning on customer access will require future policy decisions about how staff handle alerts and outreach, and it will require an additional annual software licensing to include the customer portal features. Staff will bring you those policy recommendations and any license changes before we enable public access.

I had a council member ask for the costs beyond equipment and a clear comparison with what we pay today. We currently pay for Neptune 360 software for AMR at \$2.15 per service per year. With 2,268 services, that is about \$4,876 per year. When you add the truck and labor for monthly routes, the recurring AMR cost is about \$6,448 annually. For AMI, the software is \$5.00 per service per year. If we converted everyone at once, the annual AMI software would be \$11,340. But we are not doing that. In Phase 1, we plan to move about 1,500 services to AMI and keep 768 on AMR. That means the AMI portion will be about \$7,500 per year, and the AMR portion will be about \$1,651 per year, for a combined software total of about \$9,151 per year. Because AMR will still read 768 accounts during Phase 1, we estimate that about one- third of the current truck and labor will remain for those reads, roughly \$533 per year. Taken together, Phase 1 recurring costs are about \$9,684 per year. Compared with today's \$6,448, Phase 1 increases recurring costs by about \$3,236 annually. Spread across 2,268 customers, that is about twelve cents per month per account. When we complete all phases and move all services to AMI, the recurring cost will be about \$11,340 annually. That is a net increase of about \$4,892 annually today, or about eighteen cents per month per account citywide. These increases can be folded into our upcoming water rate adjustments, which are needed regardless of whether we proceed with AMI.

There is also a one- time investment to begin Phase 1 at the water tower—the AMI gateway equipment, UPS, antennas, and mounting total \$32,398. Professional installation is \$16,350. The Phase 1 total is \$48,748 and is included in the FY26 Water Budget. The vendor confirmed that AMI software fees are billed only for the number of services read through AMI, so we are not paying for more than we use during the phased rollout.

Key Figures: AMI vs AMR Costs and Rollout

Category	Details	Annual Cost	Per Account per Month
Current AMR Recurring	Software (\$2.15 x 2,268) + Truck/Labor	\$6,448	–
Phase 1 Recurring	AMI Software (\$5 x 1,500) + AMR Software (\$2.15 x 768) + Reduced Truck/Labor (≈33.9%)	\$9,684	\$0.12
Net Phase 1 Increase	Compared to current recurring costs	\$3,236	\$0.12
Full AMI Recurring (All Phases)	AMI Software (\$5 x 2,268)	\$11,340	\$0.18
Net Full-Rollout Increase	Compared to today's AMR	\$4,892	\$0.18
One-Time Phase 1 Capital (FY26)	AMI Gateway Equipment, UPS, Antennas, Mounting + Installation	\$48,748	–

Service, efficiency, and water conservation are critical to our residents and the City's well-being. With AMI, our staff can monitor water usage in real time, enabling quick responses to potential leaks and significantly reducing water loss. Residents can access daily usage data and set personalized alerts once the Council approves the portal and supporting policies. We anticipate a decline in “high bill” complaints, quicker resolutions for customer inquiries, and reduced staff hours spent on re-reads and data logging. Although not all benefits will be immediately apparent, the decrease in driving for meter

reading, fewer on-site inspections, and minimized water loss signify substantial operational improvements that enhance customer service and promote responsible stewardship.

Our rollout plan is simple and low- risk. Phase 1 will install the AMI gateway at the water tower in FY26, bringing about an estimated 1,500 services onto AMI, while the rest will stay on AMR. In later phases, we will add one or more gateways to reach near- full coverage, and we can use cellular endpoints in a few hard- to- reach locations if needed. This “build- on” approach lets us verify coverage and performance before we expand, so we buy only what we need. AMR remains a backup throughout the rollout, so billing continuity is protected.

AMI modernizes our system, improves service for residents, and supports conservation. It currently costs more each year than AMR alone, but the amount is small per account and can be included in the work rate you expect to consider. I recommend that the Council authorize staff to proceed with Phase 1 of the AMI implementation at the water tower in FY26.

Thank you for your consideration. I am happy to answer any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Mick J. Michel", with a large, stylized flourish at the end.

Mick J. Michel
City Administrator