

BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

APPLICATION OF THE EMPIRE DISTRICT)
ELECTRIC COMPANY, A KANSAS)
CORPORATION, FOR AN ADJUSTMENT IN ITS)
RATES AND CHARGES FOR ELECTRIC SERVICE)
IN THE STATE OF OKLAHOMA)

CAUSE NO. PUD 202100163

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CORPORATION COMMISSION
OF OKLAHOMA

Direct Testimony

of

Chad C. Hook

Submitted on behalf of

The Empire District Electric Company

February 28, 2022



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THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA
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LIST OF EXHIBITS IN SUPPORT OF DIRECT TESTIMONY

1.	CCH-1 AMI System Components
2.	CCH-2 AMI Implementation Plan
3.	CCH-3 Customer Communication Materials

DIRECT TESTIMONY OF CHAD C. HOOK
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA
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1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Chad C. Hook, and my business address is 602 Joplin Avenue, Joplin,
4 Missouri, 64802.

5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by Liberty Utilities Service Corp. as the Regional Director Operations
7 Strategy for the Central Region, which includes The Empire District Electric Company
8 (“Liberty-Empire” or the “Company”).

9 **Q. On whose behalf are you testifying in this proceeding?**

10 A. I am testifying on behalf of Liberty-Empire.

11 **Q. Please describe your educational and professional background.**

12 A. I began my career with Liberty-Empire more than twenty-four years ago, and I have
13 held various positions of increasing responsibility within electric operations including
14 generation, transmission, distribution, and metering. My previous classifications
15 include: Assistant Plant Operator, Mechanical Maintenance Welder 1st Class,
16 Journeyman Lineman, Line Foreman, Journeyman Meter Tester, and Assistant
17 Operations Manager Transmission/Distribution. I spent two years as the Regional
18 Manager for Environmental Health and Safety, leading the Central Region’s efforts to
19 successfully improve safety training, and performance. I assumed my current role in
20 July of 2019, and I assumed the responsibility for serving as the Company’s national
21 business lead for Advanced Metering Infrastructure (“AMI”) in May of 2020.

1 **Q. Have you previously testified in a proceeding before the Oklahoma Corporation**
2 **Commission (“Commission”) or before any other utility regulatory agency?**

3 A. I have not testified before the Oklahoma Corporation Commission; however, I’ve
4 submitted testimony on behalf of Liberty-Empire before the Missouri Public Service
5 Commission related to AMI.

6 **Q. What is the purpose of your Direct Testimony in this proceeding?**

7 A. In my testimony, I provide an overview of AMI and describe Liberty-Empire’s
8 implementation of AMI in Oklahoma. I discuss the importance of AMI and the
9 customer facing benefits, including those that provide customers with greater
10 convenience and transparency over their energy usage. Additionally, I highlight the
11 costs included in this case.

12 **Q. Are you sponsoring Exhibits which are attached to your Direct Testimony?**

13 A. Yes. I am sponsoring the following Exhibits.

DIRECT EXHIBITS	TOPIC
CCH-1	AMI System Components
CCH-2	AMI Implementation Plan
CCH-3	Customer Communication Materials

14 **II. OVERVIEW OF AMI**

15 **Q. What is AMI?**

16 A. As discussed in the Oklahoma Energy Assurance Plan, AMI “includes smart meters,
17 data management systems, and communication networks. Deployment of AMI has
18 proven to lower outage costs and allow faster outage restoration through more efficient

1 outage identification, allowing repair crews to be precisely dispatched to the specific
2 outage location.”¹

3 AMI is a comprehensive metering solution working in concert to create two-
4 way communications between customer meters and the utility. AMI meters, often
5 referred to as “smart meters,” are digital meters with advanced features and capabilities
6 beyond traditional electricity meters. In addition to two-way communication, smart
7 meters include more granular usage measurement, tamper detection, net metering
8 capability, and an internal remotely operable connect/disconnect switch. The meters
9 transmit information to field collectors, forming a mesh network, which is flexible in
10 that the meters route data via nearby devices creating a mesh of network coverage.
11 Within the network each meter serves as a repeater to help transfer the data to the
12 collectors, which then transmit the information to the AMI control center through a
13 cellular network. Direct Exhibit CCH-1 describes the system components of Liberty-
14 Empire’s AMI system.

15 **Q. Is AMI a new technology?**

16 A. No. In 2010, the U.S. Department of Energy’s Office of Electricity, with utilities
17 sharing the cost, funded the installation of more than 15 million smart meters to
18 modernize infrastructure and demonstrate the value and benefits of AMI technology.²
19 By the end of 2018, more than 88 million smart meters had been deployed throughout

¹ Oklahoma Energy Assurance Plan, June 2021 https://ee.ok.gov/wp-content/uploads/2021/07/Oklahoma_Energy_Assurance_Plan_2021.pdf

² Advanced Grid Research, Office of Electricity U.S. Department of Energy, AMI in Review: Informing the Conversation https://www.smartgrid.gov/documents/voe_series/voe-ami-in-review-informing-the-conversation

1 the U.S., covering nearly 70 percent of U.S. households.³ In Oklahoma, more than 1.8
2 million smart meters are deployed as follows⁴:

Entity	Meters deployed
Oklahoma Gas & Electric Co	824,989
Public Service Co of Oklahoma	560,981
Electric Cooperatives	426,835
Municipalities	53,041

3 **Q. Why did Liberty-Empire adopt AMI?**

4 A. AMI is a customer-focused foundational technology that directly provides and enables
5 greater convenience and transparency over a customer's energy consumption. The
6 AMI investment supports Liberty-Empire's long-term efforts to upgrade its company
7 technologies and capabilities in order to improve the efficiency, quality, and range of
8 services it provides to its customers.

9 **Q. Why is AMI important to customers?**

10 A. The AMI Project will improve the efficiency, quality, and range of services provided to
11 customers by providing better data about energy usage so customers can be more
12 informed and make choices about how they consume their energy. Additionally, AMI
13 provides features that improve Liberty-Empire's ability to plan and operate the grid
14 safely and reliably. For example, with AMI, Liberty-Empire is able to interrogate

³ The Edison Foundation, Institute for Electric Innovation, Electric Company Smart Meter Deployments: Foundation for a Smart Grid (2019 Update) https://www.edisonfoundation.net/-/media/Files/IEI/publications/IEI_Smart-Meter-Report_2019_FINAL.ashx

⁴ U.S. EIA. Annual Electric Power Industry Report, Form EIA-861 detailed data files. <https://www.eia.gov/electricity/data/eia861/> (December 16, 2021)

1 meters to determine if they are energized, sometimes avoiding field visits to a
2 customer's premise.

3 **Q. What will Liberty-Empire customers experience once AMI is fully implemented?**

4 A. It is important to appreciate the wide range of AMI improvements and the nature of the
5 AMI change process as described above. By implementing AMI, Liberty-Empire will
6 be able to significantly upgrade and improve the way it supports its customers in its
7 metering, billing and customer care functions. Customer service representatives will
8 have access to more granular customer energy use information compared to historical
9 information enabling them to better process customer metering and billing inquiries.
10 Customers establishing or disconnecting service will find their orders processed more
11 quickly and easily, as AMI enables this work to be completed remotely. Through
12 Liberty-Empire's My Account platform, customers will have detailed access to their
13 energy usage information to better understand and adjust their consumption behavior.
14 In the long-term, customers will have additional options to handle many of their service
15 needs directly through web portals and mobile applications. Additionally, with the
16 capability to record interval usage data, AMI is a foundational technology that can
17 enable new rate designs that include TOU rate structures that provide price signals to
18 shift load.

19 **III. LIBERTY-EMPIRE'S AMI IMPLEMENTATION SCOPE**

20 **Q. Please describe Liberty-Empire's legacy metering solution.**

21 A. Liberty-Empire's legacy metering solution requires metering technicians to physically
22 visit and read each meter in the service territory on a monthly basis. The single monthly
23 meter readings provide limited energy usage information and do not provide customers
24 or the company with capabilities for enhanced customer services and programs. Many

1 of the meters in Liberty-Empire's service territory have exceeded their useful life, are
2 no longer being manufactured, and are unsupported by the manufacturing company.
3 While Liberty-Empire has replaced some of these meters with digital, solid-state
4 meters, these meters do not have communication capabilities. Continued investment
5 in this legacy metering solution is neither practical, prudent, nor sustainable.

6 **Q. Please describe the implementation of AMI across the Liberty-Empire system.**

7 A. Beginning in 2019, Liberty-Empire initiated careful planning and design for the AMI
8 system, and the AMI project was officially kicked off in September 2019. The
9 Company began installing the AMI system by sectors throughout its central region of
10 Missouri, Arkansas, Oklahoma, and Kansas in June 2020 and, by December 2020,
11 Liberty-Empire had completed the installation of the field collection and
12 communication network. As of December 31, 2021, Liberty-Empire installed over
13 4,800 smart meters in Oklahoma and is materially complete with the smart meter
14 installations. Liberty-Empire intends to address any meters not previously upgraded,
15 including those that might be hard to access or that may require additional customer
16 contact and installation scheduling. Direct Exhibit CCH-2 depicts Liberty-Empire's
17 AMI implementation plan.

18 **Q. Please describe the physical scope of Liberty-Empire's AMI system.**

19 A. As further described in Direct Exhibit CCH-2, Liberty-Empire is installing the AMI
20 system for residential and small and medium sized commercial customers throughout
21 its service areas, in Missouri, Arkansas, Oklahoma, and Kansas, and the AMI system
22 will act as one network across the four states. Liberty-Empire's largest customers are
23 not part of the deployment because these customers already have an advanced metering
24 solution at their facilities. There are about 4,800 electric meters that will be covered

1 by the network within Oklahoma, and Liberty-Empire installed 6 network collectors in
2 Oklahoma.

3 **Q. Did Liberty-Empire consider alternatives to implementing AMI?**

4 A. Absolutely. Liberty-Empire considered maintaining the status quo; continuing in the
5 installation of non-communicating solid state meters; and, installing a vehicle-based
6 one-way communicating remote reading system known as AMR. However, running a
7 modern utility demands levels of equipment automation, monitoring, diagnostics and
8 control that Liberty-Empire does not have today and cannot achieve without a wholistic
9 and comprehensive view to its technology roadmap needs. Without AMI, Liberty-
10 Empire will not be able to improve core billing processes, nor will it be able to offer
11 customers new rate designs, service features, and programs. The lack of AMI data
12 would also hamper Liberty-Empire's ability to create modern asset management
13 capabilities across the distribution grid. None of these operational capabilities, which
14 are essential to operating a modern utility, are possible through these alternatives.

15 **Q. Why not just upgrade to digital non-communicating meters?**

16 A. As discussed earlier, Liberty-Empire has been replacing some of its old, electro-
17 mechanical meters with digital, solid-state meters that do not have communication
18 capabilities. These meters, while functionally adequate for providing monthly usage
19 consumption, cannot be upgraded to provide the operational and customer benefits of
20 a smart meter. With more than 70% of US households currently served by AMI, it
21 would not be reasonable nor prudent for Liberty-Empire to replace its aging
22 infrastructure with technology that does not align with current industry and peer utility
23 practices.

1 **Q. Did Liberty-Empire reach out to customers to gain insights and feedback about**
2 **the rollout of AMI?**

3 A. Yes. Liberty-Empire recognizes that community engagement is very important and
4 valuable to the overall success of our efforts. These efforts can help make our
5 customers aware of the AMI deployment and the meter exchange process. Outreach
6 opportunities are also used to gain input on customer questions and concerns.
7 Accordingly, Liberty-Empire reached out to customers during the implementation of
8 AMI using a variety of means to educate and inform, as well as listen and gain
9 feedback.

10 Prior to deployment, the Company developed and made available for
11 distribution an informational brochure, fact sheets, and a Q&A on key program
12 attributes including benefits. Liberty-Empire has also trained our business account
13 teams, customer service representatives, AMI call center representatives, and field
14 representatives to respond to customer questions. Furthermore, the Company
15 developed informational videos and published deployment information and schedules.
16 Links to these and other materials have been placed on a website landing page:
17 www.libertyutilities.com/smartmeters.

18 During deployment, if a customer was not present during the meter exchange,
19 a door hanger containing information about the AMI project and smart meter benefits
20 was placed on the customer's door. The hanger informs the customer that their meter
21 was exchanged while they were gone, or that their meter was unable to be exchanged
22 for reasons such as locked gates. In the case of an impediment to the exchange, the door
23 hanger requested the customer call to schedule an appointment when the exchange can

1 proceed. The door hanger also includes some background information about the AMI
2 Project and smart meter benefits as an informational piece.

3 After AMI deployment is complete, Liberty-Empire will continue to engage
4 with customers around the benefits of their smart meters and their energy management
5 opportunities. The goal is to create two-way communication: we hope to share with
6 our customers how the AMI-enabled information can help inform them of their energy
7 use patterns, and we hope to hear from customers about their energy management
8 needs. Examples of the communication material sent to customers are attached as
9 Direct Exhibit CCH-3.

10 **Q. Are costs for the AMI implementation included in this rate case?**

11 A. Yes. Costs of AMI implementation are included in this rate case. Since the beginning
12 of the project through December 31, 2021, Liberty-Empire has invested \$41.1 million
13 across its system. Liberty-Empire is seeking to recover Oklahoma's allocated costs of
14 AMI in this rate case. The Company is requesting to recover approximately \$1.2
15 million of rate base through December 31, 2021.

16 **Q. Do the above referenced costs include an amount for undepreciated meters?**

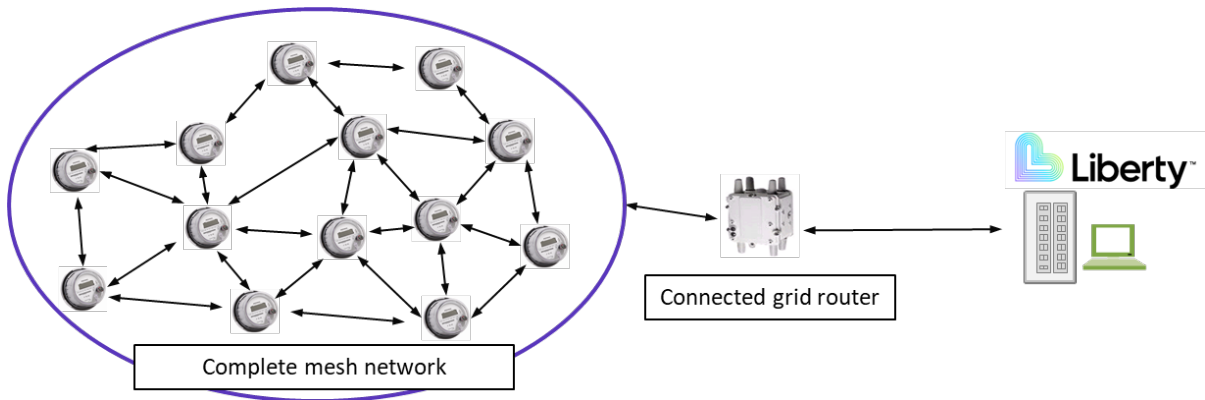
17 A. Yes.

18 **Q. Why should Liberty-Empire be allowed to earn a return on its undepreciated
19 meters that were replaced by the AMI investment?**

20 A. Liberty-Empire carefully designed and planned its AMI system in 2019 and began
21 installing the system by sectors. Moving through Liberty-Empire's territory by sector
22 allowed Liberty-Empire to replace all in-scope meters in an area before moving onto
23 the next. This is a more efficient approach than skipping the undepreciated meters in
24 sectors, and then travelling all over the service territory to replace those meters ad hoc

1 as they depreciate. Additionally, the AMI solution being implemented by Liberty-
2 Empire relies on a mesh network. This means that each meter in the system acts as a
3 repeater and forms a mesh network that communicates with Liberty-Empire's meter
4 data management system. When all the meters in a sector are AMI meters, they work
5 in concert with each other to create a strong mesh network of two-way communication
6 between the customers and Liberty-Empire, as demonstrated in Figure 1 below.

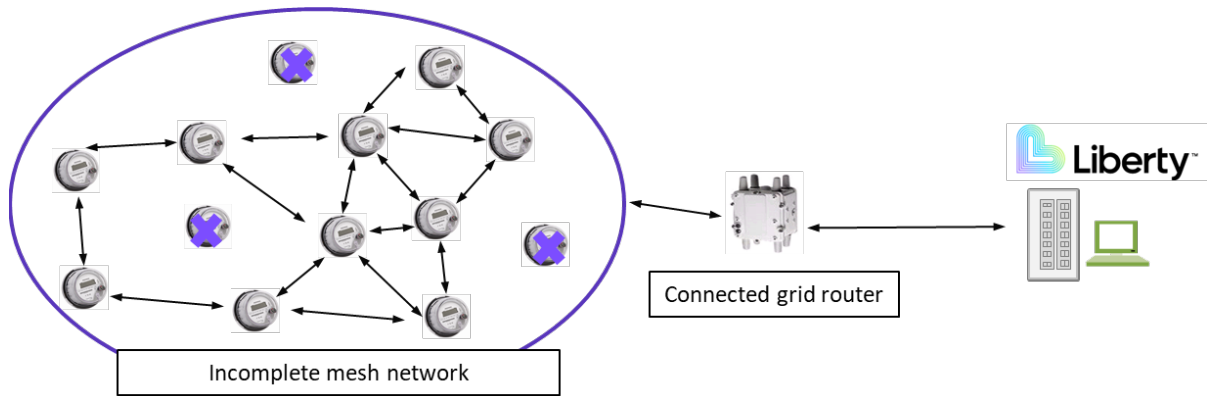
7 **Figure 1: Complete AMI mesh network**



10 However, if Liberty-Empire were to only replace fully depreciated meters, there would
11 be fewer AMI meters to act as repeaters, and the resulting mesh network would be
12 weaker than the one described above. With reduced overlapping coverage, there is
13 great risk of meters becoming stranded and unable to communicate with Liberty-
14 Empire.

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Figure 2: Incomplete AMI mesh network



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Furthermore, if, for the sake of argument, Liberty-Empire only replaced fully depreciated meters, this would have prevented some of Liberty-Empire customers from realizing benefits of the AMI system at the same time as their neighboring customers, even though they are paying for a portion of the AMI implementation. Liberty-Empire strongly believes all customers should be able to access the benefits I have discussed at length throughout my direct testimony. For further details please refer to the direct testimony of Liberty-Empire witness Charlotte T. Emery who discusses more specifics around the treatment of the undepreciated meters.

11

Q. You previously mentioned that Liberty-Empire was deploying AMI across all of its territories. Are costs for other states included in the AMI Project Costs?

12

13

A. No. Costs are directly assigned to each jurisdiction, where possible. For shared costs, Liberty-Empire allocated the costs based on the number of meters within each state. For example, the Company allocated costs paid to Itron for its services based on meter count within each jurisdiction.

14

15

16

1 **IV. AMI BENEFITS TO CUSTOMERS**

2 **Q. Does the implementation of AMI deliver benefits to Liberty-Empire’s customers?**

3 A. Yes. AMI is a customer-focused foundational technology that directly provides and
4 enables greater convenience and transparency over a customer’s energy consumption.
5 The data that AMI will generate will touch nearly every part of Liberty-Empire’s
6 business, improving the customer experience through enhanced customer care
7 functions such in billing, customer service, outage management, testing and other
8 activities.

9 **Q. How will the implementation of AMI deliver the benefit of convenience to**
10 **customers?**

11 A. AMI technology delivers convenience to customers by enabling remote monthly and
12 off-cycle meter reading; remote connect, disconnect, and reconnect ability; and, remote
13 meter interrogation. Remote monthly and off-cycle meter reading provides customers
14 the benefit of convenience by transmitting usage information to Liberty-Empire
15 without the need for a technician to visit the customer’s premise. With remote connect,
16 disconnect, and reconnect ability, AMI provides convenience to customers of not
17 having to schedule a technician visit when a customer wants to establish or cancel
18 service. Further, customers who may become eligible to have their service
19 disconnected for non-payment may have power more quickly restored using AMI’s
20 remote reconnect technology. Finally, with AMI technology, Liberty-Empire will be
21 able to interrogate a meter over the network to determine if it has power without having
22 to send a truck to the location to test it, in some cases, avoiding a field visit.

23 **Q. How does AMI deliver the benefit of increased transparency and communication**
24 **with customers?**

1 A. AMI technology will directly provide customers access to more pertinent and timely
2 usage information. When a customer calls Liberty-Empire’s call center, customer
3 service representatives will have detailed information about customer usage levels well
4 beyond today’s once-a-month ‘snapshot’ of energy use. Customer service
5 representatives will also be able to share information about power outages, voltage
6 alarms and other diagnostic information from the meter with the customer.
7 Accordingly, the customer care representatives will be able to address customer
8 inquiries more quickly and expertly with this information in hand.

9 Additionally, AMI technology enables customers who have a smart meter the
10 ability to view and download detailed information about their hourly and daily usage
11 patterns through the My Account portal, allowing them to more closely monitor their
12 usage. Through AMI and My Account, customers are empowered to make informed
13 choices regarding how they use energy and have the ability to potentially change their
14 energy usage behaviors and reduce their energy costs. Additionally, the AMI
15 investment is being integrated into the Company’s efforts to increase communications
16 about outages and restoration timelines after a storm.

17 **Q. How will Liberty-Empire integrate AMI into outage management activities?**

18 A. AMI is an important tool for improving outage management capabilities. Liberty-
19 Empire has the capability to interrogate individual smart meters to determine if
20 customers have power to confirm outages. Interrogating meters will assist the Liberty-
21 Empire restoration crews to improve their field work routing as they move about the
22 outage area to restore power. The linemen and other field technicians will be able to
23 confirm that an area is fully restored before heading off to address outages in another
24 area.

1 **Q. Will Liberty-Empire’s customers have new rate options as part of the AMI**
2 **implementation?**

3 A. With the capability to record and transmit interval usage data, AMI can provide
4 information that helps enable new rate design. This additional data, combined with a
5 new customer information system will provide the Company with tools needed to offer
6 more robust rate offerings in future proceedings.

7 **V. OPERATIONAL BENEFITS**

8 **Q. Does Liberty-Empire anticipate realizing operating benefits or efficiencies as a**
9 **result of its AMI implementation?**

10 A. Yes. While Liberty-Empire’s AMI implementation is a foundational investment that
11 will replace aging technology on the brink of obsolesce with an industry standard
12 metering solution that will provide customers more control and transparency over their
13 energy consumption, the Company anticipates it will realize operational efficiencies as
14 a result of AMI.

15 **Q. Please describe the efficiencies Liberty-Empire believes it will realize.**

16 A. Liberty-Empire’s AMI investment will enable monthly meter reading to be conducted
17 remotely, avoiding the need to send a technician to read each meter on premise.
18 Additionally, in many cases, Liberty-Empire will be able to remotely perform connects,
19 disconnects, and reconnects again avoiding a meter technician and vehicle expense.
20 During storm restoration, AMI will enable Liberty-Empire to interrogate a meter
21 remotely to see if it is receiving power without sending a technician or truck. Refer to
22 Company witness Charlotte T. Emery’s testimony for details surrounding projected
23 meter reader savings which have been incorporated into the cost of service as a result
24 of the implementation of AMI.

1 **Q. Will Liberty-Empire track progress it makes on realizing operational efficiencies**
2 **from AMI?**

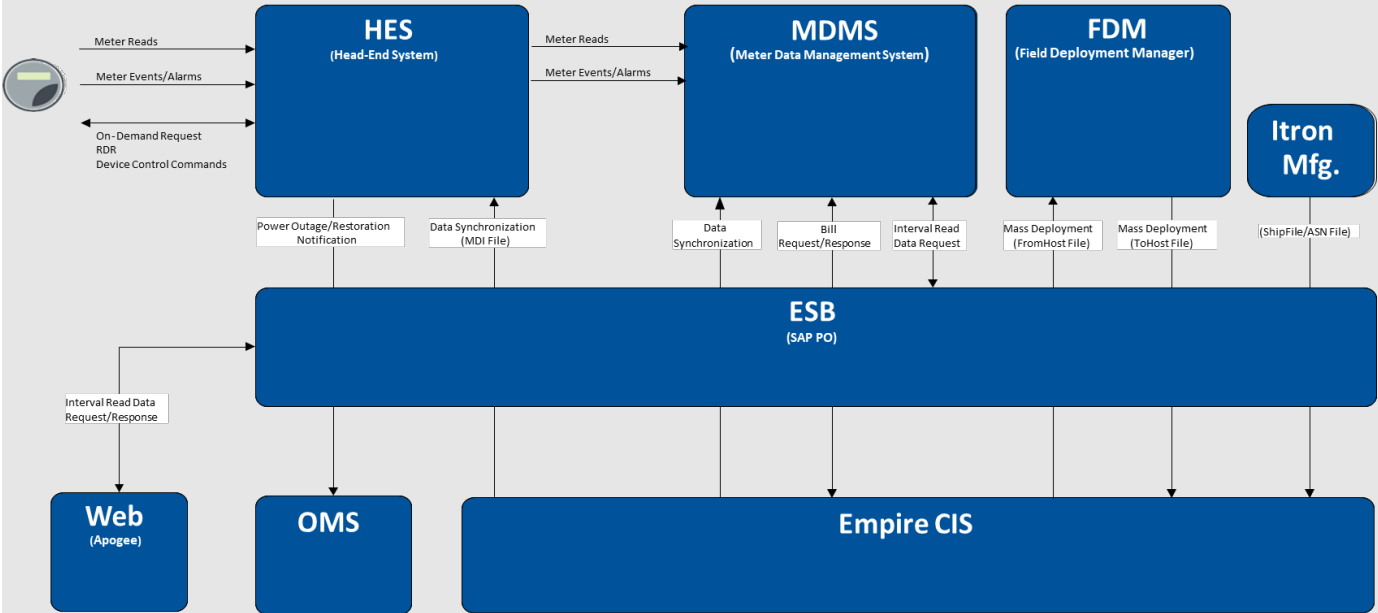
3 A. Yes. Once the AMI project is complete and closed, Liberty-Empire plans to track the
4 costs it otherwise would have incurred but for the deployment of AMI in monthly meter
5 reading; off-cycle meter reading; remote connect, disconnect, and reconnect
6 functionality; and, in storm restoration costs.

7 **VI. CONCLUSION**

8 **Q. Does this conclude your direct testimony?**

9 A. Yes.

Direct Exhibit CCH-1: AMI System Components



Direct Exhibit CCH-2: AMI Implementation Plan

Figure 1: Liberty Central U.S Installation Map and Timeline

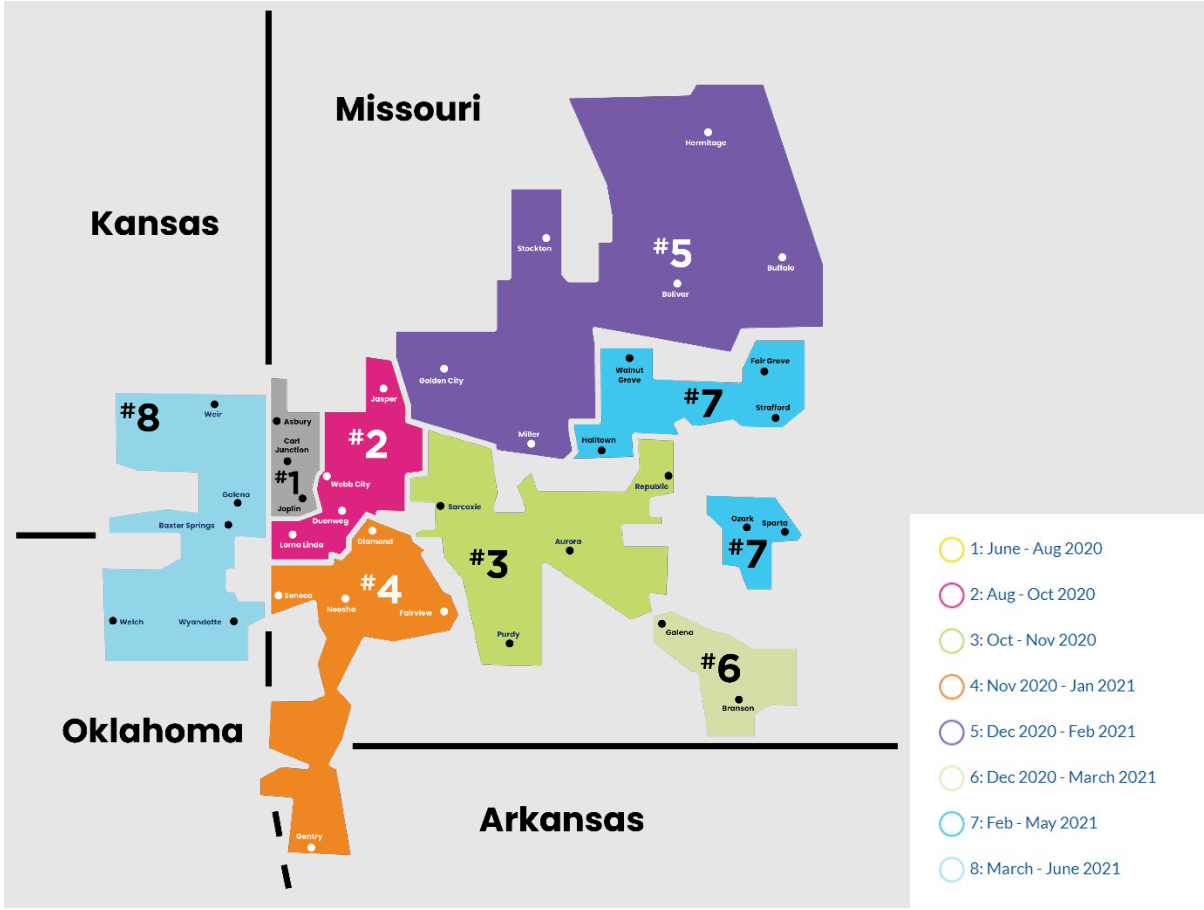


Table 1: Key Milestones for the Liberty-Empire AMI Initiative

Activity and Milestone	Schedule Period and Milestone (if applicable)	Description
Detailed AMI Implementation Planning Period	Milestone: Q1 2020 Substantially complete prior to field network and meter deployment.	Completion of AMI implementation planning sufficient to enable the commencement of communication system network deployment and meter installation activities. Planning includes on-boarding the required communication system provider, field installation crews, and IT support resources. Liberty-Empire will staff internal project management and business process change management resources during this time as well.
Installation of Field Communications Network	Milestone: Q4 2020 Liberty-Empire expects a 3-4-month activity, preceding meter deployment.	Deployment of 4g cellular capable field collectors and repeaters. Testing and initiation.
Meter Procurement	Milestone: Q2 2020 During the planning period, meter procurement requirements will be finalized, and procurement schedules established for needed meter stock.	Planning and procurement of required AMI meter stock must begin well ahead of the actual meter installation. Liberty-Empire will work with its meter manufacturer to anticipate the meter procurement and delivery requirements so as to provide the necessary orderly support of the meter exchange process. This work involves the, meter exchange processes, and meter programming.
Meter Installation Period	Start Milestone: Q2 2020 Finish Milestone: Q2 2021 Phased behind network deployment to allow for smooth transition from manual to network meter reads.	Liberty-Empire expects the complete meter installation period to last approximately 12-15 months. Liberty-Empire onboarded the meter installation contractors, which included customer contact and safety training. Then, Liberty-Empire project and IT staff, the meter manufacturer and the install contractor coordinated closely to ensure an orderly exchange of meters.
AMI System to Billing Integration	Milestone: Q3 2020	Complete the “flat file” transfer protocols needed to support the transfer of AMI meter

	Integrations must be in place, tested and secured prior to first meter deployment.	reading data to Liberty-Empire's current billing system.
Cut-over to AMI for Billing Support Purposes	Milestone: Q4 2020 Phased and rolling process, proceeding in stages as meters are deployed.	Utilizing a phased transition from manual meter reading, Liberty-Empire will cut-over the manual meter reading routes to AMI once the AMI system has achieved satisfactory read performance. Therefore, the number of meters transitioning from manual meter reading declines over this period as the number of AMI-support meters increases.
Transition to Operations	Completion Milestone: Q2 2021 Occurs in stages as network and meter operational performance is validated.	Liberty-Empire expects transition of responsibilities to a steady state mode once the system is installed and performance is verified and stable.
Customer Engagement Activities	A progressive set of activities that involves building awareness, gaining input, addressing stakeholder questions, and ultimately gaining acceptance for the wide-ranging improvements that will be ushered in with AMI. Begins ahead of actual field deployment activities.	Liberty-Empire will begin an informal process of engaging with customers concerning the AMI initiative beginning in 2019-2020 timeframe and ahead of the actual field deployment activities. Efforts continue throughout the AMI system lifecycle.

Direct Exhibit CCH-3: Customer Communication Materials

In addition to the materials below, the Company has information regarding smart meters available for customers on its website: <https://libertyutilities.com/smartmeters>.

<<Date>>

<First Last>

<Address>

<City, State Zip>

<123456789>

Dear Valued Customer,

We know that you count on us to provide you with safe and reliable energy. We are pleased to share with you that we are making improvements to our technology and our infrastructure to better meet your energy needs today and in the future. This includes replacing meters throughout our service areas with smart meters.

In the coming weeks, we will be in your neighborhood exchanging meters. Once the meters and technology infrastructure are fully installed and activated throughout our service area, you will have access to more timely information about your energy usage, giving you more control and the opportunity to take action more quickly to manage energy costs. In addition, we will be able to read meters and start or transfer service remotely and respond to outages faster, making your service more convenient and efficient. Please review the enclosed information to learn more about smart meters.

Here's what you can expect from the meter exchange:

- You do not need to be at your home or business for the meter exchange (most meters are located outdoors), but we will need access to your meter.
- Your account information and billing cycle will not change.
- There are no smart meter installation fees.
- You will experience a brief interruption in service when the new meter is installed.
- For a period of time after the meter is installed, we will continue to read the meter manually as we transition to the new technology.

Liberty is working with a contractor, Itron, to install the meters. The Itron technicians will drive vehicles with signage identifying them as a Liberty contractor. The technicians will also carry identification. When they arrive at your home or business, they will knock to notify you that they are present and will be exchanging your meter. They will show their Liberty contractor identification. If you are not home or available, they will leave a door hanger letting you know that your meter was replaced. **If there is any reason they cannot exchange your meter, they will leave a door hanger that notes the reason and provides a phone number for you to call to schedule an appointment to have your meter exchanged. Please call this phone number as soon as possible.**

If you have questions or concerns, please call our Smart Meter Information Center at 833-971-1864, 8 a.m. to 7 p.m., Monday through Friday. You can find additional information and an installation map and timeline at www.libertyutilities.com/smartmeters.

Thank you in advance for your patience and support as we improve our energy grid and distribution systems to better serve you today and in the future.

Sincerely,
Liberty

As part of our improvements to our system and infrastructure, we will replace the electric meter located at each of the service addresses listed below. If you have any questions, please contact our Smart Meter Information Center at 833-971-1864, 8 a.m. to 7 p.m., Monday through Friday.

Service Address	Meter Number



**Smarter Meter.
Better Service!**







Liberty is Installing Smart Meters!

Beginning in 2020, we're replacing meters throughout our service areas with smart meters.* Smart meters are digital meters that allow for secure and automatic two-way communication. The equipment and technology, once fully installed and activated, will enable customers to access near real-time information about their usage, giving them more control and the opportunity to take action more quickly to manage costs.

*Dates may vary as installation progresses. Watch www.libertyutilities.com/smartmeters for updated installment schedules.




Meeting Your Needs Today and Tomorrow


By December 2019, there were more than 98 million smart meters installed across the United States.** Liberty is pleased to join utilities across the country in implementing this technology to improve our customers' experience, reduce costs through efficiency, protect our environment through lower emissions, and strengthen our electric, water, and natural gas distribution networks for safe and reliable service today and in the future.

**Source: The Edison Foundation, Institute for Electric Innovation


For more information, visit www.libertyutilities.com/smartmeters.



What to Expect During Installation




- Installation began in June of 2020.
- We will install or upgrade meters by geographic regions to ensure the transition is efficient and seamless. A map and schedule is available at www.libertyutilities.com/smartmeters.
- Customers will receive a letter with additional details approximately four weeks before the installer arrives to change the meter at their home or business. This letter will include a phone number to call for specific questions or to schedule an installation time if you prefer.
- Customers do not need to be home during the meter exchange. In most cases, there will only be a brief interruption in service lasting just a few minutes. Installers will leave behind a door hanger with additional details regarding the work that was conducted.
- Installers will drive vehicles with signage identifying them as a Liberty contractor. Installers will also carry identification.



Improving Your Customer Experience

Once our smart meter project is completed within a service region and the technology is fully activated, customers will enjoy numerous benefits:


- Meter readings will be automated. This means few to no estimated bills.
- Automated meter readings provide cost savings with fewer service calls and service trucks on the road. This also reduces vehicle emissions, protecting the environment.
- Starting or stopping service will be done more quickly and efficiently.
- Customers can better track and manage usage throughout the month with near real-time usage data provided through a simple, user-friendly website portal.
- Smart meter information helps our service teams troubleshoot and resolve problems with equipment or services and provides timely outage and safety alerts. This helps customers by reducing the need for them to call to report issues or outages.
- Smart meters help to modernize the energy grid and our distribution systems. This helps to improve reliability and service restoration when an outage or issue occurs.
- Smart meters also help our utilities plan for the future by providing precise analysis to help us design pricing plans and service options that match customer needs and energy and water use.



Keeping Your Information Safe and Secure

Liberty remains committed to safeguarding customer privacy.

- Smart meters do not transmit personally identifiable information such as names or account numbers. The information that is transmitted is done so over secure networks.
- Smart meter data is considered confidential and is protected by the same rigorous privacy and security safeguards that we use to protect other account information. Liberty will meet legal and regulatory standards and industry best practices, including ongoing security testing.



For more information, visit www.libertyutilities.com/smartmeters.





Smarter Meter. Better Service!

Liberty visited today to install a new smart meter.

We were able to successfully replace the meter. There's nothing you need to do. To learn more about smart meters and future benefits, see the back of this card.

We're sorry we missed you. We were unable to install the new smart meter for the following reason:

- Locked Gate
- Animal in Yard
- Blocked Meter
- Other _____

Please call to schedule an appointment for your meter upgrade:

Smart Meter Information Center
833-971-1864 (toll free)
 8 a.m. – 7 p.m., Monday – Friday



Learn more about smart meters and future benefits on the back of this card.



Smart Meters Explained

While it doesn't look much different than your current meter, a smart meter is digital and allows for secure and automatic two-way communication.

Future Smart Meter Benefits

Once the equipment and technology are fully installed and activated throughout our service area, customer benefits will include:





- Information about your usage in near real-time to help you better manage costs
- Automated meter readings resulting in fewer estimated bills and fewer service trucks on the road, lowering costs and helping the environment by reducing vehicle emissions
- Automated service starts and stops when you move for quicker, more efficient service
- Faster service restoration times when there is an outage

Keeping Your Information Safe & Secure


Liberty remains committed to safeguarding customer privacy. Smart meter data is protected by the same rigorous privacy and security safeguards that we use to protect other account information. Smart meters do not transmit personally identifiable information such as names or account numbers, and the information that is transmitted is done so over secure networks.




For more information, visit
www.libertyutilities.com/smartmeters
or call our Smart Meter Information Center at 833-971-1864

 **Liberty Utilities Central**
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Liberty Utilities is installing smart meters in your neighborhood soon. Click to learn more about how they work, the benefits, and what to expect during installation.

 Liberty
**Smarter Meter.
Better Service!**



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Liberty Utilities
Beginning in 2020, we're replaci... [LEARN MORE](#)

CERTIFICATION

The undersigned, Chad Hook, deposes and states that he is the Regional Director, Operations Strategy, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and accurate to the best of his information, knowledge and belief after reasonable inquiry.

/s/ Chad C. Hook

Chad C. Hook