**Before the Public Service Commission
of the State of Missouri**

Direct Testimony

of

Colin Penny

on behalf of

The Empire District Electric Company d/b/a Liberty

November 6, 2024

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FOR THE DIRECT TESTIMONY OF COLIN PENNY
THE EMPIRE DISTRICT ELECTRIC COMPANY D/B/A LIBERTY
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2024-0261

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1   **I.   INTRODUCTION**

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

3   A.   My name is Colin Penny. My business address is 354 Davis Road, Suite 100, Oakville,

4   Ontario, LJ6 2X1.

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

6   A.   I am employed by Liberty Utilities (Canada) Corp. as Chief Information Officer.

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

8   A.   I am testifying on behalf of The Empire District Electric Company d/b/a Liberty

9   ("Empire" or "Company").

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

11 A.   I have worked in Information Technology for the past twenty-eight years in various

12   capacities. Early in my career I built and delivered technology solutions within the

13   utilities sector in North America while working for Andersen Consulting (now

14   Accenture) and Black & Veatch. Prior to joining Liberty Utilities, I worked at Hydro

15   One where I held multiple roles, including Senior Vice President Technology & Chief

16   Information Officer. I joined Liberty Utilities (Canada) Corp. in 2019 as Vice

17   President, IT Transformation, became Executive Vice President, IT and Digital

18   Transformation in 2021, and in March 2024, was appointed Chief Information

19   Officer. I hold a Bachelor's Degree, Electrical Engineering from Queen's University

20   in Canada.

1   **Q.**   **Have you previously testified before the Missouri Public Service Commission**

2   **("Commission") or any other regulatory agency?**

3   A.   Yes, I testified before this Commission in Case No. WR-2024-0104.

4   **Q.**   **What is the purpose of your direct testimony in this proceeding?**

5   A.   I describe our recent enterprise-wide implementation of a modern technology platform

6   called Customer First, which replaced a variety of legacy customer information systems

7   as well as several other technology systems. I also discuss the Customer First costs

8   and deployment. Finally, I describe a new text messaging service that will soon be

9   available for customers.

10   **II.**   **<u>CUSTOMER FIRST</u>**

11   **Q.**   **Please present a graphic summarizing the significant components of Customer**

12   **First.**

13   A.   Figure 1 below illustrates the six major components of Customer First.

14   **Figure 1**

15

1   Q.   **Please explain Customer First.**

2   A.   Customer First provides a series of business transformation and integrated enterprise-

3   wide software programs, processes and upgrades that are critically necessary for the

4   Company to continue providing safe and reliable electric services to customers in

5   today's ever-changing world. The fundamental driving force behind the Customer First

6   solution is the common problem that many utilities have faced -- operating with a

7   variety of legacy systems and business processes that are outdated, generally obsolete,

8   lack support and require substantial manual work arounds. These outdated systems

9   expose utilities and customers to substantial operational, business and cybersecurity

10   risks. It simply is not appropriate for utilities to operate in that setting.

11   When faced with the problem of replacing outdated customer, financial and

12   work management information systems there were two choices: (1) develop local

13   applications resulting in different processes and solutions for the utilities across the

14   enterprise, or (2) implement a fully integrated solution using the same programs,

15   software and processes for the enterprise.

16   Under these circumstances, the Customer First enterprise solution was not only

17   the best and most beneficial choice, but it was the clear logical choice. Continued use

18   of localized applications simply could not address the gaps related to information

19   consolidation, process standardization, and data visibility across the enterprise.

20   Continued use of those localized solutions also requires separate and manual

21   implementation and support, resulting in significant inefficiencies across the enterprise.

22   By leveraging the scale of the entire Liberty enterprise, implementing Customer First

23   will result in benefits to the Company and its customers through integrated and current

24   customer, financial, and work management systems, in turn resulting in better and more

1   efficient utility service with substantially less risk. Those qualitative and operational

2   benefits were a key driving force behind the implementation of Customer First for the

3   enterprise, including Empire.

4   In evaluating its options, we considered whether an enterprise solution was

5   preferable to the continued use of disparate localized solutions. An internal review was

6   conducted, which identified the need to address several core, on-premises based

7   systems to meet current industry standards and to accommodate future requirements,

8   including the needs and desires of an increasingly digital customer base. Consideration

9   was given to several options to remedy the gaps identified in the disparate systems,

10   including sustaining them, developing localized solutions to replace them, and

11   developing a single, enterprise-wide solution.

12   That analysis also demonstrated that continued use of the legacy systems cannot

13   solve the numerous risks and problems associated with multiple databases, manual

14   patches, and workarounds. Additionally, it is increasingly difficult to find employees

15   skilled in these existing legacy systems, as new IT, finance and accounting

16   professionals no longer learn the outdated programming necessary to support the legacy

17   systems. The analysis revolved around determining the best practices for current and

18   future operations and confirmed that the continued use of antiquated, obsolete, outdated

19   and unsupported systems is neither reasonable nor prudent.   As a practical matter, the

20   limitations discussed above cannot be remedied with modifications, updates or patches

21   to the existing legacy systems, and continued investment in these technologies is not

22   practical or sustainable. Based on careful consideration a reasonable and prudent

23   decision was made to implement Customer First.

1 **Q.** **What goal did Customer First accomplish?**

2 A. The finance and accounting system used by Empire had been in place for more than 11

3 years and required dedicated internal resources and external consultants to address

4 ongoing system performance issues. These issues ranged from system failures, reliance

5 on spreadsheets and manual labor workarounds. As an enterprise, continuing to

6 maintain finance and accounting information in multiple systems, spreadsheets and

7 applications with manual workarounds presents risk for inconsistencies and delays in

8 the financial closing and reporting process. Continued use of obsolete systems with

9 significant manual workarounds was not a long-term solution and presented auditing,

10 cybersecurity and administrative control risks that simply are not appropriate.

11 By contrast, the Customer First enterprise resource planning ("ERP") solution

12 consists of a suite of applications containing multiple, integrated modules that link

13 business processes across functional areas, such as Customer Care, Billing, Human

14 Resources, Supply Chain, Finance and Accounting, Work Management, and Asset

15 Management. This integrated solution replaced separate ERP systems across the

16 enterprise and reduces monthly, quarterly, and annual financial closing cycles via

17 process automation and system standardization across utilities. Customer First also

18 provides a reduced risk of errors from disparate systems and manual workarounds;

19 more efficient vendor invoicing without current manual vendor set-up and payment;

20 better business and associated analytics to support sound decision-making; streamlined

21 employee expense submission, approval, payment, and auditing; and, finally, improved

22 planning, budgeting, forecasting, financial and regulatory reporting.

23 Empire's legacy Customer Information System ("CIS") provided limited digital

24 channels for customer contact and limited self-service capability features. Moreover,

1   the legacy CIS required customizations to support rate design, bill print and new billing

2   calculation requirements. Customer First replaced Empire's legacy CIS with a suite of

3   services to serve customers. The new CIS provides customer service representatives

4   access to a holistic view of the customer via real-time system consolidation of customer

5   records.

6   For example, after the initial transition period the new self-service capabilities

7   and communication channels are expected to improve customer autonomy, reducing

8   call center volume. Through the new My Account platform, customers will be able to

9   pay bills, better understand their usage data, subscribe to specific notifications, and

10   report issues with their service. When customer inquiries arise, the Customer Care

11   department will have more customer information (e.g. daily meter read histories) to

12   address them.   With AMI meter data and improved asset and work management

13   systems, field workers will be able to more quickly identify and resolve customer work

14   orders. Customers will also benefit from simpler, more convenient, and more efficient

15   ways for customer engagement, and seamless access to data across devices and

16   platforms, which can aid Customer Service Representatives ("CSRs") in customer

17   communications.

18   The ERP solution and the Ariba system which support all activities related to

19   procuring goods and services through paying for them (Procure to Pay) enable

20   automated purchase order processes, supplier invoice routing, and approval processes;

21   volume discounts with vendors through consolidation of purchasing and better analysis

22   of spending; reduced procurement engineering hours through improved use of standard

23   specifications and equivalencies; reduced inventory levels as a result of better inventory

24   tracking and work management practices (enabled by integrations with Mobile

1 Workforce Management ("MWM") and Enterprise Asset Management ("EAM")

2 systems.

3 The Enterprise EAM solution and the Network Design and Operations solution

4 enables the System Planning and Operations team to work more effectively through

5 better control of preventative maintenance and transparent access to information; better

6 resource utilization and prioritization through improved financial management, control

7 of enterprise-wide investments, and optimization of strategic resources; streamlining

8 of maintenance activities and consolidation of critical tasks; more accurate information

9 on the location and potential cause of outages and other system events; and reduced

10 manual interventions, duplicate data entries, and erroneous information through use of

11 auto-correcting mobile field devices linked to the asset management system.

12 The Employee Central solution from Customer First provides employee

13 lifecycle automation that simplify and accelerate HR transactional work done by

14 managers and employees; reduced hiring time by improving workflow, reducing

15 manual processes, and enabling better collaboration during the hiring process;

16 improved collection, reporting, and analysis of diversity and inclusion data; and

17 automated reporting and analytics capabilities, which will reduce time spent extracting,

18 compiling, analyzing, and distributing HR data.

19 **Q. Please describe how Customer First incorporates customer needs and**

20 **expectations throughout its design and implementation.**

21 A. Customer First is a redesign of the approach to deliver services to our customers, as

22 well as how it manages data and work processes. The chosen software solution is a

23 leading enterprise resource planning software provided by SAP. The SAP software is

24 an industry-leading system used by large companies, including utilities, all over the

1   world. In addition to the software implementation, our transformation effort is

2   supported by a substantial upgrade in network operations and work management

3   practices. The selection process was based on a comprehensive assessment of customer

4   and employee needs against the capabilities of the software. To implement the system,

5   we hired industry experts in deploying SAP and paired them with teams of experienced

6   company employees to adapt the system to fit local preferences and requirements. As

7   the design, configuration, testing, and implementation of the system was defined,

8   decisions on how the system would work were incorporated from research in customer

9   and industry practices, regulatory requirements, and procedures to help streamline

10   work for our employees and make information more accessible for our customers. The

11   design contemplated how information is delivered to our customers in a manner that

12   helps them understand and manage their energy usage. The system was also built with

13   the capacity to adapt to additional innovative programs and software enhancements as

14   those become available to our customers. Furthermore, Customer First reduces data

15   security risks by providing industry leading security frameworks and best practices

16   throughout the design, build, and deployment of the solutions and business process. To

17   help ensure industry leading practices were followed, we leveraged industry partners

18   like IBM in designing our data security protocols, data storage/cloud security options

19   and enhanced investments in cyber security. By sharing these investments across the

20   enterprise, the cost of these improvements and the efforts to deploy these are shared

21   proportionally and consistently, rather than each subsidiary taking their own approach.

1   III.   **CUSTOMER FIRST DEPLOYMENT**

2   **Q.   When was Customer First deployed?**

3   A.   Our enterprise-wide deployment of the Customer Care features of Customer First began

4   in 2021, with precursor infrastructure and software setup activities and deployment of

5   the first phases. Customer First Foundations, which included SAP, was deployed for

6   Empire in April 2024. The precursor infrastructure and system installation dates for

7   other parts of the Customer First project are shown below. These were necessary

8   investments to prepare the enterprise, including Empire, for the implementation of

9   SAP.

Project	In-Service Date (asset transferred to utility)
Employee Central	Sep 2021
Procure-to-pay	Dec 2021
eCustomer / Kubra	Dec 2021
GIS	Mar 2022

10   **Q.   Please outline the capital investment associated with the Customer First project.**

11   A.   We forecast $544 million in enterprise-wide capital expenditures for Customer First,

12   of which, approximately $145.6 million is Empire's Missouri electric operations'

13   allocated share.

14   **Q.   In addition to the capital expenditures, are there recurring annual operating and**

15   **maintenance ("O&M") costs related to the Customer First project?**

16   A.   Yes, all systems require ongoing support, maintenance, and upgrades to keep them

17   performing at optimal levels. Customer First is no exception. On an annual basis,

18   Empire will receive its allocated share of O&M expenses related to Customer First,

19   which will include, but is not limited to, annual support fees, software maintenance,

20   hosting, and managed services. The Company's normalized O&M costs for its

21   Missouri electric operations are approximately $5,165,203 per year. These annual

1   O&M costs will increase with inflation, and there will be continued ongoing costs

2   through 2042 during the project's 20-year planned life. For further discussion of

3   Customer First O&M expenses included within the Company's proposed cost of

4   service, please refer to the direct testimony of Charlotte T. Emery.

5   **IV.   ENHANCED TEXT MESSAGING**

6   **Q.   Has the Company identified an additional program for customers?**

7   A.   Yes, in conjunction with the Customer First go-live, in April 2024, the Company will

8   be able to deploy a text messaging system to alert customers about any electric

9   emergencies or other important events about their electric service. The text messaging

10   service Empire has engaged is provided by a third-party company, Onsolve, which

11   provides similar alerts for other utilities and municipalities.

12   **Q.   What is the estimated cost to implement this service?**

13   A.   It is anticipated the total capital cost to implement this service will be approximately

14   $307,975 for Empire's Missouri electric operations. The annual operating costs for

15   2025-2027 are estimated at $0.50 per customer per year, or approximately $79,539 at

16   the Missouri jurisdictional level.   The first-year operating costs at the Missouri

17   jurisdictional level will be lower, estimated at $69,359, due to the program starting

18   mid-year.

19   **Q.   What are some of the benefits of this program?**

20   A.   Text messaging is a function found on most mobile phone devices and is easy,

21   customizable, automated, and trackable. This service allows Empire to alert customers

22   of issues with our electric distribution system quickly and easily. If the Company is

23   doing maintenance work, such as switching or line repairs, it can alert customers in

24   advance and during the work, minimizing the disruption to the customer. Additionally,

1   one feature of the service we are considering adding in the future is the ability for

2   stakeholders in the community who are not account holders to sign up for emergency

3   and service alerts. For example, people who live in a multifamily apartment building

4   that is served through an account paid by the property management company would

5   not normally receive alerts as they are not listed as account holders in Empire's system.

6   In addition, public safety officials could sign up for alerts affecting their local

7   community. Text messaging is an active and inexpensive communication channel

8   between the Company and our customers, and this feature will allow the Company to

9   communicate more effectively with its customers.

10 **Q.   Does this conclude your direct testimony at this time?**

11 A.   Yes.

VERIFICATION

I, Colin Penny, under penalty of perjury, on this 6th day of November, 2024, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Colin Penny