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ELECTRONIC FILING

Mr. Adam J. Teitzman, Commission Clerk Office of Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Docket 20240026-EI; Petition for Rate Increase by Tampa Electric Company

Dear Mr. Teitzman:

Attached for filing on behalf of Tampa Electric Company in the above-referenced docket is the Direct Testimony of Chris Heck and Exhibit No. CH-1.

Thank you for your assistance in connection with this matter.

(Document 9 of 32)

Sincerely,

J. Jeffry Wahlen

cc: All parties

JJW/ne Attachment



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20240026-EI IN RE: PETITION FOR RATE INCREASE BY TAMPA ELECTRIC COMPANY

PREPARED DIRECT TESTIMONY AND EXHIBIT

OF

CHRIS HECK

| 1 | | BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION |
|----|----|--|
| 2 | | PREPARED DIRECT TESTIMONY |
| 3 | | OF |
| 4 | | CHRIS HECK |
| 5 | | |
| 6 | Q. | Please state your name, address, occupation, and employer. |
| 7 | | |
| 8 | A. | My name is Chris Heck. My business address is 702 North |
| 9 | | Franklin Street, Tampa, Florida 33602. I am employed by |
| 10 | | Tampa Electric Company ("Tampa Electric" or the "company") |
| 11 | | as Vice President Information Technology ("IT") and Chief |
| 12 | | Information Officer. |
| 13 | | |
| 14 | Q. | Please describe your duties and responsibilities in that |
| 15 | | position. |
| 16 | | |
| 17 | A. | I am responsible for the company's IT leadership, vision, |
| 18 | | strategy, architecture, infrastructure, cybersecurity, and |
| 19 | | technology projects. I am also responsible for the |
| 20 | | operations and governance of data, technology systems, and |
| 21 | | procuring resources from third-party vendors. The goals of |
| 22 | | the IT department are to (1) ensure the competitiveness of |
| 23 | | the company's IT services; (2) establish cybersecurity |
| 24 | | protection measures for our business operations and |
| 25 | | customer data; and (3) manage the company's comprehensive |

business continuity plan for emergencies that could affect 1 its computing systems and operations. I report to the Chief 2 Executive Officer of Tampa Electric. 3 4 5 Q. Please provide а brief outline of your educational background and business experience. 6 7 Α. I graduated from Appalachian State University with a 8 degree in computer science and from 9 bachelor's The University of North Carolina Charlotte with a master's 10 11 degree in computer science. 12 I have thirty-nine years of experience in the energy 13 14 industry. I joined Tampa Electric in my current role in April 2023. Prior to joining Tampa Electric, I served as 15 16 the Chief Digital Officer for Emera Inc. ("Emera") and the Chief Information Officer for Duke Energy. 17 18 What are the purposes of your direct testimony? Q. 19 20 Α. The purposes of my direct testimony are to: (1) describe 21 22 the company's IΤ department, the IΤ resources and 23 applications Tampa Electric uses, and the company's 24 cybersecurity strategy; (2) explain the company's 25 continued progress in the IT area since its 2021 rate case;

(3) demonstrate that the IT rate base amounts and 1 and 2 operations and maintenance ("O&M") expense levels for the 3 2025 test year are reasonable and prudent. 4 5 Q. How does your direct testimony relate to the testimony of other Tampa Electric witnesses? 6 7 My direct testimony describes the company's information Α. 8 applications, including technology their supporting 9 hardware, that support the company's business functions. 10 11 Those applications are typically housed in either our data centers, or within a third-party cloud provider's data 12 My direct testimony covers costs to operate and 13 center. 14 maintain those applications. These applications support the activities described in the direct testimony of the 15 16 company's operational witnesses, including Tampa Electric witnesses Karen Sparkman, Carlos Aldazabal, Chip 17 Whitworth, and David Lukcic. My testimony describes capital 18 investments in technology projects that support more than 19 20 one company department, while capital projects that are sponsored solely by a specific department are described in 21 22 the direct testimony of the operational witnesses. 23

24 My direct testimony does not include operational technology 25 applications and their supporting hardware, which are

described in the direct testimony of Mr. Lukcic. 1 Mr. Lukcic's direct testimony also covers the technologies and 2 3 costs related to data strategy and data governance, for both OT and IT. My testimony covers cybersecurity defenses 4 5 for both IT and OT. 6 Have you prepared an exhibit to support your 7 Q. direct testimony? 8 9 Yes. Exhibit No. CH-1, entitled "Exhibit of Chris Heck," Α. 10 11 was prepared under my direction and supervision. The contents of my exhibit were derived from the business 12 records of the company and are true and correct to the best 13 14 of my information and belief. It consists of the following two documents: 15 16 List of Minimum Filing Requirement Document No. 1 17 Schedules Sponsored or Co-Sponsored by 18 Chris Heck 19 Information Technology Capital Expense 20 Document No. 2 Summary from 2022 - 2025. 21 22 23 Q. Are you sponsoring any sections of Tampa Electric's Minimum Filing Requirement ("MFR") Schedules? 24 25

| | 1 | |
|----|------|---|
| 1 | A. | Yes, I am sponsoring or co-sponsoring the MFR Schedules |
| 2 | | listed in Document No. 1 of my exhibit. |
| 3 | | |
| 4 | (1) | INFORMATION TECHNOLOGY OVERVIEW |
| 5 | IT D | EPARTMENT |
| 6 | Q. | What are Tampa Electric's major areas of strategic focus? |
| 7 | | |
| 8 | A. | As noted in the direct testimony of Tampa Electric witness |
| 9 | | Archie Collins, the company's goals are: (1) to carefully |
| 10 | | and prudently manage operating expenses and capital |
| 11 | | spending to meet growing and changing needs in our service |
| 12 | | area; (2) to continuously improve the safety, reliability, |
| 13 | | and resilience of our electric system; (3) to improve |
| 14 | | efficiency in all areas of our operations; and (4) to |
| 15 | | ensure that we can continue serving customers at all times |
| 16 | | regardless of weather conditions. The company's IT |
| 17 | | department plays a vital role in supporting these areas. |
| 18 | | |
| 19 | Q. | Please describe the company's IT department. |
| 20 | | |
| 21 | A. | Tampa Electric's IT department consists of 202 team |
| 22 | | members. The IT department will have approximately 202 team |
| 23 | | members on average in the projected 2025 test year. |
| 24 | | |
| 25 | | The IT department helps Tampa Electric achieve its goals |
| | | |

by providing several key services to the company's 1 2 functional areas. First, the department provides ongoing 3 enhancements, operations, and maintenance of IΤ applications for company's business areas, including 4 5 Energy Supply, Electric Delivery, Customer Experience, and Corporate (Finances, HR, Procurement, IT and Legal). 6 IT department provides the planning 7 Second, the and execution of large technology projects to meet 8 the strategic business objectives of those business areas. 9 Third, the IT department operates and provides support 10 11 services for the company's IT infrastructure (data centers, servers, personal computers, mobile devices), as well as 12 for systems in third party "cloud" data centers. Fourth, 13 14 the IT department plays a key role in protecting and safequarding critical infrastructure and sensitive data 15 16 from cyber threats to ensure the reliability and security of essential services. Fifth, the IT department provides 17 strategy, architecture, and governance to ensure its assets 18 (data, applications, infrastructure) and services work in 19 20 harmony to provide outstanding customer and employee experiences. 21 22

Q. Does Tampa Electric's IT department provide services to any affiliates?

23

24

25

| | I | |
|----|----|--|
| 1 | A. | Yes. Tampa Electric provides the same IT services to its |
| 2 | | affiliates Peoples Gas System, Inc. ("Peoples") and New |
| 3 | | Mexico Gas Company ("NMGC"), except the following: |
| 4 | | • Application development and support for applications |
| 5 | | specific to Peoples or NMGC; |
| 6 | | • IT project management for NMGC; and |
| 7 | | • Customer relationship management and billing (CRB) |
| 8 | | support for NMGC. |
| 9 | | |
| 10 | | All costs noted in this testimony are those charged to |
| 11 | | Tampa Electric, unless otherwise noted. |
| 12 | | |
| 13 | Q. | Peoples operated as a division of Tampa Electric from 1997 |
| 14 | | to December 2022, and became a separate corporation and |
| 15 | | affiliate of Tampa Electric on January 1, 2023. Did this |
| 16 | | corporate change impact the Tampa Electric IT department? |
| 17 | | |
| 18 | A. | Yes, it did. As a result of this change, Tampa Electric's |
| 19 | | IT department no longer provides application development |
| 20 | | and support services to Peoples for applications specific |
| 21 | | to their company alone. As part of this shift, 11 IT |
| 22 | | employees shifted from Tampa Electric to Peoples. |
| 23 | | |
| 24 | Q. | Does Emera provide any IT services to Tampa Electric? |
| 25 | | |
| | | |

| 1 | A. | Yes. Emera provides Tampa Electric with high-level IT and |
|----|------|---|
| 2 | | cybersecurity policy governance. Emera also monitors and |
| 3 | | validates that its affiliates have adequate technology |
| 4 | | plans and technology controls. For cybersecurity, Emera |
| 5 | | maintains a set of standards based on the National |
| 6 | | Institute of Standards and Technology's ("NIST") Cyber |
| 7 | | Security Framework ("CSF"). Emera's Audit Services |
| 8 | | department audits all Emera affiliates to ensure compliance |
| 9 | | with these requirements. Finally, Emera coordinates third |
| 10 | | party expert reviews to ensure that the affiliates maintain |
| 11 | | compliance with these standards. |
| 12 | | |
| 13 | IT S | UPPORT FOR FUNCTIONAL AREAS OF THE COMPANY |
| 14 | Q. | What major IT applications support customer experience |
| 15 | | activities? |
| 16 | | |
| 17 | A. | The core of the company's application support for customer |
| 18 | | experience activities is our Customer Relationship |
| 19 | | Management and Billing ("CRB") system, which became |
| 20 | | operational in 2017. The CRB system manages customer |
| 21 | | accounts, billing, payment, credit, and collection |
| 22 | | services. It also interfaces with other applications that |
| 23 | | collectively allow customers to contact the company by |
| 24 | | telephone, computer, and mobile devices and to interact |
| 25 | | with the CRB system without agent assistance. |

| | I | |
|----|----|---|
| 1 | Q. | What major IT applications support Electric Delivery |
| 2 | | activities? |
| 3 | | |
| 4 | A. | The IT department provides IT support services for Electric |
| 5 | | Delivery applications including the Energy Management |
| 6 | | System ("EMS"), Supervisory Control and Data Acquisition |
| 7 | | ("SCADA"), Advanced Distribution Management System |
| 8 | | ("ADMS"), Advanced Metering Infrastructure ("AMI"), |
| 9 | | Workforce Management Systems ("WMS"), Geographic |
| 10 | | Information System ("GIS"), and Street Light Vision |
| 11 | | ("SLV"). These applications are discussed in greater detail |
| 12 | | by Mr. Lukcic. |
| 13 | | |
| 14 | Q. | What major IT applications support the company's Energy |
| 15 | | Supply activities? |
| 16 | | |
| 17 | A. | The IT department provides IT support services for Energy |
| 18 | | Supply applications including Work & Asset Management, |
| 19 | | Lock-Out/Tag-Out ("LOTO"), Data Historian, Power Plant |
| 20 | | Controllers ("PPC"), and SCADA. Mr. Lukcic discusses these |
| 21 | | applications in further detail in his testimony. |
| 22 | | |
| 23 | Q. | What major IT applications support Tampa Electric's |
| 24 | | Corporate Functions (Finance, HR, Supply Chain, etc.)? |
| 25 | | |
| | | |

| | i i | |
|----|-----|---|
| 1 | Α. | The IT department manages the Enterprise Resource Planning |
| 2 | | ("ERP") system used by the Human Resources, Finance, and |
| 3 | | Procurement corporate functions at Tampa Electric, |
| 4 | | Peoples, and NMGC. These applications provide tools for |
| 5 | | accounting, financial planning and analysis, financial |
| 6 | | reporting, employee information, payroll, supply chain, |
| 7 | | inventory, and more. The IT department also supports a set |
| 8 | | of smaller applications for the companies, including |
| 9 | | collaboration and office productivity applications such as |
| 10 | | the Microsoft Office suite of tools, as well as data |
| 11 | | analytics and business intelligence application building |
| 12 | | tools. |
| 13 | | |
| 14 | Q. | Please describe the company's IT Infrastructure. |
| 15 | | |
| 16 | A. | Tampa Electric's IT Infrastructure is comprised of hardware |
| 17 | | including servers, networking equipment, personal |
| 18 | | computers, mobile devices, and other technologies. |
| 19 | | |
| 20 | | The IT Infrastructure also includes software and |
| 21 | | applications hosted in three company data centers and on |
| 22 | | remote servers operated by third party vendors. This |
| 23 | | arrangement provides resiliency and redundancy through |
| 24 | | geographic dispersion. This resiliency will be further |
| 25 | | improved when the company relocates its primary data center |

to our new Bearss Operating Center in northern Hillsborough 1 County in 2025. This project is discussed further in the 2 3 direct testimony of witness Mr. Aldazabal. 4 5 Q. Please describe the company's IT Operations Team. 6 The IT Operations Team and the company's outside IT vendors 7 Α. work to ensure that the company's IT Infrastructure 8 operates reliably 24 hours a day, 7 days a week. 9 10 11 Q. What major applications does the IT department use to provide IT services to Tampa Electric, to manage its IT 12 assets, and to automate its IT operations? 13 14 over a decade, Α. the ΙT department has 15 For used the 16 ServiceOne application to provide IT products and services online to employees throughout Tampa Electric. This 17 application allows the company to (1) run the IT Service 18 Desk; (2) manage IT trouble and request tickets; (3) 19 20 automate IT processes; (4) inventory and manage IT assets; and (5) automate IT processes and approvals. 21 22 23 CYBERSECURITY AND COMPLIANCE 24 Ο. What cybersecurity threats and concerns influence the 25 delivery of IT services?

| 1 | A. | As the global economy becomes increasingly dependent on |
|----|----|--|
| 2 | | cyber resources, corporations like Tampa Electric are |
| 3 | | increasingly being targeted by cyberterrorists and |
| 4 | | cybercriminals. The most advanced attacks come from state- |
| 5 | | sponsored actors targeting American critical energy |
| 6 | | infrastructure, while the most frequent attacks come from |
| 7 | | profit motivated ransomware gangs. Our customers are also |
| 8 | | concerned about data privacy and expect that their service |
| 9 | | will not be disrupted by a cybersecurity event. |
| 10 | | |
| 11 | Q. | How has the company addressed these threats and concerns? |
| 12 | | |
| 13 | A. | Tampa Electric takes cybersecurity threats and privacy |
| 14 | | concerns very seriously. The company has a comprehensive |
| 15 | | cybersecurity program to address these threats, including |
| 16 | | a dedicated cybersecurity team of 18 full time employees. |
| 17 | | These team members are responsible for: |
| 18 | | • Identification of cyber risks |
| 19 | | • Assessment of cyber risks, including their potential |
| 20 | | consequences and their likelihood of occurrence |
| 21 | | • Establishment of an order of priority for addressing |
| 22 | | identified risks |
| 23 | | • Implementation of these prioritized actions |
| 24 | | • Involving the company's functional areas in decision |
| 25 | | making related to cybersecurity |
| | | |

| 1 | • Informing internal stakeholders of cyber risk |
|----|---|
| 2 | management status |
| 3 | • Monitoring of the effectiveness of cyber risk treatment |
| 4 | • Monitoring and revising the cyber risk and cyber risk |
| 5 | management process regularly |
| 6 | • Collection of information to understand and improve |
| 7 | Tampa Electric's cyber risk management approach |
| 8 | |
| 9 | In completing these tasks, the company's cybersecurity |
| 10 | team members follow national and international |
| 11 | cybersecurity best practices and standards including the |
| 12 | NIST CSF; NIST Special Publication 800-53 Security and |
| 13 | Privacy Controls for Information Systems and |
| 14 | Organizations; NIST SP 800-171 Protecting Controlled |
| 15 | Unclassified Information in Nonfederal Systems and |
| 16 | Organizations; NIST SP 800-181 Workforce Framework for |
| 17 | Cybersecurity; MITRE Adversarial Tactics, Techniques, and |
| 18 | Common Knowledge (ATT&CK); and International Organization |
| 19 | for Standardization/ International Electrotechnical |
| 20 | Commission 27000 series (ISO/IEC 27000) family of |
| 21 | standards such as ISO/IEC 27001 Information Security |
| 22 | Management Systems. |
| 23 | |

24Tampa Electric also uses a Managed Security Service25Provider ("MSSP") that provides 24/7 system monitoring,

| 1 | | including proactive alerts and responses for |
|----|----|--|
| 2 | | cybersecurity threats. |
| 3 | | |
| 4 | Q. | Are there any cybersecurity-related laws, regulations, or |
| 5 | | standards that impose requirements on Tampa Electric's |
| 6 | | operations? |
| 7 | | |
| 8 | A. | Yes. The company is subject to many standards and |
| 9 | | regulations addressing cybersecurity risks, such as: |
| 10 | | • The Sarbanes-Oxley Act ("SOX") |
| 11 | | • North American Reliability Council ("NERC") Critical |
| 12 | | Infrastructure Protection Standards ("CIP") |
| 13 | | • NERC requirements for use of third-party solutions for |
| 14 | | the NERC Bulk Electric Cyber System Information |
| 15 | | • Payment Card Industry Data Security Standard ("PCI DSS") |
| 16 | | • Health Insurance Portability and Accountability Act |
| 17 | | ("HIPAA") |
| 18 | | • Defense Federal Acquisition Regulation Supplement |
| 19 | | ("DFARS") |
| 20 | | • Securities and Exchange Commission Rules on |
| 21 | | Cybersecurity Risk Management, Strategy, Governance and |
| 22 | | Incident Disclosure by Public Companies |
| 23 | | • The Cyber Incident Reporting for Critical Infrastructure |
| 24 | | Act of 2022 |
| 25 | | • Federal Energy Regulatory Commission regulations on |
| | | |

| 1 | | supply chain risk management |
|--|-----|---|
| 2 | | • Updated state and federal privacy laws |
| 3 | | • Executive order 14028: Improving the Nation's |
| 4 | | Cybersecurity |
| 5 | | |
| 6 | Q. | Does Tampa Electric's cybersecurity program comply with |
| 7 | | these requirements? |
| 8 | | |
| 9 | A. | Yes. Tampa Electric's cybersecurity program not only meets |
| 10 | | the minimum requirements of these rules and regulations, |
| 11 | | but in many instances goes beyond them. |
| 12 | | |
| 13 | (2) | PROGRESS SINCE TAMPA ELECTRIC'S LAST BASE RATE CASE |
| 14 | Q. | What changes has the company made to its major IT |
| 15 | | applications that support customer experience activities |
| | | |
| 16 | | since its 2021 rate case? |
| 16 17 | | since its 2021 rate case? |
| 16 17 18 | A. | since its 2021 rate case? Tampa Electric made several changes to the major IT |
| 16 17 18 19 | A. | since its 2021 rate case? Tampa Electric made several changes to the major IT applications that support the Customer Experience |
| 16 17 18 19 20 | Α. | <pre>since its 2021 rate case? Tampa Electric made several changes to the major IT applications that support the Customer Experience Department, including:</pre> |
| 16 17 18 19 20 21 | Α. | <pre>since its 2021 rate case? Tampa Electric made several changes to the major IT applications that support the Customer Experience Department, including: • Upgrades to the company's Interactive Voice response</pre> |
| 16 17 18 19 20 21 22 | Α. | <pre>since its 2021 rate case? Tampa Electric made several changes to the major IT applications that support the Customer Experience Department, including: • Upgrades to the company's Interactive Voice response software, which allows customers to obtain service over</pre> |
| 16 17 18 19 20 21 22 23 | Α. | <pre>since its 2021 rate case? Tampa Electric made several changes to the major IT applications that support the Customer Experience Department, including: • Upgrades to the company's Interactive Voice response software, which allows customers to obtain service over the phone without speaking to a customer service</pre> |
| 16 17 18 19 20 21 22 23 24 | Α. | <pre>since its 2021 rate case? Tampa Electric made several changes to the major IT applications that support the Customer Experience Department, including: • Upgrades to the company's Interactive Voice response software, which allows customers to obtain service over the phone without speaking to a customer service professional.</pre> |
| 16 17 18 19 20 21 22 23 24 25 | Α. | since its 2021 rate case? Tampa Electric made several changes to the major IT applications that support the Customer Experience Department, including: Upgrades to the company's Interactive Voice response software, which allows customers to obtain service over the phone without speaking to a customer service professional. Updates to the online customer self-service portal to |

make the portal easier to use for mobile customers. 1 2 Implementation of a new interactive bill through the 3 customer portal. the notification Improvements to and preferences 4 5 management system, which allows customers to opt into notifications via email, text message, and phone calls. 6 Transitioned the company's outage map from hosting at 7 Tampa Electric's data centers to third party remote 8 servers to improve its resiliency, accessibility, and 9 reliability. 10 11 Moved the company's website hosting from Tampa Electric's data centers to third-party remote servers 12 with the capability to handle increased traffic during 13 14 periods of high demand, such as storms. 15 16 The changes to these systems are also described in the direct testimony of Ms. Sparkman. 17 18 What changes has the company made to IT Infrastructure and Q. 19 Operations since its last rate case? 20 21 Tampa Electric currently hosts its IT infrastructure on 22 Α. 23 on-site servers, but the company is transitioning to "cloud-based 24 hosting remote servers, or on infrastructure." This transition will benefit customers in 25

several ways. First, the new arrangement is cost-effective. 1 Second, it will enhance the resiliency of the company's IT 2 3 infrastructure by moving key systems to secure, geographically dispersed servers. Third, the cloud-based 4 5 infrastructure will enhance our ability to recover from cyberattacks because it will include data backups that are 6 protected from being edited, altered, or deleted. In the 7 event of a cyberattack, the company can use these backups 8 to restore the system. 9 10 11 Q. What changes has the company made to its major ΙT applications that support electric delivery activities 12 since its last rate case? 13 14 Tampa Electric implemented two upgrades to the ADMS in 2022 15 Α. 16 and 2023. These upgrades, which were supplied by the vendor, corrected several known issues and added new 17 functionality to support the company's AMI system. 18 19 20 The company also enhanced the existing Geographic ("GIS") to provide a website Information System 21 for 22 internal and external usage. This improved access to the grid reliability 23 system will help to increase and 24 resiliency. 25

changes has the company made to its major Q. IΤ 1 What 2 applications that support energy supply activities since 3 its last rate case? 4 Tampa Electric modified the Human Machine 5 Α. Since 2022, Interface (*i.e.*, the system operator's interface to the 6 equipment) to the SCADA systems in the company's solar 7 sites. These changes will create consistency across all 8 sites and enhance monitoring and control. These changes 9 will help to improve generating capacity and increase 10 11 resiliency. Tampa Electric has also completed configuration enhancements to Power Plant Controllers to 12 increase grid stability and reliability. 13 14 The company also updated the project management system to 15 16 reduce cyber security risk and increase reliability. We made enhancements to the LOTO system that allow operations 17 to better document maintenance tasks and create work orders 18 in a more efficient manner. The Planning & Risk system was 19 20 also upgraded to reduce cyber security risk and improve long-term forecasting capabilities for solar energy and 21 batteries. 22 23 24

Lastly, Tampa Electric made enhancements to the Resource Optimization application which improved its reliability

and added the capability to participate in the Southeast 1 Energy Exchange Market ("SEEM"), which maximizes the value 2 3 of available generation capacity. 4 5 Q. What changes has the company made to its major ΙT applications that support corporate functions activities 6 since its last rate case? 7 8 Since 2022, Tampa Electric has completed the following to 9 Α. support corporate function activities: 10 Upgraded the core of the SAP ERP system that supports 11 (1)customer, financial, Human Resources, 12 our and Procurement business processes. These included 13 14 critical buq fixes and stability improvements, enhancing system reliability, system performance and 15 16 addressing cyber security vulnerabilities. Upgraded the SAP Business Warehouse and Business (2) 17 Objects application to ensure a more streamlined and 18 optimized ERP data management and reporting system. 19 20 This led to more informed decision-making processes for corporate operations and planning. 21 (3) 22 Enhanced the process of automatically revoking system 23 access for former employees and contractors to 24 reinforce data security. Encrypted SAP data to safeguard sensitive information 25 (4)

| 1 | | | and demonstrate our commitment to data integrity and |
|--|--------------------------|--|--|
| 2 | | | compliance with privacy regulations. |
| 3 | | (5) | Upgraded our application integration software, which |
| 4 | | | improved integration between our SAP applications and |
| 5 | | | the company's various applications including |
| 6 | | | integration with the Advanced Distribution Management |
| 7 | | | System, and Customer Outage Map application. |
| 8 | | (6) | Migrated our internal websites from on-site servers |
| 9 | | | to remote, cloud-based servers to enhance resiliency, |
| 10 | | | accessibility, and capacity during high traffic times |
| 11 | | | such as storms. |
| 12 | | | |
| 13 | (3) | IT 2 | 025 RATE BASE AND O&M EXPENSES |
| 1 4 | | | |
| 14 | RATE | BASE | |
| 14 | RATE Q. | BASE How : | much capital did the company invest in the IT area for |
| 14 15 16 | <u>rate</u> Q. | BASE How : | much capital did the company invest in the IT area for period 2022 through 2024? |
| 14 15 16 17 | <u>RATE</u> Q. | BASE How : the | much capital did the company invest in the IT area for period 2022 through 2024? |
| 14 15 16 17 18 | <u>RATE</u> Q. A. | BASE How the The | much capital did the company invest in the IT area for period 2022 through 2024? company expects to invest \$74.5 million in the IT area |
| 14 15 16 17 18 19 | <u>RATE</u> Q. A. | BASE How : the : The for | much capital did the company invest in the IT area for period 2022 through 2024? company expects to invest \$74.5 million in the IT area the period 2022 through 2024. Document No. 2 of my |
| 14 15 16 17 18 19 20 | <u>RATE</u> Q. A. | BASE How : the The for exhi | much capital did the company invest in the IT area for period 2022 through 2024? company expects to invest \$74.5 million in the IT area the period 2022 through 2024. Document No. 2 of my bit shows the actual amount of IT capital spending by |
| 14 15 16 17 18 19 20 21 | <u>RATE</u> Q. A. | BASE How : the : The for exhi year | much capital did the company invest in the IT area for period 2022 through 2024? company expects to invest \$74.5 million in the IT area the period 2022 through 2024. Document No. 2 of my bit shows the actual amount of IT capital spending by for 2022 and 2023, and our forecasted amount for 2024, |
| 14 15 16 17 18 19 20 21 22 | <u>RATE</u> Q. A. | BASE How : the The for exhi year and | much capital did the company invest in the IT area for period 2022 through 2024? company expects to invest \$74.5 million in the IT area the period 2022 through 2024. Document No. 2 of my bit shows the actual amount of IT capital spending by for 2022 and 2023, and our forecasted amount for 2024, the major capital projects and project amounts by year. |
| 14 15 16 17 18 19 20 21 22 23 | <u>RATE</u> Q. A. | BASE How the The for exhi year and | much capital did the company invest in the IT area for period 2022 through 2024? company expects to invest \$74.5 million in the IT area the period 2022 through 2024. Document No. 2 of my bit shows the actual amount of IT capital spending by for 2022 and 2023, and our forecasted amount for 2024, the major capital projects and project amounts by year. |
| 14 15 16 17 18 19 20 21 22 23 24 | <u>RATE</u> Q. A. | BASE How : the : The for exhi year and : The | much capital did the company invest in the IT area for period 2022 through 2024? company expects to invest \$74.5 million in the IT area the period 2022 through 2024. Document No. 2 of my bit shows the actual amount of IT capital spending by for 2022 and 2023, and our forecasted amount for 2024, the major capital projects and project amounts by year. projects that make up the \$74.5 million are described |

ServiceNow. The company spent \$3.4 million on ServiceNow, 1 modern, state of the art, cloud-based ΙT Service 2 а 3 Management and IT Operations Management platform. 4 The move to ServiceNow will allow the IT department to 5 many of its processes, inventory 6 automate such as management of its IT assets; routing of service requests 7 and many of the tasks within those service requests; the 8 commissioning decommissioning and of assets; and 9 compliance and reporting functions. 10 11 The ServiceNow platform and the associated improvements to 12 the IT business processes will enable the IT department to 13 14 handle increasing workloads without increasing staff, improve IT system reliability, and improve cybersecurity 15 and regulatory controls. 16 17 The move to ServiceNow is a multi-year project with key 18 deliverables scheduled for 2024 and 2025. 19 20 IT Infrastructure Upgrades. The company spent \$34.0 million 21 22 for sustaining capital to replace/upgrade end of life data 23 center hardware and software including servers, network equipment, storage equipment, databases, 24 data and 25 operating systems. The Department also makes purchases

throughout each year to support new applications. 1 2 3 These investments ensure that the company's IΤ Infrastructure will remain reliable and is supported by 4 5 the providing vendors. 6 \$25.4 million 7 Cybersecurity. The company spent for cybersecurity. This investment included new and upgraded 8 tools 9 and processes to strengthen the company's cybersecurity protections and keep pace with the ever-10 11 increasing capabilities of cyber criminals. 12 NERC CIP Enhancements and Upgrades - The company spent \$2.2 13 14 million on projects required to keep our NERC CIP program up-to-date and effective. The NERC CIP program protects 15 16 Tampa Electric's most critical generation, transmission, distribution, and technology assets from cyber criminals. 17 These projects include the upgrade of current software used 18 for the management of intelligent devices located in 19 and distribution 20 transmission substations, which is required for NERC compliance. These projects also help the 21 22 company prepare for future changes to the standards while 23 providing Tampa Electric's customers protection against electrical services 24 interruption of caused by cybercriminals. 25

SAP Enterprise Resource Planning (ERP) and Customer System 1 Upgrades and Enhancements. The company spent \$3.4 million 2 3 on ERP and Customer System upgrades and enhancements. The SAP ERP and Customer Systems are a set of highly integrated 4 5 applications that provide corporate and customer functionality including accounting; financial 6 7 consolidation and reporting; financial analytics and planning; accounts payable/receivable; payroll; employee 8 information database; recruiting; supply chain and 9 customer information database; 10 inventory management; 11 customer billing; and customer service. These upgrades and enhancement projects keep our SAP ERP and Customer System 12 applications up to date and secure and ensure that they 13 14 retain support from SAP. This, in turn, will ensure that company's corporate business functions 15 the operate 16 smoothly, with accuracy, and in a timely manner.

Non-ERP Corporate Updates and Enhancements. The company 18 spent \$6.1 million to improve the applications for several 19 20 corporate functions and processes including contract document/records 21 management; management; employee 22 websites; employee collaboration and productivity; process 23 automation; project management; process controls; compliance; legal; real estate; and safety. These projects 24 25 ensured that our team members in these areas had the tools

17

necessary to work effectively, efficiently, and securely. 1 2 3 The implementation of these projects increased the productivity of corporate functions and allowed the labor 4 5 force to serve a growing workload without increases to employee count. 6 7 Q. How do these capital expenditures and the others shown on 8 Document No. 2 benefit the company's customers? 9 10 As described above, these projects allow the IT department 11 Α. to automate and improve its business processes, to ensure 12 the reliability and resiliency of the company's computing 13 14 systems, to improve its cybersecurity defenses, to ensure regulatorv compliance with existing and changing 15 standards, and to ensure that systems are well-maintained 16 and supported. This allows the company's corporate business 17 functions to operate securely, smoothly, with accuracy, 18 and in a timely manner so that the company provides 19 20 customers with the secure, resilient, and reliable products and services they expect. 21 22 23 Q. Are the IT capital expenditures described above and shown 24 on Document No. 2 reasonable and prudent? 25

| | I | |
|----|----|--|
| 1 | A. | Yes. All the expenditures shown on Document No. 2 were made |
| 2 | | after careful consideration of the company's IT needs, |
| 3 | | examination of available alternatives, and using the |
| 4 | | company's procurement practices, which are designed so we |
| 5 | | can purchase goods and services at the lowest reasonable |
| 6 | | cost. The projects shown on Document No. 2 enable the |
| 7 | | company to provide safe, reliable, resilient, and efficient |
| 8 | | electric service to customers; will be in service in our |
| 9 | | 2025 test year; and are prudent. |
| 10 | | |
| 11 | Q. | What amount does the company plan to spend on IT projects |
| 12 | | for the 2025 test year? |
| 13 | | |
| 14 | A. | The company plans to invest \$22.9 million in 2025. The |
| 15 | | projects that make up the \$22.9 million are described below |
| 16 | | and are also shown on Document No. 2 of my exhibit. |
| 17 | | |
| 18 | | ServiceNow. The company expects to spend \$0.4 million in |
| 19 | | 2025 on the ServiceNow project I previously described. |
| 20 | | |
| 21 | | IT Infrastructure Upgrades. The company expects to spend |
| 22 | | \$9.5 million in 2025 to replace or upgrade end of life data |
| 23 | | center hardware and software including servers, networking |
| 24 | | equipment, data storage equipment, databases, and |
| 25 | | operating systems. The IT Department also makes purchases |
| | | |

throughout the year to support new applications. 1 2 3 Investments ensure that the hardware and software used by Tampa Electric will continue to be reliable and retain 4 5 support from the providing vendors. This enables Tampa Electric to provide reliable products and services and 6 provide support to our customers. 7 8 Cybersecurity. The company expects to spend \$7.2 million 9 in 2025 for cybersecurity. This project will strengthen 10 11 the company's cybersecurity protections and keep pace with the ever-increasing capabilities of cyber criminals. 12 13 14 Additionally, the company will make changes to cyber required by security programs that are mandated 15 or 16 regulations and compliance standards. These improvements to the company's cybersecurity program enable the company 17 to continue to protect the confidentiality, integrity, and 18 availability of customer information and company services. 19 20 Tampa Electric is forecasting a need to increase 21 team 22 members in the cybersecurity area and expects to add two 23 additional team members in 2025. The new team members are needed to sustain the company's cybersecurity efforts and 24 25 to keep pace with changes in this area.

NERC CIP Enhancements and Upgrades. The company expects to 1 spend \$1.1 million in 2025 on our NERC CIP program. We are 2 3 not forecasting the need for additional team members in the IT department due to these projects or the changes to 4 5 the NERC CIP standards, beyond the two additions as described in 2025 Cybersecurity projects above. 6 7 SAP Enterprise Resource Planning (ERP) and Customer System 8 Upgrades and Enhancements. The company expects to spend 9 \$3.3 million on these projects in 2025. No labor increases 10 11 or decreases are forecasted as a result of these projects. 12 Non-ERP Corporate Updates and Enhancements. The company 13 14 expects to spend \$1.4 million for 2025 on these projects. 15 16 These projects include upgrades and enhancements to business applications that support key functions, 17 including safety, legal, regulatory, data governance, data 18 management, real estate, security, and compliance. These 19 20 improvements ensure applications are well supported by their providing vendors, are cyber 21 secure, and meet 22 business and compliance requirements. 23 0. Once IT projects are approved, what steps does the company 24 25 take to ensure that projects are "procured" at the lowest

reasonable cost? 1 2 3 Α. The IT Department follows a formal bidding process for the purchase of all ordinary goods and services as outlined in 4 5 company policies. This ensures that the company procures goods and services through an unbiased, consistent, and 6 objective procurement process that leads to the lowest 7 reasonable cost while maintaining necessary quality of 8 product and effectiveness of the project. The key elements 9 of the process are requesting formal and well-documented 10 bids from three or more vendors, a full review of bidders' 11 qualifications and information submitted, evaluating other 12 factors such as location and diversity considerations, and 13 14 ensuring proper level of approvals after а vendor is selected. 15 16 17 O&M EXPENSES What amount of IT department O&M expense is included in 18 Q. the projected 2025 test year and what major activities are 19 20 reflected in that expense amount? 21 Tampa Electric's IT department is forecasted to incur \$36.8 22 Α.

million of O&M attributed in the projected 2025 test year. Of this amount, (1) labor & fringe account for approximately \$17.0 million or 46 percent; (2) Outside

| | 1 | | | | | | | |
|----|----|--|--|--|--|--|--|--|
| 1 | | Services (primarily application managed services and | | | | | | |
| 2 | | temporary staffing support) accounts for approximately | | | | | | |
| 3 | | \$4.5 million or 12 percent; and (3) software and hardware | | | | | | |
| 4 | | application licensing and maintenance account for | | | | | | |
| 5 | | approximately \$11.9 million or 32 percent. The remaining | | | | | | |
| 6 | | \$3.4 million, or 9 percent, is comprised of items such as | | | | | | |
| 7 | | rent, facilities overhead, Emera allocations, and | | | | | | |
| 8 | | miscellaneous employee expenses and supplies. | | | | | | |
| 9 | | | | | | | | |
| 10 | Q. | How does the projected level of 2025 O&M expense compare | | | | | | |
| 11 | | to actual 2022 O&M expense? | | | | | | |
| 12 | | | | | | | | |
| 13 | A. | IT O&M expense for the 2025 test year has increased | | | | | | |
| 14 | | approximately \$3.6 million, or a 10.84 percent increase, | | | | | | |
| 15 | | compared to the actual 2022 O&M expense of \$33.2 million. | | | | | | |
| 16 | | | | | | | | |
| 17 | Q. | What is the percentage increase from 2020 actual O&M | | | | | | |
| 18 | | expense to forecasted 2025 O&M expense and how does that | | | | | | |
| 19 | | compare to the Commission's O&M benchmark? | | | | | | |
| 20 | | | | | | | | |
| 21 | A. | IT O&M expense in 2020 was \$26.1 million and, after | | | | | | |
| 22 | | applying the Commission's O&M A&G benchmark multiplier of | | | | | | |
| 23 | | 35 percent, this translates to \$35.2 million. The | | | | | | |
| 24 | | forecasted 2025 O&M expense of \$36.8 million is \$1.6 | | | | | | |
| 25 | | million, or 4.55 percent higher. The primary driver is | | | | | | |
| | | | | | | | | |

investments to enhance our overall cyber security posture 1 in response to increasing cyber threats and changes to 2 3 cybersecurity regulations. 4 5 Q. What major factors have contributed to the increase in O&M expenses since 2022? 6 7 The main reasons for the \$3.6 million increase are (1) Α. 8 approximately \$1.0 million for new cybersecurity related 9 tools; (2) approximately \$1.0 million increase in Microsoft 10 11 Enterprise Agreement costs; (3) approximately \$1.2 million for new technology licensing fees including ServiceNow, HR 12 Workforce Analytics, and Contractor Lifecycle Management; 13 14 (4) approximately \$0.6 million for IT infrastructure; and (5) approximately \$0.6 million for general inflation. These 15 16 increases were partially offset by an approximately \$0.8 million reduction in other cost elements, mainly outside 17 staffing costs. There were several other smaller offsetting 18 factors, including labor merit increases and IT management 19 staffing level reductions. 20 21 What steps has the company taken to reduce O&M expenses in 22 Q. 23 IT? 24 25 Α. IT has taken several steps to moderate and reduce O&M.

First, Tampa Electric secured pricing discounts on our 1 software and hardware licensing and maintenance fees by 2 3 entering into multi-year agreements. In addition to the discount, this also locks in current pricing and avoids 4 5 annual inflation escalators. As renewals approach, Tampa Electric evaluates whether software subscriptions can be 6 canceled if they are obsolete, redundant, or do not add 7 desired value. Second, the IT Department addressed labor 8 costs through reductions in management staffing levels and 9 hiring third parties with specific application expertise 10 11 to support certain applications (e.g., SAP expertise). Our workforce practices also include hiring of early career, 12 entry level employees, including the use of interns and 13 14 co-operative students for certain tasks. Third, the IT Department took to reduce outside service 15 steps 16 expenditures by securing credits and reimbursements for poor performance, discounts for early payments, 17 and reducing staffing assigned to project initiation 18 and management functions. 19

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21

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Q. Is this level of O&M expense reasonable and prudent?

A. Yes. The proposed increase in expenses for labor and
 outside services is reasonable and prudent given the
 evolving landscape of technology and utility services. The

| 1 | | projected level of O&M expense is necessary to continue |
|----|----|---|
| 2 | | the effective level of service the IT Department provides |
| 3 | | to Tampa Electric and its customers. |
| 4 | | |
| 5 | Q. | What was the employee count for IT in 2022, 2023 and 2024? |
| 6 | | |
| 7 | A. | The average employee count in IT was 200 in 2022, 196 in |
| 8 | | 2023 and 202 for 2024. |
| 9 | | |
| 10 | Q. | What is the projected employee count for IT in 2025? |
| 11 | | |
| 12 | A. | The average projected employee count in IT is 202 in 2025. |
| 13 | | |
| 14 | Q. | What factors are causing the need to increase employee |
| 15 | | count? |
| 16 | | |
| 17 | A. | Between 2022 and 2025, there was a shift of employees to |
| 18 | | other areas: 11 employees moved to Peoples and seven |
| 19 | | employees moved to the Operational Technology and Strategy |
| 20 | | department. During this period, there were three IT |
| 21 | | administration positions that retired and were not filled. |
| 22 | | These decreases were offset by an increase of 23 employees. |
| 23 | | The growth in employee count can be attributed to the |
| 24 | | following: nine employees to grow our cybersecurity team |
| 25 | | to meet the increasing complexity and volume of |
| | | |

cybersecurity threats to our company and the sensitive 1 2 customer and employee data and critical infrastructure, 3 seven employees to support growth in IT infrastructure scale and complexity, as well as an increase of seven 4 5 employees to support growing digitalization and new technologies deployed across our grid, generating plants, 6 and other operating facilities for the electric delivery 7 and energy supply functions. 8 9 What metrics did your team use to identify the need for 10 Q. 11 additional employees, when to add them, and how many to add? 12 13 14 Α. The company used cybersecurity metrics, including the number of vulnerabilities, changes in workload caused by 15 changes to standards and regulations, and the quantity and 16 complexity of cybersecurity threats, to identify the need 17 for additional employees. Other IT metrics include utility 18 benchmarks support levels for critical 19 peer and 20 applications and infrastructure. 21 Will adding employees in IT moderate the need to pay 22 Q. 23 overtime or reliance on outside service providers? 24 Yes. There is a reduction of approximately \$1.0 million in 25 Α.

outside services for staff augmentation for IT functions. 1 2 SUMMARY 3 Please summarize your direct testimony. 0. 4 5 Tampa Electric's IT Department supports all aspects of the Α. 6 company, through activities including the efficient and 7 effective maintenance and support of IT applications, the 8 delivery of IT projects that advance Tampa Electric's 9 business objectives, defense against cyber security risks, 10 11 and the delivery of data and analytics for effective Tampa Electric operations. The amounts the company spent for IT 12 projects since the 2021 rate case, and plans to spend 13 14 through 2025, are reasonable and prudent. Tampa Electric made, or will make, these investments to support safety, 15 16 reliability, resilience, improved operations, and customer experience. The company's 2025 test year capital and O&M 17 budgets for the IT Department are reasonable and prudent, 18 will enhance cybersecurity protection, deliver operating 19 20 efficiencies, enable our move to cloud-based solutions, enable useful features and functions, and enhance the 21 22 customer experience. 23 Does this conclude your direct testimony? 24 ο. 25

| 1 | A. | Yes. |
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TAMPA ELECTRIC COMPANY DOCKET NO. 20240026-EI FILED: 04/02/2024

EXHIBIT

OF

CHRIS HECK

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LIST OF MINIMUM FILING REQUIREMENT SCHEDULES

SPONSORED OR CO-SPONSORED BY CHRIS HECK

| MFR Schedule | Title |
|--------------|--|
| в-07 | Plant Balances By Account And Sub-Account |
| в-08 | Monthly Plant Balances Test Year - 13 Months |
| C-16 | Outside Professional Services |
| C-37 | O&M Benchmark Comparison By Function |
| C-38 | O&M Adjustments By Function |
| C-39 | Benchmark Year Recoverable O&M Expenses By |
| | Function |
| C-41 | O&M Benchmark Variance By Function |

Tampa Electric INFORMATION TECHONOLGY

| | 2022 | 2023 | 2024 | Total 2022-2024 | 2025 | Total 2022-2025 |
|--------------------|------------|------------|------------|-----------------|------------|-----------------|
| Total Capital | 19,651,679 | 28,361,444 | 26,535,374 | 74,548,497 | 22,930,933 | 97,479,430 |
| CLAUSE | - | - | - | - | - | - |
| AFUDC | - | - | - | - | - | - |
| Base Rate | 19,651,679 | 28,361,444 | 26,535,374 | 74,548,497 | 22,930,933 | 97,479,430 |
| Base Rate Projects | | | | | | |
| INFRASTRUCTURE | 10,999,341 | 13,105,766 | 9,881,000 | 33,986,107 | 9,496,768 | 43,482,875 |
| CYBER SECURITY | 6,065,997 | 9,576,946 | 9,787,000 | 25,429,943 | 7,182,605 | 32,612,548 |
| SAP ERP AND CRM | 530,410 | 1,711,792 | 1,151,000 | 3,393,203 | 3,367,560 | 6,760,763 |
| NON ERP CORPORATE | 2,038,512 | 2,286,807 | 1,808,374 | 6,133,693 | 1,381,600 | 7,515,293 |
| SERVICE NOW | 17,419 | 813,360 | 2,593,000 | 3,423,779 | 427,400 | 3,851,179 |
| NERC CIP | | 866,773 | 1,315,000 | 2,181,773 | 1,075,000 | 3,256,773 |
| TOTAL | 19,651,679 | 28,361,444 | 26,535,374 | - 74,548,497 | 22,930,933 | 97,479,430 |

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