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April 2, 2024

**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,

A handwritten signature in blue ink, appearing to read 'J. Jeffrey Wahlen', with a long horizontal flourish extending to the right.

J. Jeffrey 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

1 business continuity plan for emergencies that could affect  
2 its computing systems and operations. I report to the Chief  
3 Executive Officer of Tampa Electric.  
4

5 **Q.** Please provide a brief outline of your educational  
6 background and business experience.  
7

8 **A.** I graduated from Appalachian State University with a  
9 bachelor's degree in computer science and from The  
10 University of North Carolina Charlotte with a master's  
11 degree in computer science.  
12

13 I have thirty-nine years of experience in the energy  
14 industry. I joined Tampa Electric in my current role in  
15 April 2023. Prior to joining Tampa Electric, I served as  
16 the Chief Digital Officer for Emera Inc. ("Emera") and the  
17 Chief Information Officer for Duke Energy.  
18

19 **Q.** What are the purposes of your direct testimony?  
20

21 **A.** The purposes of my direct testimony are to: (1) describe  
22 the company's IT department, the IT 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;

1 and (3) demonstrate that the IT rate base amounts 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  
6 other Tampa Electric witnesses?  
7

8 **A.** My direct testimony describes the company's information  
9 technology applications, including their supporting  
10 hardware, that support the company's business functions.  
11 Those applications are typically housed in either our data  
12 centers, or within a third-party cloud provider's data  
13 center. My direct testimony covers costs to operate and  
14 maintain those applications. These applications support  
15 the activities described in the direct testimony of the  
16 company's operational witnesses, including Tampa Electric  
17 witnesses Karen Sparkman, Carlos Aldazabal, Chip  
18 Whitworth, and David Lukcic. My testimony describes capital  
19 investments in technology projects that support more than  
20 one company department, while capital projects that are  
21 sponsored solely by a specific department are described in  
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

1 described in the direct testimony of Mr. Lukcic. Mr.  
2 Lukcic's direct testimony also covers the technologies and  
3 costs related to data strategy and data governance, for  
4 both OT and IT. My testimony covers cybersecurity defenses  
5 for both IT and OT.  
6

7 **Q.** Have you prepared an exhibit to support your direct  
8 testimony?  
9

10 **A.** Yes. Exhibit No. CH-1, entitled "Exhibit of Chris Heck,"  
11 was prepared under my direction and supervision. The  
12 contents of my exhibit were derived from the business  
13 records of the company and are true and correct to the best  
14 of my information and belief. It consists of the following  
15 two documents:  
16

17 Document No. 1 List of Minimum Filing Requirement  
18 Schedules Sponsored or Co-Sponsored by  
19 Chris Heck

20 Document No. 2 Information Technology Capital Expense  
21 Summary from 2022 - 2025.  
22

23 **Q.** Are you sponsoring any sections of Tampa Electric's  
24 Minimum Filing Requirement ("MFR") Schedules?  
25

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 DEPARTMENT

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

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

22  
23 **Q.** Does Tampa Electric's IT department provide services to  
24 any affiliates?  
25

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 SUPPORT 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.

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

1 **A.** 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

1 to our new Bearss Operating Center in northern Hillsborough  
2 County in 2025. This project is discussed further in the  
3 direct testimony of witness Mr. Aldazabal.

4  
5 **Q.** Please describe the company's IT Operations Team.

6  
7 **A.** The IT Operations Team and the company's outside IT vendors  
8 work to ensure that the company's IT Infrastructure  
9 operates reliably 24 hours a day, 7 days a week.

10  
11 **Q.** What major applications does the IT department use to  
12 provide IT services to Tampa Electric, to manage its IT  
13 assets, and to automate its IT operations?

14  
15 **A.** For over a decade, the IT department has used the  
16 ServiceOne application to provide IT products and services  
17 online to employees throughout Tampa Electric. This  
18 application allows the company to (1) run the IT Service  
19 Desk; (2) manage IT trouble and request tickets; (3)  
20 automate IT processes; (4) inventory and manage IT assets;  
21 and (5) automate IT processes and approvals.

22  
23 CYBERSECURITY AND COMPLIANCE

24 **Q.** 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
- Assessment of cyber risks, including their potential  
19 consequences and their likelihood of occurrence
- Establishment of an order of priority for addressing  
20 identified risks
- Implementation of these prioritized actions
- Involving the company's functional areas in decision  
21 making related to cybersecurity

19

20

21

22

23

24

25

- 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

24 Tampa Electric also uses a Managed Security Service

25 Provider ("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?

17  
18 **A.** Tampa Electric made several changes to the major IT  
19 applications that support the Customer Experience  
20 Department, including:

- 21 • Upgrades to the company's Interactive Voice response
- 22 software, which allows customers to obtain service over
- 23 the phone without speaking to a customer service
- 24 professional.
- 25 • Updates to the online customer self-service portal to

1 make the portal easier to use for mobile customers.

- 2 • Implementation of a new interactive bill through the
- 3 customer portal.
- 4 • Improvements to the notification and preferences
- 5 management system, which allows customers to opt into
- 6 notifications via email, text message, and phone calls.
- 7 • Transitioned the company's outage map from hosting at
- 8 Tampa Electric's data centers to third party remote
- 9 servers to improve its resiliency, accessibility, and
- 10 reliability.
- 11 • Moved the company's website hosting from Tampa
- 12 Electric's data centers to third-party remote servers
- 13 with the capability to handle increased traffic during
- 14 periods of high demand, such as storms.

15  
16 The changes to these systems are also described in the  
17 direct testimony of Ms. Sparkman.

18  
19 **Q.** What changes has the company made to IT Infrastructure and  
20 Operations since its last rate case?

21  
22 **A.** Tampa Electric currently hosts its IT infrastructure on  
23 on-site servers, but the company is transitioning to  
24 hosting on remote servers, or "cloud-based  
25 infrastructure." This transition will benefit customers in

1 several ways. First, the new arrangement is cost-effective.  
2 Second, it will enhance the resiliency of the company's IT  
3 infrastructure by moving key systems to secure,  
4 geographically dispersed servers. Third, the cloud-based  
5 infrastructure will enhance our ability to recover from  
6 cyberattacks because it will include data backups that are  
7 protected from being edited, altered, or deleted. In the  
8 event of a cyberattack, the company can use these backups  
9 to restore the system.

10  
11 **Q.** What changes has the company made to its major IT  
12 applications that support electric delivery activities  
13 since its last rate case?

14  
15 **A.** Tampa Electric implemented two upgrades to the ADMS in 2022  
16 and 2023. These upgrades, which were supplied by the  
17 vendor, corrected several known issues and added new  
18 functionality to support the company's AMI system.

19  
20 The company also enhanced the existing Geographic  
21 Information System ("GIS") to provide a website for  
22 internal and external usage. This improved access to the  
23 system will help to increase grid reliability and  
24 resiliency.

25

1 Q. What changes has the company made to its major IT  
2 applications that support energy supply activities since  
3 its last rate case?  
4

5 A. Since 2022, Tampa Electric modified the Human Machine  
6 Interface (*i.e.*, the system operator's interface to the  
7 equipment) to the SCADA systems in the company's solar  
8 sites. These changes will create consistency across all  
9 sites and enhance monitoring and control. These changes  
10 will help to improve generating capacity and increase  
11 resiliency. Tampa Electric has also completed  
12 configuration enhancements to Power Plant Controllers to  
13 increase grid stability and reliability.  
14

15 The company also updated the project management system to  
16 reduce cyber security risk and increase reliability. We  
17 made enhancements to the LOTO system that allow operations  
18 to better document maintenance tasks and create work orders  
19 in a more efficient manner. The Planning & Risk system was  
20 also upgraded to reduce cyber security risk and improve  
21 long-term forecasting capabilities for solar energy and  
22 batteries.  
23

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

1 and added the capability to participate in the Southeast  
2 Energy Exchange Market ("SEEM"), which maximizes the value  
3 of available generation capacity.

4  
5 **Q.** What changes has the company made to its major IT  
6 applications that support corporate functions activities  
7 since its last rate case?

8  
9 **A.** Since 2022, Tampa Electric has completed the following to  
10 support corporate function activities:

11 (1) Upgraded the core of the SAP ERP system that supports  
12 our customer, financial, Human Resources, and  
13 Procurement business processes. These included  
14 critical bug fixes and stability improvements,  
15 enhancing system reliability, system performance and  
16 addressing cyber security vulnerabilities.

17 (2) Upgraded the SAP Business Warehouse and Business  
18 Objects application to ensure a more streamlined and  
19 optimized ERP data management and reporting system.  
20 This led to more informed decision-making processes  
21 for corporate operations and planning.

22 (3) Enhanced the process of automatically revoking system  
23 access for former employees and contractors to  
24 reinforce data security.

25 (4) Encrypted SAP data to safeguard sensitive information

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and demonstrate our commitment to data integrity and compliance with privacy regulations.

(5) Upgraded our application integration software, which improved integration between our SAP applications and the company's various applications including integration with the Advanced Distribution Management System, and Customer Outage Map application.

(6) Migrated our internal websites from on-site servers to remote, cloud-based servers to enhance resiliency, accessibility, and capacity during high traffic times such as storms.

**(3) IT 2025 RATE BASE AND O&M EXPENSES**

RATE BASE

**Q.** How much capital did the company invest in the IT area for the period 2022 through 2024?

**A.** The company expects to invest \$74.5 million in the IT area for the period 2022 through 2024. Document No. 2 of my exhibit shows the actual amount of IT capital spending by year for 2022 and 2023, and our forecasted amount for 2024, and the major capital projects and project amounts by year.

The projects that make up the \$74.5 million are described below.

1        ServiceNow. The company spent \$3.4 million on ServiceNow,  
2        a modern, state of the art, cloud-based IT Service  
3        Management and IT Operations Management platform.

4  
5        The move to ServiceNow will allow the IT department to  
6        automate many of its processes, such as inventory  
7        management of its IT assets; routing of service requests  
8        and many of the tasks within those service requests; the  
9        commissioning and decommissioning of assets; and  
10       compliance and reporting functions.

11  
12       The ServiceNow platform and the associated improvements to  
13       the IT business processes will enable the IT department to  
14       handle increasing workloads without increasing staff,  
15       improve IT system reliability, and improve cybersecurity  
16       and regulatory controls.

17  
18       The move to ServiceNow is a multi-year project with key  
19       deliverables scheduled for 2024 and 2025.

20  
21       IT Infrastructure Upgrades. The company spent \$34.0 million  
22       for sustaining capital to replace/upgrade end of life data  
23       center hardware and software including servers, network  
24       equipment, data storage equipment, databases, and  
25       operating systems. The Department also makes purchases

1 throughout each year to support new applications.

2  
3 These investments ensure that the company's IT  
4 Infrastructure will remain reliable and is supported by  
5 the providing vendors.

6  
7 Cybersecurity. The company spent \$25.4 million for  
8 cybersecurity. This investment included new and upgraded  
9 tools and processes to strengthen the company's  
10 cybersecurity protections and keep pace with the ever-  
11 increasing capabilities of cyber criminals.

12  
13 NERC CIP Enhancements and Upgrades - The company spent \$2.2  
14 million on projects required to keep our NERC CIP program  
15 up-to-date and effective. The NERC CIP program protects  
16 Tampa Electric's most critical generation, transmission,  
17 distribution, and technology assets from cyber criminals.  
18 These projects include the upgrade of current software used  
19 for the management of intelligent devices located in  
20 transmission and distribution substations, which is  
21 required for NERC compliance. These projects also help the  
22 company prepare for future changes to the standards while  
23 providing Tampa Electric's customers protection against  
24 interruption of electrical services caused by  
25 cybercriminals.

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

17  
18          Non-ERP Corporate Updates and Enhancements. The company  
19          spent \$6.1 million to improve the applications for several  
20          corporate functions and processes including contract  
21          management; document/records management; employee  
22          websites; employee collaboration and productivity; process  
23          automation; project management; process controls;  
24          compliance; legal; real estate; and safety. These projects  
25          ensured that our team members in these areas had the tools

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necessary to work effectively, efficiently, and securely.

The implementation of these projects increased the productivity of corporate functions and allowed the labor force to serve a growing workload without increases to employee count.

**Q.** How do these capital expenditures and the others shown on Document No. 2 benefit the company's customers?

**A.** As described above, these projects allow the IT department to automate and improve its business processes, to ensure the reliability and resiliency of the company's computing systems, to improve its cybersecurity defenses, to ensure compliance with existing and changing regulatory standards, and to ensure that systems are well-maintained and supported. This allows the company's corporate business functions to operate securely, smoothly, with accuracy, and in a timely manner so that the company provides customers with the secure, resilient, and reliable products and services they expect.

**Q.** Are the IT capital expenditures described above and shown on Document No. 2 reasonable and prudent?

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

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throughout the year to support new applications.

Investments ensure that the hardware and software used by Tampa Electric will continue to be reliable and retain support from the providing vendors. This enables Tampa Electric to provide reliable products and services and provide support to our customers.

Cybersecurity. The company expects to spend \$7.2 million in 2025 for cybersecurity. This project will strengthen the company's cybersecurity protections and keep pace with the ever-increasing capabilities of cyber criminals.

Additionally, the company will make changes to cyber security programs that are mandated or required by regulations and compliance standards. These improvements to the company's cybersecurity program enable the company to continue to protect the confidentiality, integrity, and availability of customer information and company services.

Tampa Electric is forecasting a need to increase team members in the cybersecurity area and expects to add two additional team members in 2025. The new team members are needed to sustain the company's cybersecurity efforts and to keep pace with changes in this area.

1 NERC CIP Enhancements and Upgrades. The company expects to  
2 spend \$1.1 million in 2025 on our NERC CIP program. We are  
3 not forecasting the need for additional team members in  
4 the IT department due to these projects or the changes to  
5 the NERC CIP standards, beyond the two additions as  
6 described in 2025 Cybersecurity projects above.

7  
8 SAP Enterprise Resource Planning (ERP) and Customer System  
9 Upgrades and Enhancements. The company expects to spend  
10 \$3.3 million on these projects in 2025. No labor increases  
11 or decreases are forecasted as a result of these projects.

12  
13 Non-ERP Corporate Updates and Enhancements. The company  
14 expects to spend \$1.4 million for 2025 on these projects.

15  
16 These projects include upgrades and enhancements to  
17 applications that support key business functions,  
18 including safety, legal, regulatory, data governance, data  
19 management, real estate, security, and compliance. These  
20 improvements ensure applications are well supported by  
21 their providing vendors, are cyber secure, and meet  
22 business and compliance requirements.

23  
24 **Q.** Once IT projects are approved, what steps does the company  
25 take to ensure that projects are "procured" at the lowest

1 reasonable cost?

2

3 **A.** The IT Department follows a formal bidding process for the  
4 purchase of all ordinary goods and services as outlined in  
5 company policies. This ensures that the company procures  
6 goods and services through an unbiased, consistent, and  
7 objective procurement process that leads to the lowest  
8 reasonable cost while maintaining necessary quality of  
9 product and effectiveness of the project. The key elements  
10 of the process are requesting formal and well-documented  
11 bids from three or more vendors, a full review of bidders'  
12 qualifications and information submitted, evaluating other  
13 factors such as location and diversity considerations, and  
14 ensuring proper level of approvals after a vendor is  
15 selected.

16

17 O&M EXPENSES

18 **Q.** What amount of IT department O&M expense is included in  
19 the projected 2025 test year and what major activities are  
20 reflected in that expense amount?

21

22 **A.** Tampa Electric's IT department is forecasted to incur \$36.8  
23 million of O&M attributed in the projected 2025 test year.  
24 Of this amount, (1) labor & fringe account for  
25 approximately \$17.0 million or 46 percent; (2) Outside

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

1 investments to enhance our overall cyber security posture  
2 in response to increasing cyber threats and changes to  
3 cybersecurity regulations.  
4

5 **Q.** What major factors have contributed to the increase in O&M  
6 expenses since 2022?  
7

8 **A.** The main reasons for the \$3.6 million increase are (1)  
9 approximately \$1.0 million for new cybersecurity related  
10 tools; (2) approximately \$1.0 million increase in Microsoft  
11 Enterprise Agreement costs; (3) approximately \$1.2 million  
12 for new technology licensing fees including ServiceNow, HR  
13 Workforce Analytics, and Contractor Lifecycle Management;  
14 (4) approximately \$0.6 million for IT infrastructure; and  
15 (5) approximately \$0.6 million for general inflation. These  
16 increases were partially offset by an approximately \$0.8  
17 million reduction in other cost elements, mainly outside  
18 staffing costs. There were several other smaller offsetting  
19 factors, including labor merit increases and IT management  
20 staffing level reductions.  
21

22 **Q.** What steps has the company taken to reduce O&M expenses in  
23 IT?  
24

25 **A.** IT has taken several steps to moderate and reduce O&M.

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

20  
21 **Q.** Is this level of O&M expense reasonable and prudent?

22  
23 **A.** Yes. The proposed increase in expenses for labor and  
24 outside services is reasonable and prudent given the  
25 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

1 cybersecurity threats to our company and the sensitive  
2 customer and employee data and critical infrastructure,  
3 seven employees to support growth in IT infrastructure  
4 scale and complexity, as well as an increase of seven  
5 employees to support growing digitalization and new  
6 technologies deployed across our grid, generating plants,  
7 and other operating facilities for the electric delivery  
8 and energy supply functions.

9  
10 **Q.** What metrics did your team use to identify the need for  
11 additional employees, when to add them, and how many to  
12 add?

13  
14 **A.** The company used cybersecurity metrics, including the  
15 number of vulnerabilities, changes in workload caused by  
16 changes to standards and regulations, and the quantity and  
17 complexity of cybersecurity threats, to identify the need  
18 for additional employees. Other IT metrics include utility  
19 peer benchmarks and support levels for critical  
20 applications and infrastructure.

21  
22 **Q.** Will adding employees in IT moderate the need to pay  
23 overtime or reliance on outside service providers?

24  
25 **A.** Yes. There is a reduction of approximately \$1.0 million in

1 outside services for staff augmentation for IT functions.

2

3 **SUMMARY**

4 **Q.** Please summarize your direct testimony.

5

6 **A.** Tampa Electric's IT Department supports all aspects of the  
7 company, through activities including the efficient and  
8 effective maintenance and support of IT applications, the  
9 delivery of IT projects that advance Tampa Electric's  
10 business objectives, defense against cyber security risks,  
11 and the delivery of data and analytics for effective Tampa  
12 Electric operations. The amounts the company spent for IT  
13 projects since the 2021 rate case, and plans to spend  
14 through 2025, are reasonable and prudent. Tampa Electric  
15 made, or will make, these investments to support safety,  
16 reliability, resilience, improved operations, and customer  
17 experience. The company's 2025 test year capital and O&M  
18 budgets for the IT Department are reasonable and prudent,  
19 will enhance cybersecurity protection, deliver operating  
20 efficiencies, enable our move to cloud-based solutions,  
21 enable useful features and functions, and enhance the  
22 customer experience.

23

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

25

1    **A.**    Yes.

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EXHIBIT

OF

CHRIS HECK

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LIST OF MINIMUM FILING REQUIREMENT SCHEDULES  
SPONSORED OR CO-SPONSORED BY CHRIS HECK

MFR Schedule	Title
B-07	Plant Balances By Account And Sub-Account
B-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 TECHNOLOGY**

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