BEFORE THE NORTH CAROLINA UTILITIES COMMISSION DOCKET NO. E-2, SUB 1300

In the Matter of:)	
)	SUPPLEMENTAL DIRECT
Application of Duke Energy Progress, LLC)	TESTIMONY OF
For Adjustment of Rates and Charges Applicable)	MARTIN M. STRASBURGER
to Electric Service in North Carolina and)	FOR DUKE ENERGY
Performance-Based Regulation)	PROGRESS, LLC

I. <u>INTRODUCTION</u>

- 2 O. PLEASE STATE YOUR NAME AND ADDRESS.
- 3 A. My name is Martin M. Strasburger. My business address is 526 South Church
- 4 Street, Charlotte, North Carolina 28202.

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- 5 O. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
- 6 A. I am employed by Duke Energy Corporation ("Duke Energy") as Vice President
- 7 Chief Security and Information Security Officer.
- 8 Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND
- 9 PROFESSIONAL BACKGROUND.
- 10 A. I have a bachelor's degree in Business Administration with an option in
- 11 Management Information Systems from California State University Chico
- 12 College of Business. I began my career with Deloitte & Touche in 1999 as a
- 13 consultant focused on information security. While at Deloitte & Touche, I
- implemented information security programs and technologies for several
- Fortune 500 corporations. I left consulting in 2011 and joined Pacific Gas and
- 16 Electric Company, where I ran the security intelligence and operations center.
- In 2019, I assumed the role of Chief Information Security Officer for Pacific
- Gas and Electric Company where I oversaw cybersecurity across the entire
- company. In January 2022, I joined Duke Energy as Chief Information Security
- 20 Officer with a scope of cybersecurity across the company. Finally, in December
- 21 2022, I added responsibility for physical security to my scope and my title was
- changed to Chief Security and Information Security Officer.

1	Q.	WHAT ARE YOUR DUTIES AS VICE PRESIDENT – CHIEF
2		SECURITY AND INFORMATION SECURITY OFFICER?
3	A.	In this role, I work with Duke Energy executives and the board of directors to
4		define Duke Energy's security strategy across technology networks/systems,
5		operational assets, facilities and personnel. To implement this strategy, I lead a
6		team of 250 highly skilled employees across all security disciplines.
7	Q.	HAVE YOU TESTIFIED BEFORE THE NORTH CAROLINA
8		UTILITIES COMMISSION ("COMMISSION") IN ANY PRIOR
9		PROCEEDINGS?
10	A.	No. I have not.
11	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
12		PROCEEDING?
13	A.	My supplemental direct testimony supports an additional Multiyear Rate Plan
14		("MYRP") project to be included in Duke Energy Progress, LLC's ("DEP")
15		Performance-Based Regulation Application ("PBR Application" or the
16		"Application") originally filed on October 6, 2022. Specifically, DEP has
17		identified a new information technology ("IT")/operational technology ("OT")
18		Cybersecurity project that will be placed in service during the MYRP period.
19		My testimony describes the scope of, and provides cost estimates for, this
20		IT/OT Cybersecurity project.

¹ IT/OT refers to the integration of IT systems and operational technology ("OT") systems. OT systems manage, detect or cause operational change to physical devices. Includes supervisory control and data acquisition ("SCADA") systems, energy management systems ("EMS") and distributed control systems ("DCS").

1 Q. DOES YOUR TESTIMONY INCLUDE EXHI

- 2 A. Yes. Strasburger Exhibit 1 includes the IT/OT Cybersecurity project's
- forecasted in-service date, description and scope, cost estimate, and reason for
- 4 inclusion in DEP's proposed MYRP.
- 5 Q. WAS THIS EXHIBIT PREPARED BY YOU OR UNDER YOUR
- 6 **DIRECTION AND SUPERVISION?**
- 7 A. Yes. Strasburger Exhibit 1 was prepared under my supervision.

8 II. <u>MYRP IT/OT CYBERSECURITY PROJECT</u>

- 9 Q. PLEASE DESCRIBE THE IT/OT CYBERSECURITY PROJECT
- 10 INCLUDED IN DEP'S PROPOSED MYRP.
- 11 A. DEP's proposed MYRP includes one IT/OT security investment: The IT/OT
- 12 Cybersecurity project. Consistent with the requirements of Commission Rule
- 13 R1-17B(d)(2)j.(i)-(iii), Strasburger Exhibit 1 details the reason, scope, and
- timing of the proposed project, including the projected in-service month and
- 15 year. The remainder of my testimony supplements the information outlined in
- those exhibits.
- DEP continues to review its current state maturity of IT/OT cybersecurity
- capabilities, measure maturity improvements and prioritize new initiatives to
- address future cybersecurity challenges. The OT Cybersecurity project will
- 20 update OT governance, risk and compliance standards and processes,
- 21 implement a new OT specific asset, patch and vulnerability management
- system, and deliver new OT cybersecurity threat logging and monitoring

1	capabilities. An integrated OT asset, patch, and vulnerability management
2	system is important to quickly react and mitigate cybersecurity risks.

3 Q. PLEASE ADDRESS THE NEED FOR THE IT/OT SECURITY 4 PROJECT [COMMISSION RULE R1-17B(d)(2)j(i)].

DEP continues to see increased cyber threats against operational assets, including potential geopolitical threats. Cybersecurity is a critical component of the energy transition and grid protection initiatives as DEP continues to introduce new technologies and distributed energy resources. It is important that we continue to mature DEP's OT security posture to provide safe and reliable energy to our customers.

The purpose of the project is to assure safe and sustainable operations through proactive and effective cybersecurity design, implementation and operation of critical energy systems and their underlying technology. Through both cybersecurity maturity assessments and knowledge gathered from updating operational high security technology, new opportunities were identified to proactively address and improve OT cybersecurity capabilities and enhance OT risk mitigation. Output from these cybersecurity assessments formed the basis for the IT/OT Cybersecurity project. The project will focus on expanding monitoring and threat response capabilities and will introduce proactive elements to reduce cybersecurity risks.

1 Q. DOES THE IT/OT CYBERSECURITY PROJECT OF	1	Q.	DOES	THE	IT/OT	CYBERSECURITY	PROJECT	OFFE
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2 **PROJECTED OPERATING BENEFITS?**

- A. No. The purpose of the project is to address future OT risk management and mitigation that will improve DEP's response to cybersecurity threats. This requires new investment in tools and processes. Although operational benefits are not easily quantifiable, it is critical that we continue to develop new capabilities that ensure DEP provides reliable, un-interrupted service to its customers.
- 9 Q. HOW DID THE COMPANY DEVELOP THE COSTS ASSOCIATED

 10 WITH THE IT/OT CYBERSECURITY PROJECT?
- 11 During 2022, DEP and the Duke Energy Enterprise Cybersecurity department A. 12 conducted an OT Cybersecurity Assessment focused on current state capabilities and risks. The output of the assessment included recommendations, 13 14 scope definition, initial requirements and infrastructure needed to implement 15 new cybersecurity systems and processes. The cost estimate for the project was 16 developed using the Project Management Institute methodology including 17 Work Break Down Structure, defining project activities, resource planning, 18 software and hardware projections and labor estimates.
- Q. ARE THE COST PROJECTIONS FOR SERVERS AND SOFTWARE
 OF THE PROPOSED IT/OT CYBERSECURITY PROJECT PRUDENT
 AND REASONABLE?
- 22 A. Yes.

- 1 Q. WHAT IS THE ESTIMATED SCHEDULE FOR THE IT SECURITY
- 2 PROJECT [COMMISSION RULE R1-17B(d)(2)j(iii)]?
- 3 A. The IT/OT Cybersecurity project is scheduled to begin in 2023 and continue
- 4 through the end of 2025. Assets will be placed in service from mid to late 2025.
- 5 Q. DO THE PROJECTED COSTS INCLUDE CONTINGENCY?
- 6 A. Yes. Contingency is an essential component of a comprehensive and
- 7 transparent cost estimate. As such, 15% is included in the cost estimate.
- 8 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 9 A. Yes.

DUKE ENERGY PROGRESS, LLC MYRP PROJECTS - SUPPLEMENTAL DOCKET NO. E-2, SUB 1300

					Total Project Amount (System)			
No. MYRP Project Name IT/OT Cybersecurity Project	FERC Function	Project Forecasted In: Service Date Jul-25	MYRP Project Description & Scope DEP continues to review its current state maturity of	Reason for the MYRP Project DEP continues to see increased cyber threats against	5	Projected In Service Costs 17 946 213	Proiected Annual Net O&M \$ 3 335 742	Projected Installation O&M \$ 3 547 436
			Operational Technology (OT) cybersecurity capabilities,	operational assets, including potential geopolitical				
			measure maturity improvements and prioritize new	threats. Cybersecurity is a critical component of the				
			initiatives to address future cybersecurity challenges. The					
				continues to introduce new technologies and distributed				
			risk and compliance standards and processes, implement					
			a new OT specific asset, patch and vulnerability management system, and deliver new OT cybersecurity	mature DEP's OT security posture to provide safe and reliable energy to our customers. The purpose of the				
				project is to assure safe and sustainable operations				
			OT asset, patch, and vulnerability management system is					
•			important to quickly react and mitigate cybersecurity	implementation and operation of critical energy systems				
11.00			risks.	and their underlying technology. Through both				
				cybersecurity maturity assessments and knowledge				
				gathered from updating operational high security				
				technology, new opportunities were identified to				
				proactively address and improve OT cybersecurity				
				capabilities and enhance OT risk mitigation. Output from				
				these cybersecurity assessments formed the basis for the				
				IT/OT Cybersecurity Project. The Project will focus on				
				expanding monitoring and threat response capabilities				
				and will introduce proactive elements to reduce				