## FILED June 12, 2023 INDIANA UTILITY REGULATORY COMMISSION

RESPONDENT'S EXHIBIT 1 IURC CAUSE NO. 45816 DIRECT TESTIMONY OF CORMACK C. GORDON FILED JUNE 12, 2023

# DIRECT TESTIMONY OF CORMACK C. GORDON DIRECTOR, TRANSPORTATION ELECTRIFICATION DUKE ENERGY BUSINESS SERVICES, LLC ON BEHALF OF DUKE ENERGY INDIANA, LLC CAUSE NO. 45816 BEFORE THE INDIANA UTILITY REGULATORY COMMISSION

1		I. <u>INTRODUCTION</u>
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	A.	My name is Cormack C. Gordon, and my business address is 1000 East Main
4		Street, Plainfield, Indiana.
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
6	A.	I am employed as Director, Transportation Electrification by Duke Energy
7		Business Services, LLC, a service company subsidiary of Duke Energy
8		Corporation, and a non-utility affiliate of Duke Energy Indiana, LLC ("Duke
9		Energy Indiana," or "Company").
10	Q.	PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND
11		PROFESSIONAL BACKGROUND.
12	A.	I hold a Bachelor of Science from the University of Tennessee and a Master of
13		Management Science and Engineering from Stanford University. I have been
14		employed by Duke Energy since September of 2010, and worked previously as an
15		engineering consultant, in energy efficiency as an engineer, project manager and
16		researcher, and as a general contractor. During my time at Duke Energy, I have
17		worked in non-residential energy efficiency, including as a Products & Services
18		Manager responsible for the launch of the Custom Incentives program in 2012. In
19		2014, I assumed responsibility for the Custom Incentives suite of programs &

1		personnel across all of Duke Energy's territories. In 2020, after participating in
2		several special projects related to electric transportation, I was asked to take on
3		the role of Director, Products & Services to lead commercialization of electric
4		vehicle infrastructure businesses. In May 2021, I assumed the role of Director,
5		Transportation Electrification.
6	Q.	PLEASE DESCRIBE YOUR DUTIES AND RESPONSIBILITIES AS
7		DIRECTOR, TRANSPORTATION ELECTRIFICATION.
8	A.	My primary responsibility as Director, Transportation Electrification is to lead the
9		team that is accountable for executing electric transportation efforts in our various
10		jurisdictions and for leveraging lessons learned and market trends to develop and
11		implement new products, services and policies that enable customer adoption of
12		electric transportation by identifying and solving for gaps in the electrification
13		space. Members of my team are located throughout Duke Energy's service
14		territories, including Indiana.
15	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
16	A.	The purpose of my testimony is to address certain issues identified by the
17		Commission for this proceeding. Specifically, my testimony addresses electric
18		vehicle ("EV") fleet electrification and jurisdictional demarcation. My testimony
19		is offered on behalf of Duke Energy Indiana and the "Utility Group," which
20		consists of AES Indiana, CenterPoint, Duke Energy Indiana, Indiana Michigan
21		Power Company, and Northern Indiana Public Service Company.

#### 1 Q. ARE YOU SPONSORING ANY ATTACHMENTS TO YOUR DIRECT 2 **TESTIMONY?** 3 A. No. 4 II. FLEET ELECTRIFICATION 5 Q. WHAT CHALLENGES EXIST FOR FLEET ELECTRIFICATION? 6 A. Today, fleet operating companies face political and customer – and therefore 7 economic – pressure to decarbonize. As electrification of fleets grows, so does the 8 need for substation and feeder capacity. This gives way to a growing risk for 9 customers and utility operators alike. Most fleets operate medium and heavy-duty 10 vehicles which consume significantly more energy than light duty vehicles while 11 requiring near perfect reliability to avoid operational disruptions and profit loss. 12 Moreover, fleets are generally located near to one another in warehousing districts 13 and around access to air transport, interstates, ports, or rail, leading to an inherent 14 localized load clustering effect. 15 Consider a hypothetical, but very realistic, site operating up to one 16 hundred class 6 trucks and just six class 8 trucks. Before electrification, a site like 17 this demands an electric load of approximately 500 kW. With electrification, the 18 demand of this one location could rise to over 4 MW. A related challenge is 19 timing. With a mature electrification supply chain, new load could materialize in 20 six months while the work to bring upgraded service to the site may take years. 21 Assuming that this load could be well-served, it is likely that another fleet 22

location on the same circuit will electrify in quick succession. Many businesses

are exploring the electrification opportunity at the same time, and it is probable that many fleets will electrify in the next 5 years. This may lead to circuits requiring upgrades to satisfy dozens of megawatts. In addition, as multiple fleets on a single feeder electrify in quick succession, it could lead to costly rework because requests for upgrades move through a standard process and are usually satisfied only as the customer commits to the load. An initial system upgrade could be partially completed as requests for further, incremental upgrades are received. Efficiency, both in terms of time and cost, is lost as the partially completed upgrade must be redone. Meanwhile, system upgrade timelines are already measured in years while customers can obtain electric vehicles in timeframes increasingly measured in months. Considering this, current, (primarily reactive) approaches to serving load may also delay the economic gains available to fleet operators through electrification. CAN ALL CUSTOMERS BENEFIT FROM FLEET ELECTRIFICATION? Yes. Studies have shown that managed charging from light duty, consumer EVs has potential to create downward pressure on rates. There is no reason that the same cannot be expected, to some degree, from light-, medium-, and heavy-duty EVs. Moreover, commercial fleets will have natural incentives to manage their charging load to avoid system peaks and to maintain a high load factor. As a result, system fixed costs can be spread over a larger base of kilowatt-hours, creating downward pressure on rates.

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#### 1 Q. WHAT OPTIONS EXIST TO BETTER SERVE ELECTRIC FLEET 2 LOADS? 3 A. To reiterate, the concerns with serving the load from fleet electrification using 4 traditional, primarily reactive methods, are System upgrades are completed in ways that are cost inefficient. 5 6 Customer economic benefit is delayed. 7 Ratepayer benefit is delayed. 8 It is also helpful to recognize why this reactive or responsive approach has 9 become the norm. Load is served in a responsive fashion for reasons of prudency. 10 That is, in the absence of customer commitments and/or reasonable certainty of 11 growth, system investments fail to become "used and useful" and therefore may 12 be denied recovery. 13 However, proactive approaches that shift from this traditional paradigm 14 are not foreign to Indiana. The Targeted Economic Development structure 15 leveraged by the TDSIC statute is an example of how utilities may pursue 16 investment in anticipation of growth. As is the case with economic development, 17 a methodology that combines strategic planning, funding and early execution 18 while predicting and enabling electric fleet growth may be critical for success. 19 That success, after all, would have similar positive benefits for electric sales as is 20 observed with economic development. To that end, with existing ratemaking 21 structures that deliberately and efficiently support growth, Indiana may be poised

to emerge as a leader in fleet electrification.

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#### Q. SHOULD UTILITIES PUBLISH PUBLIC CAPACITY MAPS?

A.

Publishing load capacity maps could have unintended consequences. For example, certain customers would be poised to move quickly and "gobble up" spare capacity. This is particularly troubling in the absence of solutions to the challenge described above because winners and losers in fleet electrification would emerge. Additionally, local capacity is not static. A customer that checks a capacity map and proceeds with commitments to a project without engaging the utility throughout the process cannot be guaranteed that the capacity is not taken by someone else in the interim. Finally, a map that shows excess capacity would inherently also show areas of grid constraint, which may expose critical energy infrastructure to previously unrealized risk.

#### III. JURISDICTIONAL DEMARCATION

#### Q. WHAT IS YOUR UNDERSTANDING OF THE LINE OF

#### JURISDICTIONAL DEMARCATION?

A. Generally, the Commission's jurisdiction does not consider the interface between the EVSE-owning customer & the EV driver/public. This is in accordance with state law that has clarified that entities reselling electricity for the purpose of EV charging are not considered utilities. By contrast, the Commission does continue its role of regulating the interface of the regulated utility and the EVSE-owning customer as well as, where such an interface exists, between the regulated utility and EV driver.

1	Q.	IS THE CURRENT LINE OF JURISDICTION DEMARCATION
2		APPROPRIATE?
3	A.	Yes. The current jurisdictional demarcation fits within the boundary of state law.
4		Additionally, it enables proliferation of EV charging by the market without
5		burdening players with undue regulation.
6	Q.	ARE THERE OTHER CONSIDERATIONS?
7	A.	Yes. The EV charger itself is often the "tip of the iceberg" in terms of total EV
8		charging infrastructure and the costs thereof. Make-ready infrastructure that
9		brings power to the charger can represent significant expense. This includes costs
10		of behind the meter make-ready infrastructure as well as utility-owned
11		infrastructure. To that end, to achieve the objectives of "promoting
12		affordablecharging infrastructure" and to "accelerate third party investment in
13		electric vehicle charging" as called for by the legislation underpinning this
14		proceeding, programs that enable utility investment in beneficial make ready
15		infrastructure, even if beyond the meter, should remain within the jurisdiction of
16		the Commission.

1		IV. <u>CONCLUSION</u>
2	Q.	DO YOU HAVE ANY OTHER COMMENTS?
3	A.	Yes. This Commission has been a regulatory leader in the EV space. The
4		Commission will be able to continue that leadership by implementing rules that
5		allow for efficient and flexible infrastructure investment, speedy cost recovery
6		mechanisms, and appropriate "make ready" definitions.
7	Q.	DOES THIS CONCLUDE YOUR PREFILED DIRECT TESTIMONY?
8	A.	Yes, it does.

#### VERIFICATION

I hereby verify under the penalties of perjury that the foregoing representations are true to the best of my knowledge, information and belief.

Signed: Cory

Corpoack C. Gordon

Dated: June 12, 2023