

October 31, 2024

Ms. Lisa Felice Michigan Public Service Commission 7109 W. Saginaw Hwy. Lansing, MI 48909 Via E-File

RE: MPSC Case No. U-21662

Dear Ms. Felice:

Attached please find the enclosed documents for filing:

- Direct Testimony and Exhibits of Devi Glick on behalf of Michigan Environmental Council and Sierra Club;
- Exhibit MEC-6 and;
- Proof of Service.

Thank you for your assistance in this matter. If you have any questions, please feel free to contact me.

Sincerely,

Christopher Bzdok chris@tropospherelegal.com

CC: Parties to Case No. U-21662

STATE OF MICHIGAN MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for **DTE ELECTRIC COMPANY** to fully comply with Public Act 295 of 2008, as amended.

Case No. U-21662

DIRECT TESTIMONY OF DEVI GLICK

ON BEHALF OF

MICHIGAN ENVIRONMENTAL COUNCIL AND SIERRA CLUB

October 31, 2024

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1 I. INTRODUCTION AND PURPOSE OF TESTIMONY

2 Q Please state your name and occupation.

A My name is Devi Glick. I am a Senior Principal at Synapse Energy Economics, Inc
("Synapse"). My business address is 485 Massachusetts Avenue, Suite 3, Cambridge,
Massachusetts 02139.

6 Q Please describe Synapse Energy Economics.

A Synapse is a research and consulting firm specializing in energy and environmental issues,
 including electric generation, transmission and distribution system reliability, ratemaking
 and rate design, electric industry restructuring and market power, electricity market prices,
 stranded costs, efficiency, renewable energy, environmental quality, and nuclear power.
 Synapse's clients include state consumer advocates, public utilities commission staff,
 attorneys general, environmental organizations, federal government agencies, and utilities.

13 Q Please summarize your work experience and educational background.

A At Synapse, I conduct economic analysis and write testimony and publications that focus on a variety of issues related to electric utilities. These issues include power plant economics, electric system dispatch, integrated resource planning, environmental compliance technologies and strategies, and valuation of distributed energy resources. I have submitted expert testimony in over 60 different proceedings before state utility regulators in more than 20 states.

In the course of my work, I develop in-house models and perform analysis using industrystandard electricity power system models. I am proficient in the use of spreadsheet analysis

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1		tools, as well as widely used optimization and electric dispatch models. I have directly run
2		EnCompass and PLEXOS and have reviewed inputs and outputs for several other models.
3		Before joining Synapse, I worked at Rocky Mountain Institute, focusing on a wide range
4		of energy and electricity issues. I have a master's degree in public policy and a master's
5		degree in environmental science from the University of Michigan, as well as a bachelor's
6		degree in environmental studies from Middlebury College. I have more than 12 years of
7		professional experience as a consultant, researcher, and analyst. A copy of my current
8		resume is attached as Exhibit MEC-6.
9	Q	On whose behalf are you testifying in this case?
10	Α	I am testifying on behalf of the Michigan Environmental Council ("MEC") and Sierra
10		
11		Club.
11		Club.
	Q	
11		Club.
11 12		Club. Have you testified previously before the Michigan Public Service Commission
11 12 13	Q	Club. Have you testified previously before the Michigan Public Service Commission ("Commission")?
11 12 13 14	Q	Club. Have you testified previously before the Michigan Public Service Commission ("Commission")? Yes, I submitted testimony in Case No. U-20224, Indiana Michigan Power Company's
 11 12 13 14 15 	Q	Club. Have you testified previously before the Michigan Public Service Commission ("Commission")? Yes, I submitted testimony in Case No. U-20224, Indiana Michigan Power Company's ("I&M") 2019 power supply and cost recovery ("PSCR") reconciliation docket; Case No.
 11 12 13 14 15 16 	Q	Club. Have you testified previously before the Michigan Public Service Commission ("Commission")? Yes, I submitted testimony in Case No. U-20224, Indiana Michigan Power Company's ("I&M") 2019 power supply and cost recovery ("PSCR") reconciliation docket; Case No. U-20804, I&M's 2021 PSCR Plan docket; Case No. U-20530, I&M's 2020 PSCR
 11 12 13 14 15 16 17 	Q	Club. Have you testified previously before the Michigan Public Service Commission ("Commission")? Yes, I submitted testimony in Case No. U-20224, Indiana Michigan Power Company's ("I&M") 2019 power supply and cost recovery ("PSCR") reconciliation docket; Case No. U-20804, I&M's 2021 PSCR Plan docket; Case No. U-20530, I&M's 2020 PSCR reconciliation docket; Case No. U-21052, I&M's 2022 PSCR Plan docket; Case No. U-

1	Q	What is the purpose of your testimony in this proceeding?
-	×.	······································

2 Α The purpose of my testimony is to assess whether DTE Electric Company ("DTE" or 3 "Company") is on track for compliance with renewable generation requirements 4 established in Act 235 of 2023 ("Act 235"). Specifically, I focus on the reasonableness of 5 DTE's load forecast and its projections of major sources of load growth such as data centers 6 and manufacturers. I assess whether DTE has adequately accounted for potential high load 7 growth. I evaluate the risk and cost of non-compliance with the Renewable Energy 8 Standard ("RES") if DTE does not plan for data center load growth properly in its 9 Renewable Energy Plan ("REP") filing.

10 **Q** How is your testimony structured?

11 A In Section II, I summarize my findings and recommendations for the Commission.

In Section III, I outline DTE's obligations under the RES and review the Company's
compliance plan. I summarize my findings that DTE is on track for compliance with the
RES based on the Company's current baseload forecast.

In Section IV, I compare DTE's load forecast in the RES to its load forecast from its most recent IRP. I discuss trends in high load growth I am seeing around the country and outline my concerns with DTE not evaluating how its REP would change with high load growth. I explain how high load growth from data centers and other large load customers could challenge DTE's compliance with the RES and increase incremental compliance costs for customers.

1	Q	What documents do you rely upon for your analysis, findings, and observations?
2	Α	My analysis relies primarily upon the workpapers, exhibits, and discovery responses of
3		DTE witnesses associated with this proceeding, as well as discovery from other
4		proceedings where applicable. I rely on DTE's 2022 IRP and public information associated
5		with prior DTE proceedings.
6	II.	FINDINGS AND RECOMMENDATIONS
7	Q	Please summarize your findings.
8	Α	My primary findings are:
9 10		1. Under DTE's amended REP load forecast, the Company's planned renewable buildout is sufficient to meet the RES targets.
10		 DTE's load forecast in the amended REP shows lower levels of projected load
12		growth than in its 2022 IRP.
13		3. DTE did not assess any alternative load scenarios as part of its amended REP
14		application, and therefore did not adequately capture the impact on RES
15		compliance of higher than projected load from new data centers and other large
16		customers, as well as increased EV load beyond its base projections.
17		4. If new load materializes more rapidly than DTE currently projects, the Company
18		will be at risk of non-compliance with the RES or of incurring higher-than-
19		necessary compliance costs that will be passed on to all ratepayers.
20	A	Based on my findings, I offer the following chief recommendations:

1	1.	The Commission should propose that DTE amend the REP amendment to include
2		a sensitivity with high load growth in all REP filings, to ensure that DTE will
3		remain on track for compliance with the RES even if load grows more rapidly than
4		its current baseline projection. The sensitivity should include the potential impact
5		of data centers in DTE's service area.

6 III. <u>DTE'S IRP RESOURCE PLAN WILL PRODUCE RECS SUFFICIENT TO MEET THE AMENDED</u> 7 <u>RES UNDER A BASELOAD FORECAST</u>

8 Q Please explain DTE's obligations under the Michigan Renewable Energy Standard.

9 Α This is DTE's first REP filing following the enactment of Act 235 of 2023, which increased 10 the stringency of Michigan's RES. The RES sets requirements for the percentage of retail 11 load that utilities must meet with renewable resources. Previously, the RES only extended 12 through 2021, with a maximum requirement that 15 percent of retail sales come from renewable generation.¹ Act 235 amended the RES, which now requires 15 percent of 13 annual generation to come from renewables through 2029, 50 percent during 2030-2034, 14 and 60 percent from 2035 on.² Eligible renewable resources under the RES include solar 15 16 photovoltaics ("PV"), solar thermal, wind, geothermal, and certain hydroelectric and 17 biomass resources.

¹ Public Act No. 342 (2016).

² MCL 460.1028(1).

1	Q	How are utility compliance obligations calculated under the RES?
2	Α	The RES applies to bundled retail load minus load enrolled in the voluntary green pricing
3		("VGP") program and the outflow from customer participation in the distributed generation
4		("DG") program. ³ DTE accounts for load and resources subscribed to the VGP program
5		separately from the RES; VGP-subscribed load does not increase DTE's compliance
6		obligation, and renewable generation allocated to the VGP program does not count towards
7		compliance with the RES. ⁴ Renewable energy credits ("REC") from resources allocated to
8		the VGP program are separately retired on behalf of the customers enrolled in the
9		program. ⁵
10		Because the load forecast forms the basis of the compliance obligation, accurately
11		projecting load is key to ensuring that DTE will have enough renewable resources online

12 to comply with the RES. Rapidly emerging trends, such as data center load, could 13 substantially increase DTE's future load, and have a large impact on DTE's RES 14 compliance plan.

15 Q How does DTE plan to comply with the RES?

A DTE will rely on the same renewable buildout plan that the Commission approved in the
 settlement agreement to DTE's 2022 IRP (Figure 1).⁶ Excluding resources allocated to the
 VGP program, DTE currently has 1 GW of self-built wind, 458 MW of wind from power

³ MCL 460.1028(2)(b).

⁴ Direct testimony of Bilyeu at KLB-24.

⁵ *Id.* at KLB-25.

⁶ Application at 4.

purchase agreements ("PPA"), and 72 MW of self-built solar online.⁷ It also has a small
 amount of planned, specifically identified non-VGP resource additions, including 138 MW
 of owned solar and 299 MW of PPA solar that will come online before 2030.⁸

The majority of resources that DTE will use to comply with the RES are generic additions, 4 5 meaning that DTE has not yet identified a specific project or specific ownership model for the resource additions. Between 2028 and 2034, DTE plans to add wind in 140 MW to 200 6 MW increments per year,⁹ and between 2035 and 2041, it will add wind in 1,000 MW 7 increments.¹⁰ Between 2027 and 2034, the Company will construct solar in increments of 8 280 MW to 800 MW per year.¹¹ The Company also plans to increase its total quantity of 9 PPA resources from 609 MW today to 2,221 MW in 2030.¹² Through 2030, the split 10 between self-built and PPA resources aligns with the allocation in the settlement agreement 11 to the 2022 IRP.¹³ For the period after 2030, DTE has not taken a position on whether 12 resource additions will be self-built or PPA resources.¹⁴ 13

DTE also plans to purchase RECs each year (as shown in Figure 2 below), even in years when it has a surplus of RECs. Specifically, the Company modeled the purchase of unbundled RECs to meet the maximum allowable level of 5 percent of its compliance

⁷ WP-1 KLB Compliance Tracker

⁸ Id.

⁹ DTE Response to MECSC Request 4.7(a).

¹⁰ *Id*.

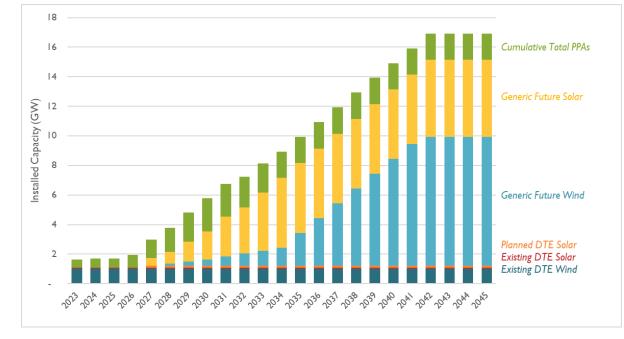
¹¹ WP-1 KLB Compliance Tracker.

¹² WP-3 KLB Resources.

¹³ DTE response to MECSC 6.4ai.

¹⁴ DTE response to MECSC 6.4ai and 6.4b.

obligation per year.¹⁵ The Company did not present any analysis or evidence to support
 that purchasing RECs was the least-cost method of complying with the RES or otherwise
 necessary for compliance.



4 Figure 1. DTE planned renewable capacity for RES compliance

Source: WP-1 KLB Compliance Tracker and WP-3 KLB Resources. Figure does not include resources allocated to the VGP program.

8 Q Do DTE's planned renewable resource additions provide enough RECs for it to 9 comply with the RES?

10 A Yes. Under its current REP load forecast, DTE's obligation under the RES grows from 6.1 11 terawatt-hours (TWh) in 2023 to 16.2 TWh in 2030 and 21.5 TWh in 2045 (Figure 2). The 12 Company will use a small number of banked RECs to meet its full RES compliance 13 requirement in 2024, 2025, and 2030. In the other years, the RECs that DTE obtains in 14 each year are sufficient to satisfy its compliance obligation for the given year, and DTE

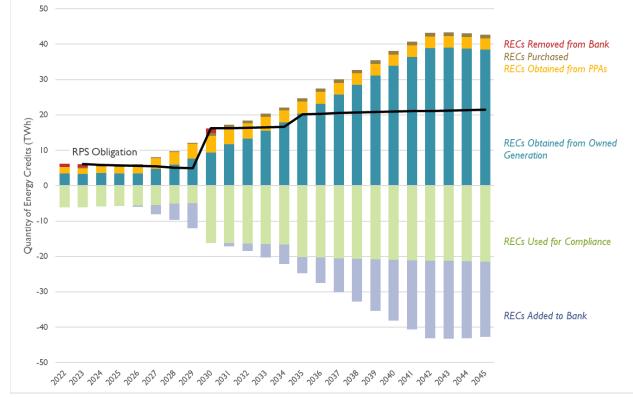
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6 7

¹⁵ WP-4 KLB Expense.

1	establishes a large bank of surplus RECs. Between 2025 and 2029, DTE will obtain 41.5
2	TWh of RECs, of which it will use 65 percent for compliance. ¹⁶ Between 2030 and 2045,
3	DTE will similarly use only 63 percent of the RECs that it obtains for compliance with the
4	RES. ¹⁷

5 Figure 2. Quantity of energy credits that DTE obtains, uses, and banks in each year



Source: Exh. A-2 KLB Summary.

8 Q What is driving DTE's accumulation of banked RECs?

9 A Excess RECs seem to be a result of high renewable builds in the 2022 IRP, as modified by

10 the settlement agreement ultimately approved by the Commission, including 7,900 MW of

11

⁶ 7

new wind from 2033 through 2042 and 2,100 MW of new solar over the same time

¹⁶ Exh. A-2 KLB Summary.

¹⁷ *Id*.

1		period. ¹⁸ DTE states that it plans to carry forward any excess RECs for future use, rather
2		than selling them, ¹⁹ and that its current compliance plan is consistent with the lowest cost
3		plan according to the 2022 IRP. ²⁰ Under the RES, banked RECs expire after five years, ²¹
4		but DTE plans to use the oldest RECs first to avoid the expiration of any RECs from its
5		bank between now and 2045. ²²
6	Q	Is DTE currently requesting a surcharge in the amended REP?
7	Α	No, according to the Company's forecast in its amended REP, DTE will not need a revenue
8		recovery mechanism surcharge through 2028. ²³ This means that the full cost of RES
9		compliance is projected to be covered by the transfer price through 2028. A surcharge is
10		only needed if DTE incurs incremental costs for RES compliance above the transfer price
11		recovered in the Power Supply Cost Recovery dockets. ²⁴
12		The Company plans to file its next amended REP by the second quarter of 2027. ²⁵ At this
13		time, or even before, a surcharge may be necessary depending on whether there are
14		deviations between actual cost and revenues and the Company's long-term energy
15		production forecast, operating cost forecast, third-party PPA charges or revenues. ²⁶

¹⁸ Order, Case No. U-21193, July 26, 2023.

¹⁹ DTE response to MECSC 6.2a.

²⁰ DTE response to MECSC 6.2c.

²¹ MCL 460.1039(3)(c).

²² Company response to MECSC 6.2a.

²³ Application at 5.

²⁴ MCL 460.1047(2)(b)(iv); MCL 460.6j.

²⁵ Application at 5.

²⁶ Application at 5.

1	Q	Does DTE address the Clean Energy Standard ("CES") in this filing?
2	Α	No. In addition to amending the RES, Act 235 established a separate CES program with
3		higher percentage targets that reach 100 percent clean energy by 2040.27 Additional
4		resource types are eligible for the CES, including nuclear and natural gas with carbon
5		capture and storage (CCS). ²⁸ Utilities will address CES compliance in their IRPs rather
6		than the REP filings, so DTE does not address CES compliance in its application in this
7		docket.
8	IV.	IN ITS REP FILING, DTE DOES NOT CONTEMPLATE HIGH LOAD GROWTH OR EVALUATE
9		THE IMPACTS HIGH LOAD COULD HAVE ON RES COMPLIANCE NEEDS AND COST
10		A. In its REP filing, DTE projects lower levels of load growth than the
11		reference scenario from the 2022 IRP, resulting in a lower RES compliance
12		obligation
13	Q	What methodology does DTE use to forecast load in its REP filing?
14	Α	DTE used regression and end-use modeling. Broadly, the Company's regression model
15		uses economic activity, weather, changes in end-use saturation, and energy efficiency to
16		develop a forecast of electricity consumption and sales. ²⁹ DTE develops the forecast
17		separately for each customer class. The Residential forecast is developed using a
18		statistically adjusted end-use specification to combine a customer forecast with a use-per-
19		customer forecast. The Small Commercial forecast is developed in a similar manner. The

²⁷ Public Act 235 (2023) (creating MCL 460.1051).

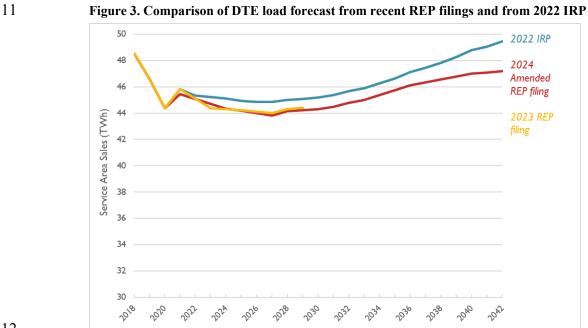
²⁸ Public Act 235 (2023) (modifying MCL 460.1003).

²⁹ Direct Testimony of E.C. Meloche at 3-4.

1 large Commercial and Industrial ("C&I") forecast is developed using econometric 2 modeling broken down into seven super-sectors.

3 Q How does DTE's current load forecast compare to its prior recent forecasts?

4 Α As shown in Figure 3 below, the load forecast that DTE relies on in the amended REP 5 application is lower than the forecast that the Company relied on in its most recent (2022) IRP. Specifically, in its 2022 IRP, DTE forecasted that its load would grow at a compound 6 annual growth rate ("CAGR") of 0.5 percent between 2023–2043;³⁰ in the amended REP, 7 that forecast has been updated to only 0.3 percent CAGR between 2023–2045.³¹ The load 8 9 forecast in DTE's amended REP is, however, very close to the load forecast in DTE's prior 10 REP application from U-21361, which was filed in March 2023.³²



12

³⁰ Case U-21193, Direct Testimony of Leuker at 37.

³¹ Direct Testimony of E.C. Meloche at 15.

³² Case No. U-21361, Application. March 9, 2023.

Source: MPSC Case No. U-21993, Exhibit A-3.1. DTE Electric Company 2022 Electric Integrated Resource Plan, page 83 of 145; DTE Response to MECSC Request 1.1, Renewable Energy Plan Master Attachments, Exh. A-28 ECM Serv Area; MPSC Case No. U-21361, Meloche Attachment 1.

4 Q What factors explain the differences between the two load forecasts?

5 A DTE explained that the IRP forecast was created in 2021 while the REP forecast in the 6 current docket was created in 2023. In the intervening years, DTE updated its forecasting 7 model with new historical sales data, updated input assumptions, and updated modeling 8 methodology.³³ This resulted in lower sales overall. Specifically, DTE's forecast for the 9 residential class is around 1 percent lower over the next decade in the amended REP 10 application than in the IRP, and both the large C&I and the small commercial load forecasts 11 are around 2.5 percent lower over this same time period.

Q Does DTE consider higher rates of load growth or evaluate how higher rates of load growth could impact its ability to meet the RES?

A No. DTE does not address or discuss the potential for higher-than-projected load growth as part of its REP application. As discussed below, this omission is concerning and could set the Company up for non-compliance and set ratepayers up for high incremental costs.

17 18

1 2 3

B. <u>Data centers and other sources of load could substantially increase DTE's</u> compliance obligation under the RES beyond what DTE currently projects

19 Q Why should DTE consider high load growth in its REP application?

A There are ongoing legislative actions relevant to data center load in Michigan that could impact the quantity of data center load in the state in the future. In September 2024, the Michigan House of Representatives voted on two bills aimed at attracting data center load

³³ DTE Response to MECSC Request 3.3(a).

1	to the state: Senate Bill (SB) 237 and House Bill (HB) 4906. SB 237 would create a use
2	tax exemption for data centers' equipment. The bill was passed in the House of
3	Representatives and is in the Senate awaiting a vote. ³⁴ HB 4906 would create a sales tax
4	exemption for data centers located in state. The bill was voted down previously by the
5	House of Representatives, but legislators can bring it up again after the November 5
6	election. ³⁵
7	DTE is aware of the possibility of data center load growth in Michigan, especially if these
8	bills pass. In May, the Company filed an Ex-Parte Application for approval of a rate
9	schedule for an XL high load factor rate factor. In that application, the Company stated
10	that:
11	Data centers are an emergent customer type, potentially requiring a gigawatt or
12	more capacity per customer, and require an alternative approach to ratemaking to
13	ensure that costs driven by these large and unique loads are appropriately borne
14	by the cost-causing customers. As such, the Company proposes to close the Rate
15	Schedule to data center customers. This will allow the time and analysis necessary
16	to develop an appropriate rate design to support these unique customers. ³⁶

³⁴ Michigan SB237 of 2023-2024 (as passed House, Sep. 25, 2024, https://www.legislature.mi.gov/documents/2023-2024/billengrossed/Senate/pdf/2023-SEBH-0237.pdf); Hendrickson, Clara. "Over environmental concerns, Michigan House passes tax break for data centers." September Detroit Free Press. 25, 2024. Accessed: https://www.freep.com/story/news/politics/2024/09/25/michigan-house-passes-data-centers-taxbreak/75361334007/.

³⁵ Michigan HB4906 of 2023-2024; Hendrickson, Clara, "Over environmental concerns, Michigan House passes tax break for data centers." *Detroit Free Press*. September 25, 2024. Accessed: https://www.freep.com/story/news/politics/2024/09/25/michigan-house-passes-data-centers-tax-break/75361334007/.

³⁶ MPSC Case No. U-21163, Ex-Parte Application, May 21, 2024 at 2.

1 In its July earnings call, DTE cited "maintaining strong collaboration on business 2 development in Michigan to attract a range of customers, including data centers" as a source of long-term growth.³⁷ In October, DTE reiterated that it has received "a lot of 3 4 interest" from potential data center customers, and has started discussions with them, although it has not finalized arrangements to serve any large data centers yet.³⁸ The 5 6 Company also stated that it believes the legislature will pass the bills exempting data 7 centers from sales and use tax in the lame duck session following the November election, and that Governor Whitmer will sign both of these bills into law if they reach her desk.³⁹ 8

9

10

Q

Is DTE, or any other Michigan utilities, incorporating data center load into any of their planning forecasts for the IRP or REP dockets?

11 No, but no Michigan utility has filed an IRP more recently than November 2022 or Α 12 developed a load forecast more recently than 2021 (present docket aside). The trend in large customer load growth is relatively recent and may not have been picked up in resource 13 14 plans developed even a year and a half ago. DTE's most recent IRP was filed in November 15 2022, with the load forecast developed in 2021. The IRPs for the rest of the Michigan utilities are even older, with Consumers Energy, I&M, Alpena Power Company, Northern 16 State Power Company, Upper Michigan Energy Resources Corporation, and Upper 17 18 Peninsula Power Company all filing their last IRPs between 2019 and 2022. I&M is

³⁷ DTE. 2024. "2Q 2024 Earnings Conference Call." July 25. Available at: <u>https://s24.q4cdn.com/970999156/files/doc_financials/2024/q2/Q2-24-presentation-FINAL.pdf</u>.

³⁸ Smolcic Larson, Lucas. 2024. "DTE expects Michigan data center tax breaks will move ahead after election, CEO says." October 25. Available at: <u>https://www.mlive.com/environment/2024/10/dte-expectsmichigan-data-center-tax-breaks-will-move-ahead-after-election-ceo-says.html</u>.

³⁹ *Id*.

currently working on its next IRP, to be filed in Indiana in March of 2025 and later that
 year in Michigan.⁴⁰

DTE is also the first utility to file an amended REP since Act 235 was enacted late last 3 4 year. Consumers Energy isn't required to file an REP until November 15, 2024 and I&M, 5 Alpena Power Company, Northern State Power Company, Upper Michigan Energy Resources Corporation, and Upper Peninsula Power Company have until January 17, 6 2025.⁴¹ This makes it all the more important for DTE and other utilities to incorporate a 7 8 sensitivity for high load projections into their REP applications where there are clear 9 changes in the market relative to the prior IRP filing. The REP should build off the robust 10 modeling from the IRP, but also reflect important changes to the market that have occurred 11 subsequent to an IRP filing.

12 Q Explain the trends in large load you are seeing across the country and the impact they 13 are having on utilities and customers.

14 A Utilities across the country are projecting large increases in load from data centers and 15 manufacturing and industrial customers. This new load has been a significant driver of 16 projected future resource needs in many places and comes on top of increases in load from 17 electric vehicles and building electrification. States like Arizona, Illinois, Ohio,⁴² New

⁴⁰ Indiana Michigan Power. 2024. "Integrated Resource Plan." Available at: https://www.indianamichiganpower.com/community/improving-our-community/projects/irp/.

⁴¹ Michigan Public Service Commission, Renewable Energy Standards and Plans. Available at https://www.michigan.gov/mpsc/commission/workgroups/2023-energy-legislation/renewable-energy-standards-and-plans.

⁴² Ethan Howland, "AEP Ohio reaches agreement with stakeholders on data center interconnection rules." *Utility Dive*, October 24, 2024. Available at https://www.utilitydive.com/news/aep-ohio-data-centeragreement-stakeholders-indiana-epri/730873/.

York, and Virginia, among others,⁴³ are on the forefront of this trend. In Virginia, for
 example, PJM projects a CAGR of 6 percent for the Dominion (Dom) Load Zone for 2024–
 2039.⁴⁴ This is up from around 2 percent just two years ago (2022–2037).⁴⁵

4 High load growth projections have brought new challenges to resource planning. New 5 customers often want to come online on faster timelines than resource procurement can 6 meet. For example, Dominion brought online 15 new data centers for 933 MW in 2023, and up through August in 2024 already had brought online 14 new data centers for 949 7 MW.⁴⁶ That works out to an average of just over 60 MW for each individual data center. 8 9 In addition, it is not always clear when a prospective customer has committed enough to 10 warrant resource procurement to serve that customer's needs-waiting too long may leave 11 utilities with no choice but to procure more expensive resources to meet load, while adding resources prematurely may force existing ratepayers to pay for unneeded capacity if load 12 13 from new customers does not materialize. Finally, the pace of load growth may increase 14 costs if resource demand forces procurement of more expensive resources in the supply 15 stack.

⁴³ Lisa Jenkins and Phoebe Skok, "Mapping the data center power demand problem. In three charts." *Latitude Media*, May 31, 2024. Available at https://www.latitudemedia.com/news/mapping-the-data-center-power-demand-problem-in-three-charts.

⁴⁴ Dominion Energy, Virginia Electric and Power Company's Report of its 2024 Integrated Resource Plan. October 15, 2024 at 9.

⁴⁵ PJM Load Forecast Report, January 2022. Available at https://pjm.com/-/media/library/reports-notices/load-forecast/2022-load-report.ashx.

⁴⁶ Virginia State Corp. Comm'n Case No. PUR-2024-00184. Virginia Electric and Power Company's Report of Its 2024 Integrated Resource Plan. Filed October 15, 2024 at 13.

1	Q	Did DTE evaluate how its RES compliance plan would change with higher load
2		growth such as what could be expected with data center load?
3	Α	No, not as part of the REP. As part of its 2022 IRP, DTE modeled several load sensitivities
4		including a High Load Growth sensitivity (Table 1). This sensitivity captured higher load
5		growth but was not designed to capture any particular assumptions around data center load
6		or electrification (it assumed a relatively linear approximately 2 percent annual growth
7		rate).

8 Table 1. Annual bundled sales in the REP forecast and the 2022 IRP High Load 9 Growth forecast (MWh)

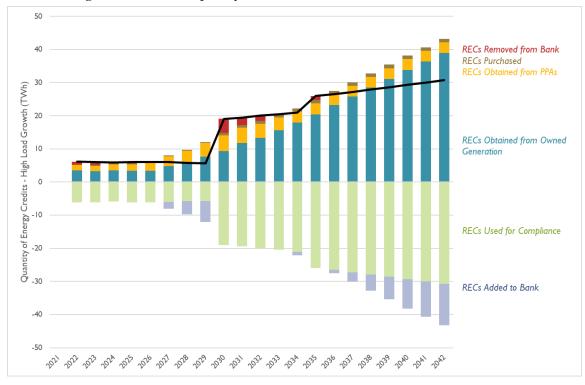
Forecast	2025	2030	2035	2040
REP forecast	39,755,689	39,892,050	41,196,743	42,340,768
High Load Growth forecast	42,595,189	46,326,899	51,431,440	57,084,217
Percent difference	7%	16%	25%	35%

10 Source: Exh. A-2 KLB Summary; DTE 2022 Electric Integrated Resource Plan at 83.

Because DTE did not perform any high load analysis, I evaluated how DTE's RES compliance requirements would change (1) under the Company's higher load forecast from its IRP, as shown in Figure 4, as well as (2) under higher levels of data-center-driven load growth. I found that the high load growth scenario from the IRP caused DTE to rely on banked RECs to meet its compliance obligation in three additional years, 2031, 2032, and 2035. But overall the renewable buildout from the 2022 IRP settlement agreement⁴⁷ was still sufficient for DTE to comply with the RES in all years (Figure 4).

⁴⁷ Case No. U-21193, Settlement Agreement. July 12, 2023.

Figure 4. Quantity of energy credits that DTE obtains, uses, and banks in each year if load follows the High Load Growth trajectory from the 2022 IRP



4

Source: Exh. A-2 KLB Summary; DTE 2022 Electric Integrated Resource Plan at 83.

Next, I looked at a higher load forecast more in line with what I would expect to capture
data center load growth. Using Virginia as an example, the growth of data centers and
manufacturing in Michigan could result in substantially higher levels of load growth than
the 2 percent CAGR in the High Load Growth forecast—as high as 4 percent and 6 percent.
Higher growth rates are especially possible when considering that data center load is just
one driver of potential future load growth on top of vehicle and building electrification.

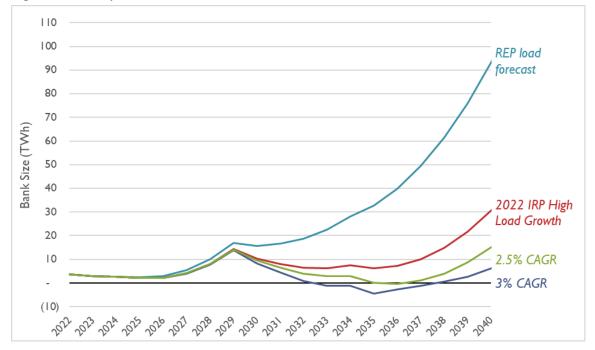
11 Q How would higher levels of data center load growth impact DTE's ability to comply 12 with the RES?

A Higher levels of load growth could increase DTE's compliance obligation such that it no
longer has enough RECs to comply with the RES, particularly in the early- to mid-2030s.

³

1	This is plausible, because as discussed above, the Dom zone in Virginia is projecting a
2	CAGR of 6 percent for energy usage over the next decade and a half. If bundled sales grow
3	at an average CAGR of 2 percent, as in the 2022 IRP High Load Growth scenario, DTE
4	will be in compliance in all years. However, if the CAGR increases to 2.5 or 3 percent, the
5	size of the REC bank drops below zero in the 2030s, indicating that DTE would not have
6	enough RECs available in those years and that its planned renewable buildout would not
7	be sufficient to comply with the RES (Figure 5).

8 Figure 5. Quantity of banked RECs under various load forecasts



9

10 11

Source: Company response to MECSC 5.1, "U-21662 MECSCDE-5.1ai REC Retirements.xlsx"; DTE 2022 Electric Integrated Resource Plan at 83; Exh. A-2 KLB Summary.

12

Q How would data center load growth impact the cost of complying with the RES?

A As discussed above, DTE is not currently projecting an incremental cost to RES
 compliance. But if the Company does not properly plan for future resource needs and
 renewable requirements, it could end up with a deficit of compliance resources. The less

lead time the Company has for procurement and compliance, the fewer options it will have
 and the more likely it will be that DTE will have to pay for resources higher on the supply
 stack.

4 Q What steps should DTE take to ensure that it can comply with the RES even if data 5 center load growth materializes?

6 Α DTE should include a high load sensitivity in its current and all future REP applications. 7 For the REP application, the high load forecast can mirror a high load growth scenario 8 from the IRP, with any relevant changes to the market since the IRP was filed (in this case, 9 data center load). For this high load scenario, DTE should evaluate how a high load will 10 change its energy needs, its RES procurement needs, and the incremental cost of 11 compliance. This will allow the Company, the Commission, and prospective customers to 12 understand how high load will impact not just DTE's normal resource procurement needs, 13 but also the timeline of compliance with the RES, and the incremental cost of meeting new 14 data center load. If the incremental cost of serving new higher load is higher than the 15 incremental cost of serving base levels of load, that is important for the Commission and 16 prospective customers to understand and for the Company to address through tariffs and 17 cost allocation. Absent action, these costs could all be passed on to existing ratepayers.

18

Q Does this conclude your testimony?

19 A Yes.

21



Devi Glick, Senior Principal

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617-453-7050 dglick@synapse-energy.com

PROFESSIONAL EXPERIENCE

Synapse Energy Economics Inc., Cambridge, MA. Senior Principal, May 2022 – Present; Principal Associate, June 2021 – May 2022; Senior Associate, April 2019 – June 2021; Associate, January 2018 – March 2019.

Conducts research and provides expert witness and consulting services on energy sector issues. Examples include:

- Modeling for resource planning using PLEXOS and Encompass utility planning software to evaluate the reasonableness of utility IRP modeling.
- Modeling for resource planning to explore alternative, lower-cost and lower-emission resource portfolio options.
- Providing expert testimony in rate cases on the prudence of continued investment in, and operation of, coal plants based on the economics of plant operations relative to market prices and alternative resource costs.
- Providing expert testimony and analysis on the reasonableness of utility coal plant commitment and dispatch practice in fuel and power cost adjustment dockets.
- Serving as an expert witness on avoided cost of distributed solar PV and submitting direct and surrebuttal testimony regarding the appropriate calculation of benefit categories associated with the value of solar calculations.
- Reviewing and assessing the reasonableness of methodologies and assumptions relied on in utility IRPs and other long-term planning documents for expert report, public comments, and expert testimony.
- Evaluating utility long-term resource plans and developing alternative clean energy portfolios for expert reports.
- Co-authoring public comments on the adequacy of utility coal ash disposal plans, and federal coal ash disposal rules and amendments.
- Analyzing system-level cost impacts of energy efficiency at the state and national level.

Rocky Mountain Institute, Basalt, CO. August 2012 – September 2017

Senior Associate

 Led technical analysis, modeling, training and capacity building work for utilities and governments in Sub-Saharan Africa around integrated resource planning for the central electricity grid energy. Identified over one billion dollars in savings based on improved resource-planning processes.

- Represented RMI as a content expert and presented materials on electricity pricing and rate design at conferences and events.
- Led a project to research and evaluate utility resource planning and spending processes, focusing specifically on integrated resource planning, to highlight systematic overspending on conventional resources and underinvestment and underutilization of distributed energy resources as a least-cost alternative.

Associate

- Led modeling analysis in collaboration with NextGen Climate America which identified a CO2 loophole in the Clean Power Plan of 250 million tons, or 41 percent of EPA projected abatement. Analysis was submitted as an official federal comment which led to a modification to address the loophole in the final rule.
- Led financial and economic modeling in collaboration with a major U.S. utility to quantify the impact that solar PV would have on their sales and helped identify alternative business models which would allow them to recapture a significant portion of this at-risk value.
- Supported the planning, content development, facilitation, and execution of numerous events and workshops with participants from across the electricity sector for RMI's Electricity Innovation Lab (eLab) initiative.
- Co-authored two studies reviewing valuation methodologies for solar PV and laying out new principles and recommendations around pricing and rate design for a distributed energy future in the United States. These studies have been highly cited by the industry and submitted as evidence in numerous Public Utility Commission rate cases.

The University of Michigan, Ann Arbor, MI. Graduate Student Instructor, September 2011 – July 2012

The Virginia Sea Grant at the Virginia Institute of Marine Science, Gloucester Point, VA. *Policy Intern*, Summer 2011

Managed a communication network analysis study of coastal resource management stakeholders on the Eastern Shore of the Delmarva Peninsula.

The Commission for Environmental Cooperation (NAFTA), Montreal, QC. *Short Term Educational Program/Intern*, Summer 2010

Researched energy and climate issues relevant to the NAFTA parties to assist the executive director in conducting a GAP analysis of emission monitoring, reporting, and verification systems in North America.

Congressman Tom Allen, Portland, ME. *Technology Systems and Outreach Coordinator*, August 2007 – December 2008

Directed Congressman Allen's technology operation, responded to constituent requests, and represented the Congressman at events throughout southern Maine.

EDUCATION

The University of Michigan, Ann Arbor, MI Master of Public Policy, Gerald R. Ford School of Public Policy, 2012 Master of Science, School of Natural Resources and the Environment, 2012 Masters Project: *Climate Change Adaptation Planning in U.S. Cities*

Middlebury College, Middlebury, VT Bachelor of Arts, 2007 Environmental Studies, Policy Focus; Minor in Spanish Thesis: Environmental Security in a Changing National Security Environment: Reconciling Divergent Policy Interests, Cold War to Present

PUBLICATIONS

Kwok, S., D. Glick, R. Anderson, T. Gyalmo. 2023. *Review of Southwestern Public Service Company 2023 Integrated Resource Plan*. Synapse Energy Economics for Sierra Club.

Kwok, S., J. Smith, D. Glick. 2023. *Review of Cleco Power's 2021 IRP Report*. Synapse Energy Economics for Sierra Club.

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Glick, D. 2021. Synapse Comments and Surreply Comments to the Minnesota Public Utility Commission in response to Otter Tail Power's 2021 Compliance Filing Docket E-999/CI-19-704. Synapse Energy Economics for Sierra Club.

Eash-Gates, P., D. Glick, S. Kwok. R. Wilson. 2020. *Orlando's Renewable Energy Future: The Path to 100 Percent Renewable Energy by 2020.* Synapse Energy Economics for the First 50 Coalition.

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Biewald, B., D. Glick, J. Hall, C. Odom, C. Roberto, R. Wilson. 2020. *Investing in Failure: How Large Power Companies are Undermining their Decarbonization Targets.* Synapse Energy Economics for Climate Majority Project.

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Camp, E., A. Hopkins, D. Bhandari, N. Garner, A. Allison, N. Peluso, B. Havumaki, D. Glick. 2019. *The Future of Energy Storage in Colorado: Opportunities, Barriers, Analysis, and Policy Recommendations.* Synapse Energy Office for the Colorado Energy Office.

Glick, D., B. Fagan, J. Frost, D. White. 2019. *Big Bend Analysis: Cleaner, Lower-Cost Alternatives to TECO's Billion-Dollar Gas Project*. Synapse Energy Economics for Sierra Club.

Glick, D., F. Ackerman, J. Frost. 2019. *Assessment of Duke Energy's Coal Ash Basin Closure Options Analysis in North Carolina.* Synapse Energy Economics for the Southern Environmental Law Center.

Glick, D., N. Peluso, R. Fagan. 2019. San Juan Replacement Study: An alternative clean energy resource portfolio to meet Public Service Company of New Mexico's energy, capacity, and flexibility needs after the retirement of the San Juan Generating Station. Synapse Energy Economics for Sierra Club.

Suphachalasai, S., M. Touati, F. Ackerman, P. Knight, D. Glick, A. Horowitz, J.A. Rogers, T. Amegroud. 2018. *Morocco – Energy Policy MRV: Emission Reductions from Energy Subsidies Reform and Renewable Energy Policy*. Prepared for the World Bank Group.

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Economics for Massachusetts Department of Energy Resources and Massachusetts Department of Environmental Protection.

Fagan, B., R. Wilson, S. Fields, D. Glick, D. White. 2018. *Nova Scotia Power Inc. Thermal Generation Utilization and Optimization: Economic Analysis of Retention of Fossil-Fueled Thermal Fleet to and Beyond 2030 – M08059*. Prepared for Board Counsel to the Nova Scotia Utility Review Board.

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Hansen, L., V. Lacy, D. Glick. 2013. A Review of Solar PV Benefit & Cost Studies. Rocky Mountain Institute.

TESTIMONY

State of Vermont Public Utility Commission (Case No. 24-2945-PET): Direct testimony of Devi Glick in Petition of VT Real Estate Holdings 2 LLC ("Fair Haven Solar") for a Certificate of Public Good, pursuant to 30 V.S.A. § 248, authorizing the installation and operation of a 20 MW solar electric generation facility off Airport Road in Fair Haven, Vermont to be known as the "Fair Haven Solar Project". On behalf of VT Real Estate Holdings 2 LLC. September 17, 2024

Public Service Commission of South Carolina (Docket No. 2024-203-E): Direct Testimony of Devi Glick in Application of Kingstree East 230 for a certificate of environmental compatibility and public convenience and necessity for the construction and operation of a 249 MW AC solar and battery facility in Williamsburg County, South Carolina Pursuant to S.C.Code Ann. § 58-33-10 et. Seq., and request to proceed with initial construction work, S.C. Code Ann. § 58-33-110(7). On behalf of Kingstree East 230 LLC. August 9, 2024.

Indiana Utility Regulatory Commission (Cause No. 46038): Direct Testimony of Devi Glick in Petition of Duke Energy Indiana, LLC Pursuant to Indiana code §§ 8-1-2-42.7 and 8-1-2-61, for authority to modify its rate and changes. On behalf of Citizens Action Coalition of Indiana, Inc. July 11, 2024.

State of Vermont Public Utility Commission (Case No. 23-1447-PET): Rebuttal testimony of Devi Glick in the Petition of VT Real Estate Holdings 1 LLC for a Certificate of Public Good, pursuant to 30 V.S.A. § 248, for a 20 MW ground-mounted solar array in Shaftsbury, Vermont. On behalf of VT Real Estate Holdings 1 LLC ("Shaftsbury Solar"). Revised June 27, 2024.

State of Vermont Public Utility Commission (Case No. 23-1447-PET): Direct testimony of Devi Glick in the Petition of VT Real Estate Holdings 1 LLC ("Shaftsbury Solar") for a Certificate of Public Good, pursuant to 30 V.S.A. § 248, authorizing the installation and operation of a 20 MW solar electric generation facility off Holy Smoke Road in Shaftsbury, Vermont to be known as the "Shaftsbury Solar") Project". On behalf of VT Real Estate Holdings 1 LLC ("Shaftsbury Solar"). Revised June 27, 2024.

Iowa Utilities Board (RPU-2023-002): Supplemental Testimony of Devi Glick in re: Interstate Power and Light Company, Proposed Rate Increase. On behalf of Environmental Intervenors. June 21, 2024.

Florida Public Service Commission (Docket No. 20240026-EI): Direct testimony of Devi Glick in petition for rate increase by Tampa Electric Company. On behalf of Sierra Club. June 6, 2024.

Iowa Utilities Board (RPU-2023-0002): Surrebuttal Testimony of Devi Glick in re: Interstate Power and Light Company, Proposed Rate Increase. On behalf of Environmental Intervenors. June 3, 2024.

Iowa Utilities Board (RPU-2023-0002): Direct Testimony of Devi Glick in re: Interstate Power and Light Company, Proposed Rate Increase. On behalf of Environmental Intervenors. April 16, 2024.

Michigan Public Service Commission (Case No. U-21051): Direct Testimony of Devi Glick in the Matter of the application of DTE Electric Company for reconciliation of its power supply cost recovery plan (Case No. U-21050) for the 12 months ended December 31, 2022. On behalf of Michigan Environmental Council. March 8, 2024.

Michigan Public Service Commission (Case No. U-21427): Direct Testimony of Devi Glick in the matter of the Application of Indiana Michigan Power Company for approval of a Power Supply Cost Recovery plan and factors (2024). On behalf of Sierra Club and Citizens Utility Board of Michigan. March 4, 2024.

Georgia Public Service Commission (Docket No. 55378): Direct Testimony of Devi Glick and Lucy Metz in Re: Georgia Power Company's 2023 Integrated Resource Plan Update. On behalf of Sierra Club. February 15, 2024.

Louisiana Public Service Commission (Docket No. U-36923): Direct Testimony of Devi Glick in the Application of Cleco Power LLC for: (1) Implementation of changes in rates to be effective July 1, 2024; and (2) extension of existing formula rate plan. On behalf of Sierra Club. February 5, 2024.

Public Service Commission of South Carolina (Docket No. 2023-154-E): Supplemental Testimony of Devi Glick in re: 2023 Integrated Resource Plan for the South Carolina Public Service Authority. On behalf of Sierra Club. January 29, 2024.

Public Service Commission of South Carolina (Docket No. 2023-154-E): Surrebuttal Testimony of Devi Glick in re: 2023 Integrated Resource Plan for the South Carolina Public Service Authority. On behalf of Sierra Club. November 17, 2023.

Public Utilities Commission of Ohio (Case No. 21-477-EL-RDR): Direct Testimony of Devi Glick in the Matter of the OVEC Generation Purchase Rider Audits Required by 4928.148 for Duke Energy Ohio, Inc. the Dayton Power and Light Company, and AEP Ohio. On behalf of Union of Concerned Scientists and the Citizens Utility Board. October 10, 2023.

Public Service Commission of South Carolina (Docket No. 2023-154-E): Direct Testimony of Devi Glick in re: 2023 Integrated Resource Plan for the South Carolina Public Service Authority. On behalf of Sierra Club. September 22, 2023.

Public Utilities Commission of Ohio (Case No. 20-165-EL-RDR): Direct Testimony of Devi Glick in the matter of the review of the Reconciliation Rider of the Dayton Power and Light Company. On behalf of Office of the Ohio Consumers' Counsel. September 12, 2023.

Virginia State Corporation Commission (Case No. PUR-2023-00066): Direct Testimony of Devi Glick in re: Virginia Electric and Power Company's 2023 Integrated Resource Plan filing pursuant to Virginia Code to §56-597 *et seq.* On behalf of Sierra Club. August 8, 2023.

Public Utility Commission of Texas (PUC Docket No. 54634): Direct Testimony of Devi Glick in the application of Southwestern Public Service Company for authority to change rates. On behalf of Sierra Club. August 4, 2023

Arizona Corporation Commission (Docket No. E-1345A-22-0144): Surrebuttal Testimony of Devi Glick in the matter of the application of Arizona Public Service Company for a hearing to determine the fair value of the utility property of the company for ratemaking purposes, to fix a just and reasonable rate of return thereon, and to approve rate schedules designed to develop such return. On Behalf of Sierra Club. July 26, 2023.

Arizona Corporation Commission (Docket No. E-01345A-22-0144): Direct Testimony of Devi Glick in the matter of the application of Arizona Public Service Company for a hearing to determine the fair value of the utility property of the company for ratemaking purposes, to fix a just and reasonable rate of return thereon, and to approve rate schedules designed to develop such return. On Behalf of Sierra Club. June 5, 2023.

Virginia State Corporation Commission (Case No. PUR-2023-00005): Direct Testimony of Devi Glick in the Petition of Virginia Electric & Power Company for revision of rate adjustment clause, Rider E, for the recovery of costs incurred to comply with state and federal environmental regulations pursuant to §56-585.1 A 5 e of the Code of Virginia. On behalf of Sierra Club. May 23, 2023.

New Mexico Public Regulation Commission (Case No, 22-00286-UT): Direct Testimony of Devi Glick in the matter of Southwestern Public Service Company's application for: (1) Revisions of its retail rates under advance no. 312; (2) Authority to abandon the Plant X Unit 1, Plant X Unit 2, and Cunningham Unit 1 Generating Stations and amend the abandonment date of the Tolk Generating Station; and (3) other associated relief. On behalf of Sierra Club. April 21, 2023.

Michigan Public Service Commission (Case No. U-20805): Direct Testimony of Devi Glick in the matter of the Application of Indiana Michigan Power Company for a Power Supply Cost Recovery Reconciliation proceeding for the 12-month period ended December 31, 2021. On behalf of Michigan Attorney General. April 17, 2023.

Michigan Public Service Commission (Case No. U-21261): Direct Testimony of Devi Glick in the matter of the application of Indiana Michigan Power Company for approval to implement a Power Supply Cost Recovery Plan for the twelve months ending December 31, 2023. On Behalf of Sierra Club. March 23, 2023.

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New Mexico Public Regulation Commission (Case No. 19-00099-UT / 19-00348-UT): Direct Testimony of Devi Glick in the matter of El Paso Electric Company's Application for Approval of Long-Term Purchased Power Agreements with Hecate Energy Santa Teresa, LLC, Buena Vista Energy, LLC, and Canutillo Energy Center LLC. On Behalf of New Mexico Office of the Attorney General, January 23, 2023.

Arizona Corporation Commission (Docket No. E-01933A-22-0107): Direct Testimony of Devi Glick in the matter of the application of Tucson Electric Power Company for the establishment of just and reasonable rates and charges designed to realize a reasonable rate of return on the fair value of the properties of Tucson Electric Power Company devoted to its operations throughout the state of Arizona for related approvals. On Behalf of Sierra Club. January 11, 2023.

New Mexico Public Regulation Commission (Case No. 22-00093-UT): Direct Testimony of Devi Glick in the amended application for approval of El Paso Electric Company's 2022 renewable energy act plan pursuant to the renewable energy act and 17.9.572 NMAC, and sixth revised rate no. 38-RPS cost rider. On Behalf of New Mexico Office of the Attorney General, January 9, 2023.

Iowa Utilities Board (Docket No. RPU-2022-0001): Supplemental Direct and Rebuttal Testimony of Devi Glick in MidAmerican Energy Company Application for a Determination of Ratemaking Principles. On behalf of Environmental Intervenors. November 21, 2022.

Public Utility Commission of Texas (PUC Docket No. 53719): Direct Testimony of Devi Glick in the application of Entergy Texas, Inc. for authority to change rates. On behalf of Sierra Club. October 26, 2022.

Virginia State Corporation Commission (Case No. PUR-2022-00051): Direct Testimony of Devi Glick in re: Appalachian Power Company's Integrated Resource Plan filing pursuant to Virginia Code §56-597 *et seq.* On behalf of Sierra Club. September 2, 2022.

Public Service Commission of the State of Missouri (Case No. ER-2022-0129, Case No. ER-2022-0130): Surrebuttal Testimony of Devi Glick in the matter of Every Missouri Metro and Evergy Missouri West request for authority to implement a general rate increase for electric service. On behalf of Sierra Club. August 16, 2022.

Iowa Utilities Board (Docket No. RPU-2022-0001): Direct Testimony of Devi Glick in MidAmerican Energy Company Application for a Determination of Ratemaking Principles. On behalf of Environmental Intervenors. July 29, 2022.

Public Service Commission of the State of Missouri (Case No. ER-2022-0129, Case No. ER-2022-0130): Direct Testimony of Devi Glick in the matter of Every Missouri Metro and Evergy Missouri West request for authority to implement a general rate increase for electric service. On behalf of Sierra Club. June 8, 2022.

Virginia State Corporation Commission (Case No. PUR-2022-00006): Direct Testimony of Devi Glick in the petition of Virginia Electric & Power Company for revision of rate adjustment clause: Rider E, for the

recovery of costs incurred to comply with state and federal environmental regulations pursuant to §56-585.1 A 5 e of the Code of Virginia. On behalf of Sierra Club. May 24, 2022.

Oklahoma Corporation Commission (Case No. PUD 202100164): Direct Testimony of Devi Glick in the matter of the application of Oklahoma gas and electric company for an order of the Commission authorizing application to modify its rates, charges, and tariffs for retail electric service in Oklahoma. On behalf of Sierra Club. April 27, 2022.

Public Utility Commission of Texas (PUC Docket No. 52485): Direct Testimony of Devi Glick in the application of Southwestern Public Service Company to amend its certifications of public convenience and necessity to convert Harrington Generation Station from coal to natural gas. On behalf of Sierra Club. March 25, 2022.

Public Utility Commission of Texas (PUC Docket No. 52487): Direct Testimony of Devi Glick in the application of Entergy Texas Inc. to amend its certificate of convenience and necessity to construct Orange County Advanced Power Station. On behalf of Sierra Club. March 18, 2022.

Michigan Public Service Commission (Case No. U-21052): Direct Testimony of Devi Glick in the matter of the application of Indiana Michigan Power Company for approval of a Power Supply Cost Recovery Plan and Factors (2022). On Behalf of Sierra Club. March 9, 2022.

Arkansas Public Service Commission (Docket No. 21-070-U): Surrebuttal Testimony of Devi Glick in the Matter of the Application of Southwestern Electric Power Company for approval of a general change in rate and tariffs. On behalf of Sierra Club. February 17, 2022.

New Mexico Public Regulation Commission (Case No. 21-00200-UT): Direct Testimony of Devi Glick in the Matter of the Southwestern Public Service Company's application to amend its certifications of public convenience and necessity to convert Harrington Generation Station from coal to natural gas. On behalf of Sierra Club. January 14, 2022.

Public Utilities Commission of Ohio (Case No. 18-1004-EL-RDR): Direct Testimony of Devi Glick in the Matter of the Review of the Power Purchase Agreement Rider of Ohio Power Company for 2018 and 2019. On behalf of the Office of the Ohio Consumer's Counsel. December 29, 2021.

Arkansas Public Service Commission (Docket No. 21-070-U): Direct Testimony of Devi Glick in the Matter of the Application of Southwestern Electric Power Company for Approval of a General Change in Rates and Tariffs. On behalf of Sierra Club. December 7, 2021.

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Public Utilities Commission of Ohio (Case No. 20-167-EL-RDR): Direct Testimony of Devi Glick in the Matter of the Review of the Reconciliation Rider of Duke Energy Ohio, Inc. On behalf of The Office of the Ohio Consumer's Counsel. October 26, 2021.

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Public Service Commission of South Carolina (Docket No, 2021-3-E): Direct Testimony of Devi Glick in the matter of the annual review of base rates for fuel costs for Duke Energy Carolinas, LLC (for potential increase or decrease in fuel adjustment and gas adjustment). On behalf of the South Carolina Coastal Conservation League and the Southern Alliance for Clean Energy. September 10, 2021.

North Carolina Utilities Commission (Docket No. E-2, Sub 1272): Direct Testimony of Devi Glick in the matter of the application of Duke Energy Progress, LLC pursuant to N.C.G.S § 62-133.2 and commission R8-5 relating to fuel and fuel-related change adjustments for electric utilities. On behalf of Sierra Club. August 31, 2021.

Michigan Public Service Commission (Docket No. U-20530): Direct Testimony of Devi Glick in the application of Indiana Michigan Power Company for a Power Supply Cost Recovery Reconciliation proceeding for the 12-month period ending December 31, 2020. On behalf of the Michigan Attorney General. August 24, 2021.

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North Carolina Utilities Commission (Docket No. E-7, Sub 1250): Direct Testimony of Devi Glick in the Mater of Application Duke Energy Carolinas, LLC Pursuant to §N.C.G.S 62-133.2 and Commission Rule R8-5 Relating to Fuel and Fuel-Related Charge Adjustments for Electric Utilities. On behalf of Sierra Club. May 17, 2021.

Public Utility Commission of Texas (PUC Docket No. 51415): Direct Testimony of Devi Glick in the application of Southwestern Electric Power Company for authority to change rates. On behalf of Sierra Club. March 31, 2021.

Michigan Public Service Commission (Docket No. U-20804): Direct Testimony of Devi Glick in the application of Indiana Michigan Power Company for approval of a Power Supply Cost Recovery Plan and factors (2021). On behalf of Sierra Club. March 12, 2021.

Public Utility Commission of Texas (PUC Docket No. 50997): Direct Testimony of Devi Glick in the application of Southwestern Electric Power Company for authority to reconcile fuel costs for the period May 1, 2017- December 31, 2019. On behalf of Sierra Club. January 7, 2021.

Michigan Public Service Commission (Docket No. U-20224): Direct Testimony of Devi Glick in the application of Indiana Michigan Power Company for Reconciliation of its Power Supply Cost Recovery Plan. On behalf of the Sierra Club. October 23, 2020.

Public Service Commission of Wisconsin (Docket No. 3270-UR-123): Surrebuttal Testimony of Devi Glick in the application of Madison Gas and Electric Company for authority to change electric and natural gas rates. On behalf of Sierra Club. September 29, 2020.

Public Service Commission of Wisconsin (Docket No. 6680-UR-122): Surrebuttal Testimony of Devi Glick in the application of Wisconsin Power and Light Company for approval to extend electric and natural gas rates into 2021 and for approval of its 2021 fuel cost plan. On behalf of Sierra Club. September 21, 2020.

Public Service Commission of Wisconsin (Docket No. 3270-UR-123): Direct Testimony and Exhibits of Devi Glick in the application of Madison Gas and Electric Company for authority to change electric and natural gas rates. On behalf of Sierra Club. September 18, 2020.

Public Service Commission of Wisconsin (Docket No. 6680-UR-122): Direct Testimony and Exhibits of Devi Glick in the application of Wisconsin Power and Light Company for approval to extend electric and natural gas rates into 2021 and for approval of its 2021 fuel cost plan. On behalf of Sierra Club. September 8, 2020.

Indiana Utility Regulatory Commission (Cause No. 38707-FAC125): Direct Testimony and Exhibits of Devi Glick in the application of Duke Energy Indiana, LLC for approval of a change in its fuel cost adjustment for electric service. On behalf of Sierra Club. September 4, 2020.

Indiana Utility Regulatory Commission (Cause No. 38707-FAC123 S1): Direct Testimony and Exhibits of Devi Glick in the Subdocket for review of Duke Energy Indian, LLC's Generation Unit Commitment Decisions. On behalf of Sierra Club. July 31, 2020.

Indiana Utility Regulatory Commission (Cause No. 38707-FAC124): Direct Testimony and Exhibits of Devi Glick in the application of Duke Energy Indiana, LLC for approval of a change in its fuel cost adjustment for electric service. On behalf of Sierra Club. June 4, 2020.

Arizona Corporation Commission (Docket No. E-01933A-19-0028): Reply to Late-filed ACC Staff Testimony of Devi Glick in the application of Tucson Electric Power Company for the establishment of just and reasonable rates. On behalf of Sierra Club. May 8, 2020.

Indiana Utility Regulatory Commission (Cause No. 38707-FAC123): Direct Testimony and Exhibits of Devi Glick in the application of Duke Energy Indiana, LLC for approval of a change in its fuel cost adjustment for electric service. On behalf of Sierra Club. March 6, 2020.

Public Utility Commission of Texas (PUC Docket No. 49831): Direct Testimony of Devi Glick in the application of Southwestern Public Service Company for authority to change rates. On behalf of Sierra Club. February 10, 2020.

New Mexico Public Regulation Commission (Case No. 19-00170-UT): Testimony of Devi Glick in Support of Uncontested Comprehensive Stipulation. On behalf of Sierra Club. January 21, 2020.

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Nova Scotia Utility and Review Board (Matter M09420): Expert Evidence of Fagan, B, D. Glick reviewing Nova Scotia Power's Application for Extra Large Industrial Active Demand Control Tariff for Port Hawkesbury Paper. Prepared for Nova Scotia Utility and Review Board Counsel. December 3, 2019.

New Mexico Public Regulation Commission (Case No. 19-00170-UT): Direct Testimony of Devi Glick regarding Southwestern Public Service Company's application for revision of its retail rates and authorization and approval to shorten the service life and abandon its Tolk generation station units. On behalf of Sierra Club. November 22, 2019.

North Carolina Utilities Commission (Docket No. E-100, Sub 158): Responsive testimony of Devi Glick regarding battery storage and PURPA avoided cost rates. On behalf of Southern Alliance for Clean Energy. July 3, 2019.

State Corporation Commission of Virginia (Case No. PUR-2018-00195): Direct testimony of Devi Glick regarding the economic performance of four of Virginia Electric and Power Company's coal-fired units and the Company's petition to recover costs incurred to company with state and federal environmental regulations. On behalf of Sierra Club. April 23, 2019.

Connecticut Siting Council (Docket No. 470B): Joint testimony of Robert Fagan and Devi Glick regarding NTE Connecticut's application for a Certificate of Environmental Compatibility and Public Need for the Killingly generating facility. On behalf of Not Another Power Plant and Sierra Club. April 11, 2019.

Public Service Commission of South Carolina (Docket No. 2018-3-E): Surrebuttal testimony of Devi Glick regarding annual review of base rates of fuel costs for Duke Energy Carolinas. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. August 31, 2018.

Public Service Commission of South Carolina (Docket No. 2018-3-E): Direct testimony of Devi Glick regarding the annual review of base rates of fuel costs for Duke Energy Carolinas. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. August 17, 2018.

Public Service Commission of South Carolina (Docket No. 2018-1-E): Surrebuttal testimony of Devi Glick regarding Duke Energy Progress' net energy metering methodology for valuing distributed energy resources system within South Carolina. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. June 4, 2018.

Public Service Commission of South Carolina (Docket No. 2018-1-E): Direct testimony of Devi Glick regarding Duke Energy Progress' net energy metering methodology for valuing distributed energy resources system within South Carolina. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. May 22, 2018.

Public Service Commission of South Carolina (Docket No. 2018-2-E): Surrebuttal testimony of Devi Glick on avoided cost calculations and the costs and benefits of solar net energy metering for South Carolina Electric and Gas Company. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. April 4, 2018.

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Public Service Commission of South Carolina (Docket No. 2018-2-E): Direct testimony of Devi Glick on avoided cost calculations and the costs and benefits of solar net energy metering for South Carolina Electric and Gas Company. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. March 23, 2018.

Resume updated October 2024

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for **DTE ELECTRIC COMPANY** to fully comply with Public Act 295 of 2008, as amended.

Case No. U-21662

Proof of Service

On the date below, an electronic copy of **Direct Testimony and Exhibits of Devi Glick on behalf of Michigan Environmental Council and Sierra Club (MEC-6)** was served on the following:

Name/Party	E-mail Address
Counsel for DTE Electric Company Andrea E. Hayden Paula Johnson-Bacon John A. Janiszewski	<u>mpscfilings_account@dteenergy.com</u> <u>andrea.hayden@dteenergy.com</u> <u>paula.bacon@dteenergy.com</u> <u>john.janiszewski@dteenergy.com</u>
Counsel for Michigan Public Service Commission Staff Heather M.S. Durian Monica M. Stephens Alena M. Clark	durianh@michigan.gov stephensm11@michigan.gov clarka55@michigan.gov
Counsel for Ecology Center, Environmental Law & Policy Center, Union of Concerned Scientists, Vote Solar Nicholas N. Wallace Daniel Abrams Carolyn Boyce Alondra Estrada	mpscdocket@elpc.org nwallace@elpc.org dabrams@elpc.org cboyce@elpc.org aestrada@elpc.org
Counsel for Association of Businesses Advocating Tariff Equity Stephen A. Campbell	scampbell@clarkhill.com
Counsel for Great Lakes Renewable Energy Association Don L. Keskey	donkeskey@publiclawrescourcecenter.com

{signatures on following page}

The statements above are true to the best of my knowledge, information and belief.

Troposphere Legal, PLC Counsel for MEC & SC

Date: October 31, 2024

By: ____

Natasha Fowles, Legal Assistant 420 E. Front St. Traverse City, MI 49686 Phone: 231-709-4000 Email: <u>natasha@tropospherelegal.com</u>