



March 8, 2024

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

RE: MPSC Case No. U-21051

Dear Ms. Felice:

Attached please find the following document for e-filing:

- Direct Testimony and Exhibits of Devi Glick on behalf of Michigan Environmental Council;
- Exhibits MEC-1 through MEC-10; and
- Proof of Service.

Please note that there is both a Public and Confidential Version of this Direct Testimony and Exhibits. The Confidential Version is only being served on those with an NDC on file in this case. Thank you for your assistance in this matter. If you have any questions, please feel free to contact me.

Sincerely,

Christopher M. Bzdok
chris@tropospherelegal.com

Cc: Parties to Case No. U-21051

STATE OF MICHIGAN
MICHIGAN PUBLIC SERVICE COMMISSION

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 twelve-month
period ending December 31, 2022.

Case No. U-21051

PUBLIC VERSION

DIRECT TESTIMONY OF

DEVI GLICK

ON BEHALF OF MICHIGAN ENVIRONMENTAL COUNCIL

March 8, 2024

**DIRECT TESTIMONY OF DEVI GLICK ON BEHALF OF MEC
CASE NO. U-21051**

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1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q Please state your name and occupation.**

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

6 **Q Please describe Synapse Energy Economics.**

7 **A**Synapse is a research and consulting firm specializing in energy and environmental
8 issues, including electric generation, transmission and distribution system
9 reliability, ratemaking and rate design, electric industry restructuring and market
10 power, electricity market prices, stranded costs, efficiency, renewable energy,
11 environmental quality, and nuclear power.

12 Synapse's clients include state consumer advocates, public utilities commission
13 staff, attorneys general, environmental organizations, federal government agencies,
14 and utilities.

15 **Q Please summarize your work experience and educational background.**

16 **A**At Synapse, I conduct economic analysis and write testimony and publications that
17 focus on a variety of issues related to electric utilities. These issues include power
18 plant economics, electric system dispatch, integrated resource planning,
19 environmental compliance technologies and strategies, and valuation of distributed
20 energy resources. I have submitted expert testimony and reports on these issues
21 before state utility regulators in over 50 litigated proceedings across 19 states.

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1 In the course of my work, I develop in-house electricity system models and perform
2 analysis using industry-standard electricity system models. I am proficient in the
3 use of spreadsheet analysis tools as well as optimization and electric dispatch
4 models including EnCompass and PLEXOS.

5 Before joining Synapse, I worked at Rocky Mountain Institute, focusing on a wide
6 range of energy and electricity issues. I have a master’s degree in public policy and
7 a master’s degree in environmental science from the University of Michigan, as
8 well as a bachelor’s degree in environmental studies from Middlebury College. I
9 have more than 11 years of professional experience as a consultant, researcher, and
10 analyst. A copy of my current resume is attached as Exhibit MEC-1.

11 **Q On whose behalf are you testifying in this case?**

12 **A** I am testifying on behalf of Michigan Environmental Council (“MEC”).

13 **Q Have you testified before the Michigan Public Service Commission before?**

14 **A** Yes, I submitted testimony in Case No. U-21427, Indiana Michigan Power
15 Company’s (“I&M”) Power Supply and Cost Recovery (“PSCR”) Plan for 2024,
16 Case No. U-20805, I&M’s PSCR reconciliation docket for 2021, Case No. U-
17 21261, I&M’s PSCR Plan for 2023, Case No. U-21052, I&M’s PSCR Plan for
18 2022, Case No. U-20528, DTE Energy’s (DTE) PSCR reconciliation docket for
19 2020, Case No. 20530, I&M’s PSCR reconciliation docket for 2020, Case No.
20 20804, I&M’s PSCR plan for 2021, and Case No. 20224, I&M’s PSCR
21 reconciliation docket for 2019.

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1 **Q What is the purpose of your testimony?**

2 **A** The purpose of my testimony is to evaluate the causes and drivers of DTE’s
3 substantial under-recovery of PSCR expenses for 2022. My primary focus is on the
4 costs that DTE incurred to operate its newest combined-cycle gas turbine (CCGT)
5 plant, the Blue Water Energy Center (BWEC). I review the Company’s natural gas
6 supply purchasing strategies, its transportation contracts—specifically with
7 NEXUS, among others—its storage contracts, and its management of its excess
8 NEXUS capacity. I also evaluate the reasonableness of DTE’s operational practices
9 at its coal- and gas-fired power plants, and the reliability of the Company’s baseload
10 and peaking generation assets.

11 **Q What documents do you rely upon in your analysis, and for your findings and**
12 **observations?**

13 **A** My analysis relies primarily upon discovery responses provided by DTE in this
14 proceeding as well as testimony filed by DTE witnesses and other intervenors in
15 other recent DTE PSCR reconciliation and plan dockets.

16 **Q Are you sponsoring any exhibits in this proceeding?**

17 **A** Yes, I am sponsoring the following exhibits:

18 MEC-1 Resume of Devi Glick

19 MEC-2 Response to AGDE-2.39a and b

20 MEC-3C Response to MECDE-2.1c with Attachment 2020_1207 Kickoff –
21 BWEC Natural Gas_FPS (Confidential)

22 MEC-4C Response to MECDE-2.1d with Attachment BWEC Hedging
23 Timeline (Confidential)

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- 1 MEC-5 Response to MECDE-1.11e
- 2 MEC-6 Response to AGDE-2.50
- 3 MEC-7 Attachment to AGDE-2.50 NEXUS Net Impact on 2022 Natural
- 4 Gas Expense
- 5 MEC-8 Excerpt from Case No. U-21050, Direct Testimony of James Wilson
- 6 MEC-9C Response to MECDE-4.2a (Confidential)
- 7 MEC-10 Response to MECDE-1.4a

8 **II. FINDINGS AND RECOMMENDATIONS**

9 **Q Please summarize your findings.**

10 **A** My findings include the following:

- 11 1. Natural gas expenses accounted for \$155 million of the total \$426 million
- 12 PSCR variance for 2022.
- 13 2. In 2022, despite record-high natural gas prices, DTE operated BWEC only
- 14 slightly less than it had projected in its PSCR plan, and [[REDACTED]
- 15 [REDACTED]
- 16 [REDACTED]].
- 17 3. DTE opted to continue using an index-based purchasing strategy rather than
- 18 switching to a forward-based strategy to buy natural gas in 2022, even after
- 19 BWEC came online and the Company’s demand for natural gas increased
- 20 substantially. This decision subjected ratepayers to market price volatility.
- 21 a. DTE’s own analysis shows that if the Company had used a forward-
- 22 based purchasing strategy in 2022 instead of maintaining the index-
- 23 based purchasing strategy, it would have reduced natural gas
- 24 expenses for ratepayers by [[REDACTED]] and would have reduced
- 25 the variance between projected and actual natural gas costs by nearly
- 26 [[REDACTED]].

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- 1 4. In 2022 DTE incurred \$14.17 million in NEXUS Transportation costs and
2 received only \$2.24 million in NEXUS supply value for a net NEXUS cost
3 of \$11.93 million. This represents a \$1.5 million variance from what DTE
4 had projected and continues a pattern of the NEXUS capacity providing no
5 value but substantial costs to ratepayers.
- 6 5. DTE opted to stop using an asset manager to manage the NEXUS pipeline
7 capacity once BWEC came online on the basis that it planned to utilize all
8 the NEXUS pipeline capacity for BWEC. But DTE failed to use most of, or
9 even a substantial portion of, its NEXUS capacity in 2022.
- 10 6. DTE’s generation fleet experienced very high unplanned outage rates in
11 2022 relative to projected outage levels. This resulted in DTE purchasing
12 substantially more energy from the MISO market than projected and
13 incurring a net \$77 million in replacement power (above what it would have
14 paid to generate its own power) for 2,419 GWh. Of that, \$30.1 million was
15 attributed to the purchase of 1,530.9 GWh of replacement power for outages
16 at DTE’s coal fleet and BWEC.

17 **Q Please summarize your recommendations.**

18 **A Based on my findings, I offer the following recommendations:**

- 19 1. The Commission should disallow [[REDACTED]] in excess natural gas
20 expenses, on the basis that the Company did not properly evaluate the costs
21 and risks of maintaining an index-based strategy prior to BWEC coming
22 online, and therefore incurred substantial natural gas expenses that were
23 avoidable with forward-pricing natural gas strategy.
- 24 2. The Commission should disallow the \$11.93 million in net costs that DTE
25 incurred through its NEXUS contract. That represents the costs DTE pays
26 for the NEXUS capacity in excess of the supply value it provides.
- 27 3. DTE should evaluate switching back to an asset manager to maximize the
28 value it gets from the NEXUS capacity at times when it is not needed by
29 DTE but has market value.

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1 4. The Commission should disallow \$30.1 million in net replacement power
2 costs incurred during outages at its baseload coal and gas plants on the
3 basis that DTE poorly managed its baseload fleet and experienced
4 excessive unplanned outages that forced it to purchase substantially more
5 energy from the market than projected.

6 **III. DTE INCURRED SUBSTANTIALLY HIGHER COST THAN PROJECTED**
7 **TO OPERATE BWEC IN 2022**

8 **Q Please provide a brief overview of BWEC.**

9 **A** BWEC is a 1,150 MW CCGT power plant located in East China Township,
10 Michigan. The plant began commercial operations in June 2022.¹

11 BWEC is interconnected with two natural gas transmission pipelines, Vector and
12 DTE Gas. DTE has contracted for firm natural gas transportation capacity with
13 NEXUS pipeline (and others) and has storage capacity which provides access to
14 multiple receipt points including Dawn, Kensington, Clarington, NEXUS-
15 Ypsilanti, and Washington 10.²

16 **Q What was DTE's total under-recovery and variance for the 2022 PSCR**
17 **period?**

18 **A** As shown in Table 1 and Table 2 below, in 2022, DTE incurred \$1.88 billion in
19 PSCR expenses but earned \$1.61 billion in PSCR revenues. The Company had
20 projected its PSCR expenses would be only \$1.46 billion, which is around \$426
21 million variance from its actual expenses.

¹ Direct Testimony of Ryan C. Pratt, p. 9.

² Pratt Direct, p. 8.

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1 When DTE’s 2022 actual PSCR expenses are combined with the prior year overage
2 balance and interest, and the 2022 actual revenues are netted out, the result is a
3 \$421 million PSCR under-recovery. The actual under-recovery and the variance
4 between actual and projected PSCR expenses are very close, although not identical,
5 because the PSCR factors are set to roughly align expenses with revenues based on
6 the PSCR plan projections. When the projections are off, the under-recovery (or
7 over-recovery) will reflect that.

8 **Table 1. 2022 Select PSCR actual and project expenses**

	Actual (\$M)	Projected (\$M)	Variance (\$M)	Percent variance (%)	Percent total PSCR variance (%)
Fossil fuels	\$904	\$728	\$176	24%	41%
Natural gas	\$364	\$209	\$155	74%	36 %
Purchased power	\$581	\$336	\$244	73%	57%
Total PSCR expenses	\$1,883	\$1,456	\$426	29%	100%

9 *Source: Direct Testimony of R. Pratt, p. 5; Exhibit A-7; Exhibit A-13; Exhibit A-15; Exhibit A-16.*

10 **Table 2. Summary of 2022 PSCR under-recovery**

Item	Amount
Total 2022 PSCR expenses	\$1,883.23
Total 2022 PSCR revenues	\$1,612.18
Interest	\$7.32
Prior year balance	\$142.24
2022 under-recovery balance	\$420.62

11 *Source: Exhibit A-15; Exhibit A-13.*

12 **Q What portion of the under-recovery was attributed to fossil fuel expenses**
13 **broadly and natural gas expenses more specifically?**

14 **A** Of this total under-recovery variance, \$176 million is attributed to fossil fuels as a
15 whole with \$155 million of that attributed to DTE’s natural gas expenses. DTE’s

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1 actual natural gas expenses were \$364 million in 2022 (74 percent) higher than
2 DTE projected.³ Natural gas cost accounts for about a third of the total under-
3 recovery. Purchased power costs (some of which is for replacement power during
4 plant outages, as discussed below) account for around 57 percent of the under-
5 recovery. Expenses for other fossil fuels account for the remainder.

6 **Q How large is this under-recovery compared to prior years?**

7 **A** As shown in Table 3 below, the under-recovery for 2022 is substantially larger than
8 the under-recovery in prior years, and around three times as large as last year's
9 under-recovery.

10 **Table 3. PSCR under- and over-recovery by year**

Year / Case No.	PSCR (under)/ over recovery (\$ Million)
2012	(\$67.6)
2013	\$73.3
2014	(\$12.8)
2015	\$29.5
2016	(\$2.7)
2017	(\$23.3)
2018	(\$116.4)
2019	(\$0.1)
2020	(\$95.4)
2021	(\$142.2)
2022	(\$420.6)

11 *Source: DTE Response to MECDE Request 1-11d.*

12 **Q What happened to natural gas supplies and prices in 2022 that drove such a**
13 **significant under-recovery of PSCR costs for DTE?**

14 **A** Natural gas prices rose dramatically across the United States in 2022. Witness Pratt
15 discussed these higher-than-expected natural gas prices and attributed them mainly

³ Pratt Direct, p. 5.

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1 to (1) record-high natural gas exports driven by the war in Ukraine; (2) limited gas-
2 to-coal switching as coal plants retired and coal supply-chain constraints hindered
3 deliveries (although later in discovery the Company indicated that it didn't actually
4 face any coal supply shortages or railroad constraints that restricted its coal
5 generation fleet in 2022);⁴ and (3) inflationary pressures impacting gas production
6 costs.⁵

7 Natural gas supply costs at local delivery points MichCon CityGate and Dawn were
8 substantially higher than DTE projected. Actual prices were \$5.99/Dth and
9 \$6.05/Dth respectively while DTE's forecasted prices would be \$3.32/Dth and
10 \$3.38/Dth respectively.⁶

11 **Q How would you expect generation levels across DTE's fleet as well as other**
12 **regional generators to change in response to record gas price spikes?**

13 **A** I would expect to see DTE reduce generation levels at its gas fleet given its reliance
14 on high-priced natural gas purchased in the spot market. I would also expect to see
15 DTE increase generation levels at plants that rely on other fuel sources, for example
16 its coal plants. Outside of DTE's service territory, I would expect to see output
17 increase at gas plants that have access to lower-cost natural gas through, for
18 example, forward market contracts or lower firm transportation arrangements.

⁴ Ex MEC-2, DTE Response to ADGE 2-3a; DTE Response to ADGE 2.3b.

⁵ Pratt Direct, p. 6.

⁶ Pratt Direct, pp. 5-6.

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1 These plants should increase output as they are likely to be more economic and
2 competitive in the market relative to DTE’s gas plants.

3 **Q BWEC is newer and more efficient than other similarly sized but older CCGT**
4 **plants. How will that impact how much it dispatches?**

5 **A**Even though BWEC is newer and more efficient than most CCGTs operating in the
6 market, the savings in moving between BWEC’s heat rate⁷ and the heat rate of the
7 average natural gas plant operating in the market today⁸ is much smaller than the
8 savings when moving from a spot price to a forward market price.⁹ In other words,
9 a less efficient gas plant with a forward contract is still expected to dispatch before
10 BWEC with its spot market contract up until a heat rate of around 9,700 Btu/kWh.

11 **Q What actually happened to generation levels at the BWEC and across DTE’s**
12 **fleet during 2022?**

13 **A**Generation levels at every single one of DTE’s fossil plants—coal, gas, and oil—
14 were below the level DTE projected in its PSCR plan.¹⁰ To make up for this
15 shortage, DTE purchased substantially more energy from MISO on net than it
16 projected and switched from being a net supplier, as it had projected, to being a net
17 purchaser.¹¹ What’s even more concerning is that the average cost of power DTE

⁷ Exhibit A-24.

⁸ U.S. Energy Information Administration, Table 8.1 Average Operating Heat Rate for Selected Energy Sources, available at https://www.eia.gov/electricity/annual/html/epa_08_01.html.

⁹ DTE Response to MECDE 2.1c Confidential Attachments; DTE Response to MECDE 2.1d Confidential Attachments.

¹⁰ Exhibit A-23.

¹¹ Exhibit A-16.

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1 purchased from MISO was \$67.00/MWh while the average cost it received for
2 purchased power was \$43.36/MWh.¹²

3 This pattern indicates that either (or likely both) (1) DTE’s power was, on net, more
4 expensive than power available in the MISO market from other regional suppliers;
5 or (2) at least some of DTE’s generators experienced higher-than-projected planned
6 and unplanned outages, causing DTE to purchase more energy from the market than
7 expected. I would have expected to see generation at DTE’s coal and nuclear fleet
8 stay at least at projected levels, and even increase.

9 At BWEC, generation levels were lower than projected, but only by 7 percent.
10 While it’s a good sign that generation levels were below projected levels, it is
11 concerning that the variance is so small given record-high natural gas costs. This
12 indicates that DTE barely changed its operational plan for the plant in response to
13 high gas costs.

14 While DTE cannot be blamed for global forces that drove natural gas prices up to
15 record-high levels, DTE is responsible for planning its system to minimize risks to
16 ratepayers and should reasonably respond to changing market forces. As I will
17 discuss in the following section, DTE’s decision to self-commit BWEC [[REDACTED]]
18 percent of the time it was available, its decision to continue to purchase natural gas
19 in the spot market, and its over-payment for transportation capacity on the NEXUS
20 pipeline all contributed to the resulting unnecessary natural gas expenses that the
21 Company now seeks to pass on to ratepayers.

¹² Exhibit A-16.

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1 **A. DTE Relied on Spot Contracts Instead of Forward-Contracts to Supply**
2 **Natural Gas to BWEC in 2022**

3 **Q How did DTE’s natural gas demand change with BWEC coming online?**

4 **A** Prior to BWEC coming online, DTE used natural gas at its peaking plants. In 2021,
5 its total gas consumption was 27,437 thousand MBtu for a total of \$133 million.
6 After BWEC came online in 2022, DTE’s total gas consumption nearly doubled to
7 48,923 thousand MBtu for a cost of \$364 million. This is almost three times as
8 much as DTE paid for gas in 2021, with BWEC online for only half the year.¹³

9 **Table 4. Historical DTE natural gas consumption, costs and generation**

	Units	2018	2019	2020	2021	2022
Annual Gas Consumption	<i>Thousand MBtu</i>	28,683	27,447	41,746	27,437	48,923
Annual Gas Costs	<i>\$ Millions</i>	\$105	\$85	\$98	\$133	\$364
Total Generation	<i>GWh</i>	2,337	2,263	3,504	2,295	6,126

10 *Source: DTE PSCR Plans 2018-2022 Exhibit A-7; Exhibit A-23.*

11 **Q How did DTE contract for natural gas to supply its gas peaking plants during**
12 **2022?**

13 **A** In 2022, DTE purchased its natural gas supply in the spot market using index-based
14 pricing. DTE Witness Pratt stated that this was a “reasonable and prudent plan
15 given the relatively small and unpredictable volume of gas consumed by the
16 Company’s peaking generation units and the BWEC plant that had not yet been
17 placed in service.”¹⁴

¹³ DTE PSCR Plans 2018-2022 Electric Exhibits A-7 and A-23.

¹⁴ Pratt Direct, p. 6.

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1 **Q How did DTE’s natural gas supply contracting approach change when BWEC**
2 **came online in June 2022?**

3 **A**Surprisingly, DTE didn’t change its approach and continued to use index-based
4 pricing. It is understandable for DTE to rely on index-based pricing for the first half
5 of 2022 when its gas use was still limited to its peaking plants. But BWEC came
6 online midway through 2022 and needed substantially more gas to operate than any
7 of DTE’s other gas plants. Therefore, DTE should have shifted its purchasing
8 strategy. By continuing to rely on the spot market for 100 percent of its gas
9 purchases, DTE left its ratepayers unprotected from volatility in the natural gas
10 market.

11 **Q What is the alternative to index-based purchases?**

12 **A**The alternative is to purchase a portion of the Company’s gas supply through a
13 forward-purchasing strategy. With a forward-purchasing strategy, the Company
14 buys a majority, generally between two-thirds and three-quarters, of its projected
15 fuel supply in advance. The purchases are spread out over a 1–2-year period, with
16 a fixed portion, say 3 percent of projected need, purchased each month. This way,
17 if gas prices spike, it will only impact a portion of the natural gas supply. While
18 there may be deviations between the forward price and the spot price, and a fixed
19 strategy can limit the utility’s ability to capitalize when gas prices are low, this
20 strategy will also protect ratepayers from gas price spikes and overall mitigates
21 volatility.

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1 **Q Did DTE evaluate switching to a forward-purchase strategy prior to BWEC**
2 **coming online in May 2022?**

3 **A** Yes. [[REDACTED]
4 [REDACTED]
5 [REDACTED]].¹⁵ [[REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]].¹⁶

11 When asked in discovery why DTE didn't use an index-based strategy for BWEC
12 in 2022, DTE indicated that it was risky to enter into a forward contract before a
13 plant was online, stating that "entering into a fixed-price, fixed-volume purchases
14 before a plant is commercially in-service could result in adverse impacts to the
15 Company's delivery strategy and PSCR expense if unforeseen schedule delays
16 were to occur."¹⁷ This justification for not switching to a forward-purchasing
17 strategy was somewhat inconsistent with the explanation provided in internal
18 company documents.

¹⁵ Ex MEC-3C, DTE Response to MECDE Request 2.1c, NDA U-21051 MECDE-2.1c BWEC Attachment, Attachment U-21051 MEC-2.1c 2020_1207 Kickoff – BWEC Natural Gas_FPS.

¹⁶ Ex MEC-3C, DTE Response to MECDE Request 2.1c, NDA U-21051 MECDE-2.1c BWEC Attachment, Attachment U-21051 MEC-2.1c 2020_1207 Kickoff - BWEC Natural Gas_FPS.

¹⁷ DTE Response to MECDE Request 2.1a.

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1 **Q** What explanation did DTE provide internally for staying with an index-based
2 purchasing strategy?

3 **A** [[[REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED] [REDACTED]
13 [REDACTED]
14 [REDACTED]]¹⁹

15 **Q** Does DTE still rely on spot purchases for its natural gas supply today?
16 **A** No, as of 2023, DTE switched to a forward purchasing strategy for BWEC. This
17 strategy involves spreading out the majority of its gas purchases over a 24-month
18 period of time instead of relying entirely on the spot market.²⁰ According to DTE
19 Company Witness Pratt in Case No. U-21259, DTE will make fixed price forward

¹⁸ Ex MEC-4C, DTE Response to MECDE Request 2.1d, NDA U-21051 MECDE-2.1d Forward Purchase Strategy Communications, Attachment RE: BWEC Hedging Timeline.

¹⁹ Ex MEC-3C, DTE Response to MECDE Request 2.1c, NDA U-21051 MECDE-2.1c BWEC Attachment, Attachment U-21051 MEC-2.1c 2020_1207 Kickoff – BWEC Natural Gas_FPS.

²⁰ Pratt Direct, p. 9.

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1 purchases on a monthly basis for approximately 3 percent of BWEC’s natural gas
2 requirement each of the 24 months preceding the delivery period in which the gas
3 is received.²¹ This will result in DTE purchasing about two-thirds (67 percent) of
4 its gas supply in advance and about one-third in the short-term market. DTE
5 explains that this switch will “create price certainty and reduce price volatility for
6 its customers.”²²

7 **Q Why did DTE decide to switch to a forward-purchase strategy in 2023?**

8 **A** DTE indicates in discovery that this switch in strategy was *not* a direct response to
9 higher gas prices in 2022.²³ In fact, the Company didn’t directly state in its
10 testimony or public documents provided in discovery what motivated it to suddenly
11 shift its purchasing strategy, beyond wanting to create price certainty and reduce
12 price volatility to customers.

13 But given the timing of when the Company began to reconsider this strategy, in
14 [[REDACTED]],²⁴ it seems clear that high
15 gas prices did have some impact on the Company’s reconsideration. And based on
16 internal company documents [[REDACTED]
17 [REDACTED]
18 [REDACTED]

²¹ Case No. U-21259. Direct Testimony of R.C. Pratt, p. 7.

²² Ex MEC-5, DTE Response to MECDE Request 1-11e.

²³ DTE Response to MECDE Request 1.11e.

²⁴ DTE Response to MECDE Request 2.1d, NDA U-21051 MECDE-2.1d Forward Purchase Strategy Communications, various Attachments.

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- 1 • [REDACTED]
- 2 [REDACTED]
- 3 • [REDACTED]
- 4 [REDACTED],
- 5 [REDACTED]
- 6 [REDACTED]
- 7 [REDACTED]]²⁵

8 [[[REDACTED]

9 [REDACTED]

10 [REDACTED]]²⁶

11 **Q How much better off would DTE ratepayers have been in 2022 if DTE had**

12 **switched to a forward-purchase strategy for 2022 instead of waiting until**

13 **2023?**

14 **A [[[REDACTED]**

15 [REDACTED]].²⁷

²⁵ Ex MEC-3C, DTE Response to MECDE Request 2.1c, NDA U-21051 MECDE-2.1d Forward Purchase Strategy Communications, Attachment U-21051 MEC-2.1d 2022_08 DTEE MPSC NatGas Update.

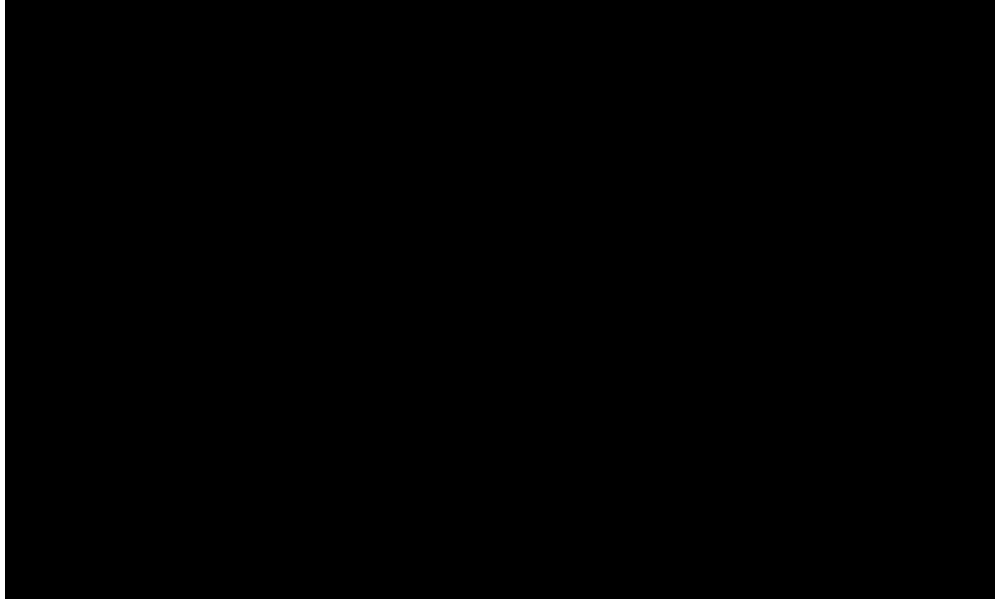
²⁶ DTE Response to MECDE Request 2.1d, NDA U-21051 MECDE-2.1d Forward Purchase Strategy Communications, various Attachments.

²⁷ Ex MEC-4C, DTE Response to MECDE Request 2.1d, NDA U-21051 MECDE-2.1d Forward Purchase Strategy Communications, Attachment U-21051 MEC-2.1d 2022_08 DTEE MPSC NatGas Update.

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Figure 1. Confidential: Short-term vs forward-purchase strategy - annual expenses



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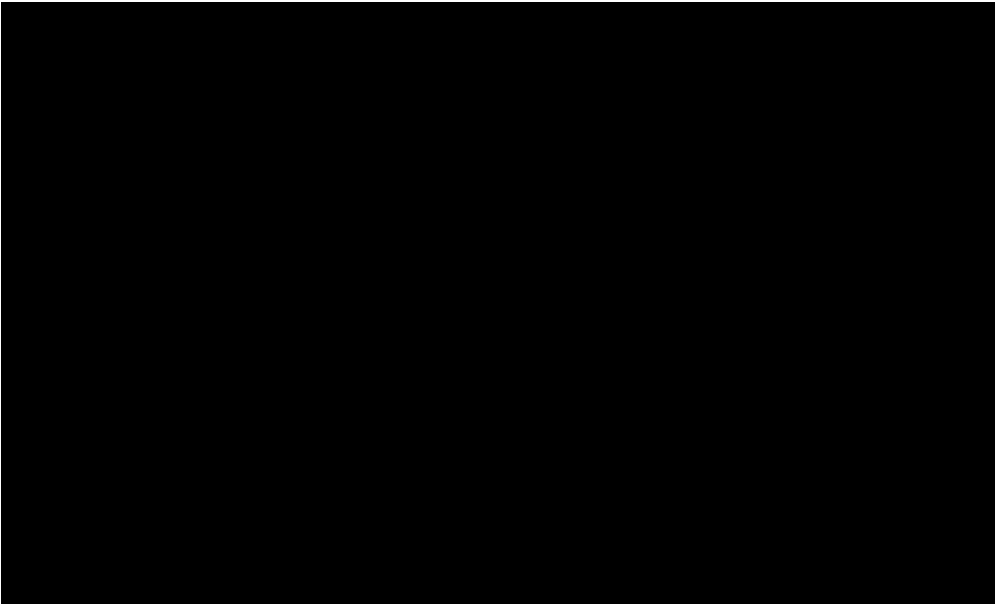
4

Source: DTE Response to MECDE Request 2.1d, NDA U-21051 MEDCE-2.1d Forward Purchase Strategy Communications, Attachment U-21051 MEC-2.1d 2022_08 DTEE MPSC NatGas Update.

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Figure 2. Confidential: Short-term vs forward-purchase strategy - variance to PSCR plan



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Source: DTE Response to MECDE Request 2.1d, NDA U-21051 MEDCE-2.1d Forward Purchase Strategy Communications, Attachment U-21051 MEC-2.1d 2022_08 DTEE MPSC NatGas Update.

11

[[[REDACTED]

12

[REDACTED]

13

[REDACTED]

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1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]]²⁸

10 This is the analysis that DTE could have and should have performed when making
11 its initial decision about whether to pursue a forward-based pricing strategy for
12 BWEC.

13 **Q Do you believe that DTE did enough to evaluate the risks of its purchasing**
14 **strategy in advance of bringing BWEC online?**

15 **A** No. As discussed above, DTE did perform some analysis to evaluate whether to
16 switch to a forward-based purchasing strategy, but the Company later admitted
17 some of the results it relied upon were flawed. Further, DTE leadership did not
18 appear to be seriously involved in evaluating fuel price risk until after gas prices
19 spiked. And CFS didn't appear to engage with DTE Gas, which itself procured its
20 gas using a forward-base purchasing strategy, until 2022.

²⁸ Ex MEC-4C, DTE Response to MECDE Request 2.1d, NDA U-21051 MEDCE-2.1d Forward Purchase Strategy Communications, Attachment U-21051 MEC-2.1d 2022_08 DTEE MPSC NatGas Update.

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1 **Q Explain CFS’s engagement with DTE leadership on its fuel purchasing**
2 **strategy for BWEC.**

3 **A** I reviewed communications, reports, and analysis that DTE prepared during two
4 different timeframes: (1) in 2020 and 2021 when it was making its initial decision
5 to stay with index-based pricing at BWEC²⁹ and (2) in 2022 when it was updating
6 its strategy to move to a forward-based pricing strategy.³⁰ DTE provided 20 files
7 with emails and internal company reports in response to my request regarding its
8 initial strategy. It provided 121 files in response to my second request regarding
9 DTE’s update of its strategy. Many of the documents in the second batch were
10 communications from Company leadership who did not appear to be involved in
11 the original review of fuel purchasing strategy. While this isn’t a precise measure
12 of its response, it is telling that Company leadership was barely engaged in the
13 review of fuel pricing strategies prior to 2022. Once natural gas prices spiked
14 globally, leadership was much more engaged and requested regular updates.³¹

15 **Q Explain CFS’s engagement with DTE Gas on its fuel purchasing strategy for**
16 **BWEC.**

17 **A** [[
18 

²⁹ DTE Response to MECDE Request 2.1c, NDA U-21051 MECDE-2.1d BWEC Attachments, various Attachments.

³⁰ DTE Response to MECDE Request 2.1d, NDA U-21051 MECDE-2.1d Forward Purchase Strategy Communications, various Attachments.

³¹ Wayne Colonnello, Director-Corporate Fuel Supply; Angela Wojtowicz, Vice President, Business Planning & Development; Benjamin Felton, Senior Vice President - Energy Supply; Trevor F Lauer - Vice Charman & Group President.

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1 [REDACTED]]³² [[REDACTED]

2 [REDACTED]

3 [REDACTED]]³³

4 **Q What do you conclude about DTE’s gas purchasing and contracting decisions**
5 **for 2022?**

6 **A** I do not believe DTE acted prudently. While it is true that a utility should not be
7 overly reactive and should not base a long-term strategy on a single or short-term
8 trend, it is also true that utilities should be responsive to changes in the market and
9 take steps to minimize risks as market volatility increases. It’s reasonable that DTE
10 responded with a forward-pricing strategy going forward, but it is also concerning
11 that it did not do more to understand the risks, and take steps to mitigate them, in
12 advance of BWEC coming online. BWEC hadn’t even come online when DTE
13 realized it needed to update its purchasing strategy for the plant.

14 DTE knew that its gas consumption was set to increase with BWEC and has an
15 affiliated entity, DTE Gas, that procures its gas supply using a forward-pricing
16 strategy.³⁴ DTE should have recognized the change in its need and leveraged the
17 expertise of its affiliate in advance.

³² DTE Response to MECDE Request 2.1c, NDA U-21051 MECDE-2.1d BWEC Attachments, various Attachments.

³³ DTE Response to MECDE Request 2.1d, NDA U-21051 MECDE-2.1d Forward Purchase Strategy Communications, various Attachments.

³⁴ Ex MEC-3C, DTE Response to MECDE Request 2.1c, NDA U-21051 MECDE-2.1c BWEC Attachment, Attachment U-21051 MEC-2.1c 2020_1207 Kickoff – BWEC Natural Gas_FPS.

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1 **B. DTE Continued to Overpay for, and Underutilize, the NEXUS Pipeline**
2 **Capacity in 2022**

3 **Q Summarize DTE’s NEXUS pipeline contract that was in place in 2022.**

4 **A** DTE has contracted with the NEXUS pipeline for 30,000 Dth/d of transportation
5 capacity from Kensington to Ypsilanti in a 20-year contract. The contracted
6 capacity increased to 75,000 Dth/d in July 2022 after BWEC came online. The term
7 of the incremental 45,000 Dth/d is 15-years.

8 In October 2018, DTE signed an amendment to access lower-cost gas from the
9 Clarington receipt point, which is south of Kensington, through the Texas Eastern
10 Appalachian Lease (TEAL) pipeline project. The term of the amendment was
11 November 1, 2018–October 31, 2022. This agreement covered 15,000 Dth/d; this
12 is half of what DTE originally contracted from NEXUS. DTE attempted to
13 negotiate for the full 30,000 Dth/d to come from Clarington, but NEXUS was
14 unwilling to provide more than 15,000 Dth/d from Clarington. When the TEAL
15 amendment expired in October, DTE was able to negotiate an extension of just
16 8,000 Dth/of TEAL capacity through October 2024.

17 Aside from NEXUS, DTE can and should purchase natural gas from other supply
18 points when gas is available at a lower cost than it is through NEXUS (inclusive of
19 the transportation capacity cost).

20 **Q How was NEXUS expected to deliver cost savings to DTE customers?**

21 **A** NEXUS was supposed to give DTE access to low-cost natural gas. DTE would pay
22 a transportation cost (reservation charge) to reserve the NEXUS pipeline capacity,

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1 but that reservation was supposed to be smaller than the supply savings.
2 Unfortunately for DTE and its ratepayers, those cost savings never materialized,
3 and they are not expected to materialize going forward. The savings from the lower-
4 cost supply, as measured by the basis from Kensington to Dawn (the alternative
5 regional supply point), have not been higher than the NEXUS reservation charge.
6 As a result, DTE has been overpaying for gas and passing those excess costs on to
7 its ratepayers.

8 **Q What were the total and net costs of the NEXUS pipeline to DTE customers in**
9 **2022?**

10 **A** According to DTE’s data, as shown in Table 5 below, in 2022 the Company
11 incurred \$14.17 million in NEXUS transportation costs and received only \$2.24
12 million in NEXUS supply value for a net NEXUS cost of \$11.93 million.^{35,36} In
13 the first half of 2022, before BWEC came online, supply savings represented
14 roughly 29 percent of the total transportation cost. That dropped to around 10
15 percent in the second half of 2022, once the NEXUS contract increased DTE’s
16 contracted gas capacity to 75,000 Dth/d to supply BWEC. This shows that the
17 NEXUS contract did not provide value to DTE ratepayers in 2022, and in fact had
18 a net impact cost impact of \$11.9 million in 2022. That is a \$1.5 million variance
19 from what DTE projected in its 2022 plan.

³⁵ Ex MEC-6, DTE Response to AGDE Request 2.50, Ex MEC-7, Attachment ADGE-2.50 NEXUS Net Impact on 2022 Natural Gas Expense.

³⁶ The gas cost savings minus the cost of the capacity has consistently been the measure of NEXUS value. See the list of all instances where this measure was used in the Direct Testimony of James Wilson, Case No. U-21050, p. 16 (Exhibit MEC-8).

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Table 5. Confidential: Market value to DTE electric customer of NEXUS commitment

Month	From Clarington	From Kensington	Total NEXUS	Transport Cost	Supply savings as % transport cost
Jan	[[[[\$207,331	\$716,100	29%
Feb			\$122,189	\$646,800	19%
Mar			\$160,848	\$716,100	22%
Apr			\$222,179	\$693,000	32%
May			\$238,153	\$716,100	33%
Jun			\$256,516	\$693,518	37%
Jan - June			\$1,207,217	\$4,181,618	29%
Jul			\$204,548	\$1,686,164	12%
Aug			\$208,225	\$1,686,347	12%
Sep			\$195,031	\$1,631,602	12%
Oct			\$134,625	\$1,686,223	8%
Nov			\$54,600	\$1,621,515	3%
Dec			\$239,450	\$1,676,657	14%
Jul - Dec			\$1,036,479	\$9,988,508	10%
Total			\$2,243,696	\$14,170,125	16%

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Source: Exhibit A-27; DTE Response to ADGE 2.4b, Attachment NDA U-21051 AGDE-2.40b 2022 NEXUS Purchases June-December; DTE Response to AGDE 2.41e, Attachment NDA U-21051 AGDE-2.41e NEXUS spreads June – December; DTE Response to AGDE Request 2.40b, Attachment NDA U-21051 AGDE-2.40b NEXUS AMA.

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Q How did DTE’s projection of NEXUS costs in its 2022 PSCR Plan compare to NEXUS’s actual costs to DTE ratepayers?

10
11

A DTE projected that NEXUS transportation costs would be around \$14.99 million and the NEXUS supply value would be around \$4.60 million for a net cost of \$10.38 million. The actual cost was about 15 percent higher than DTE projected because supply benefits from NEXUS were much lower than DTE had projected.³⁷

³⁷ Ex MEC-6, DTE Response to AGDE Request 2.50, Ex MEC-7 Attachment ADGE-2.50 NEXUS Net Impact on 2022 Natural Gas Expense.

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1 **Q How much of the NEXUS pipeline capacity did DTE utilize in 2022?**

2 **A** As shown in Table 6 below, DTE used less than half of the NEXUS pipeline
3 capacity during the majority of 2022, and never used more than 58 percent of the
4 capacity. Its average utilization for all of 2022 was only 36 percent. Its utilization
5 of the TEAL capacity was much higher averaging at around 89 percent for 2022.

6 **Table 6. NEXUS utilization in 2022**

Month	Total Deliveries (Dth)	Daily Average (Dth/d)	NEXUS Utilization	TEAL Utilization
Jan	670,000	21,613	50%	100%
Feb	280,000	10,000	50%	100%
Mar	239,677	7,732	50%	100%
Apr	235,000	7,833	58%	97%
May	360,000	11,613	56%	99%
Jun	446,470	14,882	50%	99%
Jul	380,000	12,258	16%	77%
Aug	610,000	19,677	26%	100%
Sep	282,654	9,422	13%	63%
Oct	405,000	13,065	17%	87%
Nov	112,000	3,733	5%	47%
Dec	849,681	27,409	37%	99%
Total	4,870,482	13,344	36%	89%

7 *Source: DTE response to STDE 1.33; DTE Response to STDE-1.32, Attachment U-21051 STDE-*
8 *1.32 Natural Gas Deliveries and Consumption.*

9 **Q In 2022, did DTE utilize an asset manager to manage the NEXUS capacity and**
10 **to ensure that the Company makes the best use of the assets, both when they**
11 **are needed for BWEC supply and when they are not needed but still have value**
12 **in the market?**

13 **A** Only for part of the year. Prior to May 2022 DTE released its NEXUS capacity
14 through a Gas Supply and Asset Management Agreement (“AMA”) to a natural gas
15 marketer (“Asset Manager”). The Asset Manager provided gas to DTE’s power

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1 plants when DTE requested it and otherwise flowed other gas through the pipeline
2 when it was economic to do so. Once BWEC came online, DTE opted to manage
3 the capacity itself. In Docket U-20826, DTE Company witness Pratt suggested that
4 the Asset Manager would no longer be needed once BWEC came online because
5 DTE planned to utilize all its NEXUS capacity. Even after it became clear that DTE
6 no longer was going to use all of the NEXUS capacity, it still opted not to use an
7 asset manager.³⁸

8 This decision is concerning given how much more complicated DTE’s natural gas
9 procurement became, and the possibility DTE has to earn revenue for the NEXUS
10 capacity in the market when it isn’t using 100 percent of its NEXUS capacity. An
11 asset manager could have ensured that DTE was always maximizing value from the
12 pipeline. MECDE Witness James Wilson recognized this risk back when DTE was
13 filing its 2022 PSCR Plant case and recommended that DTE continue to use an
14 AMA.³⁹ Without an asset manager, the onus is now on DTE to ensure that the
15 capacity is being optimally managed.

16 **Q What do you conclude about the efforts DTE did take to manage the costs of**
17 **the NEXUS contract during 2022?**

18 **A** DTE did not adequately manage the costs of the NEXUS capacity and incurred firm
19 transportation costs far in excess of the contract’s supply benefits. Specifically, in

³⁸ Ex MEC-8, Case No. U-21050, Direct Testimony of James Wilson, pp. 23-24.

³⁹ Ex MEC-8, Case No. U-21050, Wilson Direct, pp. 23-25.

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1 2022, DTE incurred \$11.93 million in net costs through the NEXUS contract. These
2 excess costs should be disallowed from rates.

3 **C. DTE Operated BWEC More Than It Should Have in 2022**

4 **Q How did DTE commit and dispatch BWEC in 2022?**

5 **A** [[REDACTED]
6 [[REDACTED]]⁴⁰ – [[REDACTED]
7 [[REDACTED]].⁴¹ [[REDACTED]
8 [[REDACTED]
9 [[REDACTED]]⁴² This appears to be inconsistent with how DTE
10 describes its dispatch strategy in response to a discovery response to the Attorney
11 General, where it stated that:

“The Company offers all available generation capacity and bids all customer load into the MISO market on a daily basis. As a participant in the MISO market, the Company follows economic dispatch signals received from MISO. Following MISO’s economic dispatch signals and bring[ing] units online to generate when instructed by MISO is the best economic and reliability interest of our customers.”

18 Strictly speaking, none of what DTE says is untrue. DTE does let the market decide
19 when to dispatch its non-peaking power plants *once they are already online* and it
20 does respond to market signals that order it to turn a plant on and off for reliability.
21 But its dominant strategy is to [[REDACTED]] and to

⁴⁰ Ex MEC-9C, DTE Confidential Response to MECDE-4.2a.

⁴¹ DTE Response to MECDE Request 1.2a, Attachment NDA_U-21051 MECDE-1.2a 2022 Unit Commitment Status.

⁴² DTE Response to MECDE Request 1.2a, Attachment NDA_U-21051 MECDE-1.2a 2022 Unit Commitment Status.

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1 decide internally when to bring plants online and when to turn them off, outside of
2 the market.⁴³

3 **Q How did DTE decide when to operate BWEC in 2022?**

4 **A DTE made its daily unit-commitment decisions for BWEC, and all other non-**
5 **peaking units, based on analysis it conducts daily and publishes in a report called**
6 **the Economic Reserve and Cycling (ER&C) Report.⁴⁴**

7 **Q What do you conclude about DTE’s commitment and operation of BWEC**
8 **during 2022?**

9 **A DTE’s strategy of self-committing its plants 100 percent of the time they are**
10 **available is risky and imprudent as a rule. While DTE may not have incurred**
11 **substantial uneconomic costs in 2022, that was only by the virtue of high market**
12 **prices. DTE should be careful not to uneconomically self-commit its units and to**
13 **only operate them when economic. Self-committing its units whenever they are**
14 **available under reasonable market conditions will result in uneconomic operations**
15 **that will incur substantial excess costs for ratepayers.**

16 **IV. DTE DECREASED ITS RELIANCE ON ITS OWN PLANTS AND**
17 **INCREASED MARKET PURCHASES DURING 2022**

18 **Q Please provide a summary of this section.**

19 **A In this section, I briefly discuss DTE’s increased reliance on the market, relative to**
20 **what it projected in its 2022 PSCR plan and the drivers of this change. Specifically,**

⁴³ Ex MEC-10, DTE Response to MECDE-1.4a.

⁴⁴ Ex MEC-10, DTE Response to MECDE-1.4a.

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1 I evaluate the level of unplanned outages at DTE’s coal plants, and the relative
2 economics of DTE’s fleet compared to other resources in MISO.

3 Overall, DTE’s decreased reliance on its own generation fleet, relative to what it
4 projected, shows that its own resources were less economic than other regional
5 resources.

6 **A. DTE’s Generation Fleet Experienced Increased Unplanned Outages**
7 **During 2022**

8 **Q Briefly describe DTE’s generation fleet during 2022.**

9 **A** DTE has one nuclear plant, Fermi. It has four coal plants at Belle River, Monroe,
10 St. Clair, and Trenton Channel 9—the latter of which retired at the end of May. The
11 Company also has the Dearborn Industrial Generating Station, which operates on
12 gas; the Greenwood Steam plant, which operates on both gas and oil; and a number
13 of peaking plants that include 1,728 MW of gas turbines (26 units), 142 MW of oil-
14 fired turbines (10 units), and 128 MW of diesel engines (oil-fired). It also has the
15 Ludington hydroelectric plant.

16 **Q How did DTE’s generation perform in 2022?**

17 **A** DTE’s generation fleet availability was lower than projected in 2022. The most
18 notable planned outages were at the following units:⁴⁵

- 19 1. Fermi Nuclear plant— Plant had a scheduled outage for 50 days in
20 February–March. The outages ended up being nearly double that at 98 days
21 and extended through the middle of May.

⁴⁵ Exhibit A-1; Exhibit A-2.

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- 1 2. Belle River had an 86-day scheduled outage in February–May. The outage
2 extended for 114 days and lasted through the middle of June.
- 3 3. St. Clair 2 and 3 were in planned outage most of the month of May.
- 4 4. Monroe Units 1–4 had a total of 271 days of planned outages, including a
5 93-day planned outage to perform maintenance to repair a known start-up
6 issue at Monroe 2.⁴⁶
- 7 5. The Ludington Hydraulic plant had an extensive outage for repairs.
- 8 6. The Company’s peaking units at Belle River, Greenwood, and Wilmont had
9 359 days of outages planned. In total, the peaking plants at Belle River,
10 Dean, Delray, Enrico Fermi, Greenwood, Hancock, Placid, Renaissance,
11 Slocum, and Superior experienced 1,595 days of planned outages.

12 As shown in Table 7 below, the random outage rates were also high at several of
13 DTE’s plants. Specifically:

- 14 1. Dearborn had a random outage factor above 10 percent.
- 15 2. Monroe Units 1, 3, and 4 had random outage factors above 10 percent, with
16 Monroe 4 having a nearly 30 percent random outage factor.
- 17 3. St. Clair and Trenton Channel, both of which retired at the end of May, also
18 both had extremely high random outage factors during the first half of the
19 2022 when they were operating.⁴⁷

⁴⁶ DTE Response to ABDE 1.4a-c, Attachment U-ABDE-1.4 90-Day Outage Information.

⁴⁷ Exhibit A-24.

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Table 7. Planned and random outage rate for DTEs baseload generators

Unit	Planned outage factor (%)	Random outage factor (%)
Belle River 1	33.79	2.73
Bell River 2	7.27	5.39
Blue Water Energy Center	7.06	4.23
Dearborn	0.00	10.94
Monroe 1	3.19	11.82
Monroe 2	37.99	4.63
Monroe 3	11.36	15.01
Monroe 4	0.00	27.73
St. Clair 2*	0.00	49.17
St. Clair 3	0.00	58.93
St. Clair 6	0.00	25.97
St. Clair 7	0.00	20.10
Trenton Channel Plant*	0.00	69.78
Fermi 2	4.16	27.91

2

Source: Exhibit A-23.

3

**St. Clair and Trenton Channel Power Plants were retired in 2022. Planned Outage*

4

Factor and Random Outage Factor reflect January through May 2022.

5 **Q**

How did the outage rates at DTE’s plants in 2022 compare to outage rates in prior years?

6

7 **A**

As shown in Table 8 below, random outages at many of DTE’s plants, including Fermi, Monroe, Dearborn, St. Clair, and Trenton Chanel Plant were high relative to prior years. Most notable, the random outage factor for three of the four units at Monroe was the highest it has been in the past five years. Specifically, between 2018 and 2021, there were only two instances where a Monroe unit had an outage rate above 10 percent, while in 2022 three of the four units had outage rates above 20 percent. And for Monroe Unit 2, while it didn’t have a high random outage factor, it did have a high planned outage rate. When combining Monroe’s planned and unplanned outages, its availability was the lowest it has been in the past five years. In fact, across DTE’s baseload fleet, its unit availability was the lowest it has been over the past five years.

17

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1 **Table 8. Actual random outage factors 2018–2022**

Unit	Actual Random Outage Factor (%)				
	2018	2019	2020	2021	2022
Belle River 1	14.24	5.60	0.39	5.41	2.73
Belle River 2	8.34	3.46	1.52	8.06	5.39
BWEC					4.23
Dearborn			2.50	9.79	10.94
Fermi 2	14.24	0.26	0.00	3.43	27.91
Monroe 1	2.40	2.38	5.38	5.75	11.82
Monroe 2	5.01	2.75	6.22	7.10	4.63
Monroe 3	1.58	5.80	10.76	5.62	15.01
Monroe 4	8.15	11.43	7.36	7.20	27.73
St. Clair 2	13.52	13.15	15.11	19.35	49.17
St. Clair 3	9.96	15.29	11.65	27.47	58.93
St. Clair 6	18.98	28.77	22.69	45.23	35.97
St. Clair 7	27.68	9.94	24.08	21.55	20.10
Trenton Channel Plant	14.00	21.84	38.26	30.69	69.78

2 *Sources: Exhibit A-24; U-20827 Exhibit A-25; U-20528 Exhibit A-25; U-20222 Exhibit A-25; U-*
3 *20203 Exhibit A-24.*

4 **Q How did DTE explain these high planned and random outage rates across its**
5 **fleet?**

6 **A** DTE Witness Kimmel discussed the outages, and the Company claimed that all its
7 outages were a result of prudent management. But the Company did not justify why
8 its outage rates, particularly its random outage rates, were so much higher in 2022
9 than in prior years.

10 **Q Why are these outage rates significant for reconciliation of its PSCR expenses?**

11 **A** The reduced availability of generation from DTE’s own plants caused DTE to
12 purchase a larger quantity of generation from the market than planned. The
13 Company still had to meet its full load requirement, regardless of its generator
14 availability. This contributed to its high purchased power costs in 2022. As shown
15 in Table 9 below, in 2022, generation levels were substantially below projected

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1 levels at several of DTE’s plants, for a total of a variance of 3,540 GWh (note this
2 excludes the Ludington hydro plant). About a quarter of the variance in actual
3 generation levels (relative to what DTE projected) was attributed to the Fermi
4 nuclear plant, half to the Company’s coal plants, 7 percent to BWEC, and the rest
5 to DTE’s other gas and oil plants. DTE-owned wind plants also under-generated
6 relative to projections by around 448 GWh.⁴⁸

7 **Table 9. Actual and planned generation by plant (excluding Ludington)**

Plant	Primary Fuel Type	U-21050 2022 Plan (GWh)	2022 Actual (GWh)	Variance (GWh)	Percent Variance
Fermi 2	Nuclear	7,555	6,662	(892)	-12%
Belle River	Coal	5,637	5,479	(158)	-3%
Monroe	Coal	16,017	15,350	(667)	-4%
St. Clair	Coal	2,068	1,647	(421)	-20%
Trenton Channel	Coal	988	575	(413)	-42%
Blue Water	Gas	4,932	4,593	(339)	-7%
Dearborn	Gas	264	233	(31)	-12%
Greenwood	Gas/Oil	803	289	(513)	-64%
Peakers	Gas/Oil	1,117	1,011	(106)	-9%
Total	GWh	39,379	35,839	(3,540)	-9%

8 *Source: Exhibit A-23.*

9
10 To make up for some of that 3,540 GWh shortage, DTE increased purchases from
11 the market. DTE had projected it would purchase 3,534 GWh from MISO and
12 actually purchased 6,920 GWh, for a variance of 3,386 GWh.⁴⁹ This is concerning
13 because the average cost of power DTE purchased from MISO was \$67.00/MWh⁵⁰

⁴⁸ Exhibit A-16.

⁴⁹ Exhibit A-16.

⁵⁰ Exhibit A-16.

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1 while the average cost of generation for DTE’s own fleet was only \$26.30/MWh.⁵¹
2 DTE claims that it purchases power from the market for its customer rather than
3 generating it from its own assets only when its own generating assets are more
4 expensive to operate than the market. The Company goes on to say that in hours
5 when it was a purchaser, it was more economic to buy power than to generate
6 itself.⁵² However, in hours for which the Company had units in outage, it was often
7 losing low-cost power from its own generators which it had to replace with higher-
8 cost market power.

9 **Q DTE claims it had sufficient capacity to serve DTE’s electric customers load**
10 **without exceeding its generation for 99 percent of the hours in 2022.⁵³ Is that**
11 **metric meaningful for evaluating the prudence of PSCR expenses?**

12 **A** No. While this is important for resource planning purposes it is not relevant for
13 market dispatch. DTE should not be operating all its units; rather it should be
14 relying on only its most economic units. When a baseload plant is unavailable due
15 to an outage, and DTE is already operating its other economic baseload units at
16 their maximum operating levels, it is likely still less expensive to purchase energy
17 from the market than to turn on the Company’s most expensive peaking units. And
18 if that outage occurs during an hour of high demand, that market energy is likely
19 more expensive than the marginal cost of operating the baseload plant in outage. In
20 this scenario, where power is purchased from the market at a cost that exceeds the

⁵¹ Exhibit A-15.

⁵² DTE Response to AGDE-1.6.

⁵³ DTE Response to ADGE 1.8a.

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1 cost to generate power from the plant in outage, DTE incurs replacement power
2 costs.

3 **Q How much did DTE spend on replacement energy during the extended**
4 **planned outages and unplanned outages at its baseload and peaker fleet in**
5 **2022?**

6 **A** In 2022, DTE incurred just under \$77 million in costs to replace 2,419.3 GWh of
7 power (as shown in Table 10 below) during its most significant planned and
8 unplanned outages. Of that, \$30.1 million in costs were attributed to 1,530.9 GWh
9 of replacement power for outages at DTEs baseload coal and gas plants.
10 Replacement power costs reflect the cost of replacement energy net the costs that
11 DTE would have otherwise spent to generate power from the plants that were in
12 outage. These costs fall into three major categories: unplanned outages greater than
13 25 days; planned outages under 90 days; and planned outages over 90 days (for the
14 timeframe in excess of 90 days). DTE did not provide replacement power analysis
15 for unplanned outages less than 25 days, nor did it provide replacement power
16 analysis for the full outage period for planned outages over 90 days.

17 1. **Unplanned outages greater than 25 days at steam plants:** DTE spent
18 \$15.4 million to replace 983,156 MWh of generation at Monroe 4,⁵⁴ and at
19 St. Clair Units 2 and 3 (there was an outage at Greenwood 1 as well, but
20 that did not incur replacement costs).⁵⁵

⁵⁴ The replacement power costs at Monroe 4 were net of the value of an avoidable cleaning outage that was originally scheduled to occur later in the year.

⁵⁵ DTE Response to AGDE Request 1.16, Attachments AGDE-1.16a-f 2022 Unplanned Outages Greater Than 25 Days, AGDE-1.16 GW1 Replacement Power, AGDE-1.16 STC2 Replacement Power, AGDE-1.16 STC3 Replacement Power.

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- 1 2. **Planned outages less than 90 days:** At BWEC and Fermi, DTE incurred
2 \$33.9 million to replace 846,896 MWh of generation. Around 90 percent of
3 the cost is attributed to Fermi and 10 percent to BWEC.⁵⁶
- 4 3. **Planned outages in excess of 90 days:** (note these costs cover just the
5 outage time beyond 90 days). DTE experienced outages greater than 90
6 days at 24 units in 2022. These included outages at Belle River 1, Monroe
7 2, Fermi 2, Dearborn, Ludington, and 19 of DTE’s peaking plants. All but
8 three of the outages at the peaking plants incurred zero dollars in
9 replacement costs. The total replacement power cost was \$27.5 million
10 dollars for 601,993 MWh of generation.⁵⁷

⁵⁶ DTE Response to AGDE Request 1.19d, Attachment AGDE-1.19d BWEC Replacement Costs; DTE Response to AGDE Request 1.27e, Attachment AGDE-1.27e Fermi Replacement Cost and Lost Gen.

⁵⁷ DTE Response to AGDE Request 1.15d, Attachment AGDE-1.15d BR1 Replacement Costs; DTE Response to AGDE Request 1.27e, Attachment AGDE-1.27e Fermi Replacement Cost and Lost Gen; DTE Response to ADGE 1.5b, Attachment ABDE-1.5b Ludington Unit 3 Outage Extension Estimate; DTE Response to ADGE 1.19a, Attachment; DTE Response to ABDE Request 1.6b, Attachments (22 total Attachments).

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1

Table 10. Replacement power and generation for DTE outages in 2022

Plant Name	Duration	Replacement power cost (\$ million)	Replacement power required (GWh)	Start date	End date
Random outages greater than 25 days					
Greenwood 1	35	\$-		8/13/2022	9/17/2022
Monroe 4 (net of avoided cleaning outage)	63	\$11.0	753.6	1/4/2022	3/7/2022
St. Clair 2	41	\$2.0	95.8	1/19/2022	3/1/2022
St. Clair 3	55	\$2.5	133.7	2/8/2022	4/4/2022
Total random outages		\$15.4	983.2		
Planned outages less than 90 days					
Blue Water Energy Center	9	\$3.6	233.0	11/26/2022	12/5/2022
Fermi	23	\$30.3	601.2	3/23/2022	4/15/2022
Total planned outages < 90 days		\$33.9	834.2		
Planned Outages greater than 90 days					
Belle River 1	27	\$8.7	273.1	5/24/2022	6/20/2022
Monroe 2	2	\$2.4	41.6	5/14/2022	5/16/2022
Fermi 2	7	\$6.0	220.2	5/6/2022	5/13/2022
Ludington 3	91	\$0.2	16.9	1/1/2022	4/2/2022
Dearborn 3	177	\$0.0	12.6	1/1/2022	6/27/2022
Renaissance 4	25	\$0.2	35.9	10/20/2022	11/14/2022
Northeast Peaker 11-1	364	\$0.1	1.2	1/1/2022	12/31/2022
Delray Peaker 12-1	5	\$0.0	0.5	1/1/2022	1/6/2022
Total planned outages > 90 days		\$27.5	602.0		
Total for all outages		\$76.8	2,419.3		
Total fossil baseload outages		\$30.1	1,530.9		

2

Source: See text above.

3

Q What are your conclusions regarding DTE’s outages in 2022 and the replacement power costs it incurred?

4

5

A DTE experienced high outage rates, both planned and unplanned, at many of its baseload plants in 2022. These high outage rates combined with high market and gas prices in 2022 resulted in DTE paying nearly \$77 million for replacement

7

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1 power. Of that, \$30.1 million was for replacement power for DTE's baseload coal
2 and gas plants. While some level of unplanned outages is reasonable and to be
3 expected, the magnitude of outage experienced at DTE's baseload plants in 2022,
4 particularly unplanned outages, exceeds what is reasonable and expected.

5 **Q Does this complete your direct testimony?**

6 **A** Yes, it does.

Devi Glick, Senior Principal

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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.

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Glick, D., P. Eash-Gates, J. Hall, A. Takasugi. 2021. *A Clean Energy Future for MidAmerican and Iowa*. Synapse Energy Economics for Sierra Club, Iowa Environmental Council, and the Environmental Law and Policy Center.

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Glick, D., D. Bhandari, C. Roberto, T. Woolf. 2020. *Review of benefit-cost analysis for the EPA's proposed revisions to the 2015 Steam Electric Effluent Limitations Guidelines*. Synapse Energy Economics for Earthjustice and Environmental Integrity Project.

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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.

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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.

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Lashof, D. A., D. Weiskopf, D. Glick. 2014. *Potential Emission Leakage Under the Clean Power Plan and a Proposed Solution: A Comment to the US EPA*. NextGen Climate America.

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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.

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 Every 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 Every 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.

Michigan Public Service Commission (Case No. U-20528): 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-20527) for the 12-month period ending December 31, 2020. On behalf of Michigan Environmental Council. November 23, 2021.

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.

Public Utilities Commission of Nevada (Docket No. 21-06001): Phase III Direct Testimony of Devi Glick in the joint application of Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company

d/b/a NV Energy for approval of their 2022-2041 Triennial Intergrade Resource Plan and 2022-2024 Energy Supply Plan. On behalf of Sierra Club and Natural Resource Defense Council. October 6, 2021.

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.

Public Utilities Commission of Nevada (Docket No. 21-06001): Phase I Direct Testimony of Devi Glick in the joint application of Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy for approval of their 2022-2041 Triennial Intergrade Resource Plan and 2022-2024 Energy Supply Plan. On behalf of Sierra Club and Natural Resource Defense Council. August 16, 2021.

North Carolina Utilities Commission (Docket No. E-7, Sub 1250): Direct Testimony of Devi Glick in the Matter 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.

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.

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 August 2023

MPSC Case No: U-21051

Requester: AG

Question No.: AGDE-2.39a

Respondent: K. A. Maro

Page: 1 of 1

Question: Refer to the direct testimony filed by Consumers Energy's witness Kevin Lott filed in MPSC Case No. U-21049. Beginning on page 4, Mr. Lott discusses coal conservation steps taken by Consumers during 2022 due to shortages of coal supplies and the imposition of a price adder to limit dispatch of coal-fueled generation. Please:

- a. Explain whether DTEE experienced the same issues with coal supplies and whether it imposed any restrictions of coal-fueled generation with or without a price adder. If yes, provide full details and timelines, and calculation of any price or cost adders in Excel. If no, explain why DTEE did not experience the same coal supply issues as Consumers.

Answer: The Company did not impose any restrictions on its coal-fired generation in 2022 due to shortages of coal supply. The Company was able to leverage its coal supplies from multiple regions and suppliers and utilize multiple transportation options, including its Midwest Energy Resources Company (MERC), to fuel its coal generation fleet without interruption.

Attachment: None.

MPSC Case No: U-21051

Requester: AG

Question No.: AGDE-2.39b

Respondent: K. A. Maro

Page: 1 of 1

Question: Refer to the direct testimony filed by Consumers Energy's witness Kevin Lott filed in MPSC Case No. U-21049. Beginning on page 4, Mr. Lott discusses coal conservation steps taken by Consumers during 2022 due to shortages of coal supplies and the imposition of a price adder to limit dispatch of coal-fueled generation. Please:

b. Explain if DTEE experienced any railroad capacity constraints, delivery problems, or limitations. If yes, please provide full details and timelines. If no, explain why not.

Answer: Refer to the response in AGDE-2.39a. The Company did not experience any railroad constraints that resulted in restrictions to its coal generation fleet.

Attachment: None.

MPSC Case No: U-21051

Requester: MEC

Question No.: MECDE-1.11e

Respondent: R. C. Pratt

Page: 1 of 1

Question: Regarding DTE's PSCR cost under-recovery in 2022:
e. Explain whether DTE has instituted any changes to its operations, planning, fuel procurement practices in response to the higher gas prices in 2022.

Answer: Although not a direct response to the higher gas prices in 2022, in 2023 the Company implemented its Forward Purchase Strategy at its Blue Water Energy Center to create price certainty and reduce price volatility for its customers. Refer to pages 7-11 of the direct testimony of Ryan C. Pratt in Case No. U-21259 for additional detail on the Forward Purchase Strategy.

Attachment: None.

MPSC Case No: U-21051

Requester: AG

Question No.: AGDE-2.50

Respondent: R. C. Pratt

Page: 1 of 1

Question: Refer to Exhibit A-27. Please provide the underlying data and calculations of the costs and benefits in Excel with formulas intact.

Answer: Refer to attachment U-21051 AGDE-2.50 NEXUS Net Impact on 2022 Natural Gas Expense.

Attachment: U-21051 AGDE-2.50 NEXUS Net Impact on 2022 Natural Gas Expense

Michigan Public Service Commission
DTE Electric Company
NEXUS Net Impact on 2022 Natural Gas Expense

Case No.: U-21051
 Exhibit: A-27
 Witness: R.C. Pratt

	(a)	(b)	(c)	(d)	(e)
Line No.	Month		NEXUS Transportation Cost	NEXUS Supply Benefit	NEXUS Net Impact
1	Jan-22	Actual	\$716,100	(\$207,331)	\$508,769
2	Jan-22	2022 Plan	\$716,100	(\$75,951)	\$640,149
3	Jan-22	Variance (\$)	\$0	(\$131,380)	(\$131,380)
4	Jan-22	Variance (%)	0%	173%	-21%
5					
6	Feb-22	Actual	\$646,800	(\$122,189)	\$524,611
7	Feb-22	2022 Plan	\$646,800	(\$110,936)	\$535,864
8	Feb-22	Variance (\$)	\$0	(\$11,253)	(\$11,253)
9	Feb-22	Variance (%)	0%	10%	-2%
10					
11	Mar-22	Actual	\$716,100	(\$160,848)	\$555,252
12	Mar-22	2022 Plan	\$716,100	(\$145,866)	\$570,234
13	Mar-22	Variance (\$)	\$0	(\$14,982)	(\$14,982)
14	Mar-22	Variance (%)	0%	10%	-3%
15					
16	Apr-22	Actual	\$693,000	(\$222,179)	\$470,821
17	Apr-22	2022 Plan	\$693,000	(\$167,820)	\$525,180
18	Apr-22	Variance (\$)	\$0	(\$54,359)	(\$54,359)
19	Apr-22	Variance (%)	0%	32%	-10%
20					
21	May-22	Actual	\$716,100	(\$238,153)	\$477,947
22	May-22	2022 Plan	\$716,100	(\$310,976)	\$405,124
23	May-22	Variance (\$)	\$0	\$72,823	\$72,823
24	May-22	Variance (%)	0%	-23%	18%
25					
26	Jun-22	Actual	\$693,518	(\$256,516)	\$437,002
27	Jun-22	2022 Plan	\$1,631,250	(\$312,053)	\$1,319,197
28	Jun-22	Variance (\$)	(\$937,732)	\$55,537	(\$882,195)
29	Jun-22	Variance (%)	-57%	-18%	-67%
30					
31	Jul-22	Actual	\$1,686,164	(\$204,548)	\$1,481,616
32	Jul-22	2022 Plan	\$1,685,625	(\$428,758)	\$1,256,867
33	Jul-22	Variance (\$)	\$539	\$224,210	\$224,748
34	Jul-22	Variance (%)	0%	-52%	18%
35					
36	Aug-22	Actual	\$1,686,347	(\$208,225)	\$1,478,122
37	Aug-22	2022 Plan	\$1,685,625	(\$594,945)	\$1,090,680
38	Aug-22	Variance (\$)	\$722	\$386,720	\$387,442
39	Aug-22	Variance (%)	0%	-65%	36%
40					
41	Sep-22	Actual	\$1,631,602	(\$195,031)	\$1,436,571
42	Sep-22	2022 Plan	\$1,631,250	(\$1,021,294)	\$609,956
43	Sep-22	Variance (\$)	\$352	\$826,263	\$826,615
44	Sep-22	Variance (%)	0%	-81%	136%
45					
46	Oct-22	Actual	\$1,686,223	(\$134,625)	\$1,551,598
47	Oct-22	2022 Plan	\$1,685,625	(\$1,138,565)	\$547,060
48	Oct-22	Variance (\$)	\$598	\$1,003,940	\$1,004,538
49	Oct-22	Variance (%)	0%	-88%	184%
50					
51	Nov-22	Actual	\$1,621,515	(\$54,600)	\$1,566,915
52	Nov-22	2022 Plan	\$1,563,750	(\$296,153)	\$1,267,597
53	Nov-22	Variance (\$)	\$57,765	\$241,553	\$299,318
54	Nov-22	Variance (%)	4%	-82%	24%
55					
56	Dec-22	Actual	\$1,676,657	(\$239,450)	\$1,437,207
57	Dec-22	2022 Plan	\$1,615,875	\$0	\$1,615,875
58	Dec-22	Variance (\$)	\$60,782	(\$239,450)	(\$178,668)
59	Dec-22	Variance (%)	4%	0%	-11%
60					
61	2022 Total	Actual	\$14,170,125	(\$2,243,696)	\$11,926,429
62	2022 Total	2022 Plan	\$14,987,100	(\$4,603,317)	\$10,383,783
63	2022 Total	Variance (\$)	(\$816,975)	\$2,359,621	\$1,542,646
64	2022 Total	Variance (%)	-5%	-51%	15%

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Application of **DTE
ELECTRIC COMPANY** for approval to
implement a power supply cost recovery plan
for the 12 months ending December 31, 2022.

U-21050

PUBLIC VERSION

**DIRECT TESTIMONY OF JAMES F. WILSON
ON BEHALF OF
MICHIGAN ENVIRONMENTAL COUNCIL**

August 3, 2022

**DIRECT TESTIMONY OF JAMES F. WILSON OBO MICHIGAN ENVIRONMENTAL COUNCIL
MPSC CASE NO. U-21050**

1 The gas cost savings minus the cost of the capacity has consistently been the measure of
2 NEXUS value; it was the measure used in the original 2015 ICF Study, the 2021 FTI Study,
3 in the Company's various updates (for example, Exhibit A-25 in this case), and in each
4 instance of my earlier testimony.¹⁸

5 For supplies from Clarington (and under the TEAL amendment, half of DTE Electric's
6 NEXUS capacity is from Clarington), the price differential from Clarington to MichCon is
7 compared to the reservation rate (\$0.845/Dth) and fuel cost applicable to shipments from
8 Clarington. Similarly, the TEAL amendment is valued by comparing gas price differences
9 from Clarington to Kensington to the reservation plus fuel cost for this additional capacity.

10 **Q 24: Please summarize the cost and value of the NEXUS capacity from the Kensington**
11 **receipt point since November 1, 2018.**

12 **A:** Exhibit MEC-6C shows the "net spread" (price differential net of fuel cost) from
13 Kensington to MichCon. When this spread is positive, it is economical to move gas from
14 Kensington to MichCon Citygate. When it is negative, either prices are actually higher at
15 Kensington, or the price advantage at MichCon does not even cover the fuel cost (which
16 was typically [[REDACTED]] per Dth during this period). On many days, and nearly all
17 days since September 2020, the Company provided no data, indicating that flows from
18 Kensington to MichCon were not economical and did not occur.

¹⁸ Ex A-25; Ex MEC-14C (NDA STDE-1.1 2022 PSCR Plan Exhibit Model, tab RCP WP25 NEXUS PSCR Imp, pg 1); Case Nos. U-20826, U-20527, U-20826, Ex A-25; Case No. U-20221, Exs A-17 & A-18; Case No. U-18403, Exs A-17, A-25. See also Table 1 above (Prior Estimates of NEXUS Costs in MPSC Case Nos. U-17920, U-18143, U-18403, U-20221, U-20203, U-20222, and U-20527).

**DIRECT TESTIMONY OF JAMES F. WILSON OBO MICHIGAN ENVIRONMENTAL COUNCIL
MPSC CASE NO. U-21050**

1 The Company states that with these assets it will pursue a contracting strategy that “allows
2 for multiple ways to service BWEC reliably while minimizing costs to its PSCR
3 customers.”²⁷

4 **Q 33: With BWEC is in service, and these various transportation and storage contracts**
5 **available, will the Company’s gas supply purchasing become substantially more**
6 **complex?**

7 **A:** Yes. The Company’s natural gas demands will substantially increase, and at the same time,
8 the natural gas demands will likely be quite uncertain day to day and even hour to hour
9 during some days and seasons. The Company’s expanded portfolio of transportation and
10 storage assets and enhanced transportation services will afford considerable flexibility to
11 optimize the location and timing of purchases to minimize cost, but this will be a complex
12 challenge.

13 **Q 34: What are the Company’s plans with regard to the Asset Manager the Company to**
14 **date has relied upon to optimize NEXUS purchases under the Asset Management**
15 **Agreement?**

16 **A:** The Company plans to cease relying on an asset manager going forward, but may issue
17 RFPs and enter into contracts for gas supply at Kensington and/or Clarington.²⁸

18 Witness Pratt had earlier suggested that the Asset Manager will no longer be needed
19 because the Company will utilize all of its NEXUS capacity.²⁹

²⁷ Response to data request MECDE-4.10.

²⁸ Response to MECDE-1.16.

²⁹ U-20826, Ex MEC-18 (MECDE-5.4).

**DIRECT TESTIMONY OF JAMES F. WILSON OBO MICHIGAN ENVIRONMENTAL COUNCIL
MPSC CASE NO. U-21050**

1 The Company does not currently expect to use an Asset Manager to manage
2 the NEXUS capacity once BWEC is in service. As stated in my testimony
3 on p 23 lines 2 and 3 “Once BWEC is operational in 2022, the Company
4 expects to utilize all of its NEXUS capacity.” Based on this forecast, an
5 Asset Manager will no longer be needed to manage the Company’s NEXUS
6 transport capacity.

7 While the Company no longer anticipates using all of the NEXUS capacity, as discussed
8 above, the Company apparently continues to plan to manage the various transportation and
9 storage assets themselves, rather than rely on an experience marketer.

10 **Q 35: If the Company does flow gas through NEXUS in the future when it could have been**
11 **sourced more economically elsewhere, will the Company bear the extra cost?**

12 **A:** Most likely not. While in principle the cost recovery is subject to Commission review, in
13 practice it is unlikely to be transparent that such uneconomical purchases occurred.

14 **Q 36: If the Company does flow gas through NEXUS in the future when it could have been**
15 **sourced more economically elsewhere, should the Company bear the extra cost?**

16 **A:** Yes, the Company should bear the extra cost whenever it chooses to source gas through
17 NEXUS that could have been acquired more economically elsewhere. I am not aware of
18 any reason the Company would source gas through NEXUS when it is uneconomical, but
19 if they do, they should bear the cost, not customers. Uneconomic purchases generally do
20 not occur under the current arrangements that rely upon an Asset Manager.

21 **Q 37: What would you recommend the Commission require of the Company in this regard?**

22 **A:** The Commission should require that the Company demonstrate in reconciliation
23 proceedings that it minimized its gas supply costs, taking into account the uncertainties
24 around demand and price, and the need for firmness and flexibility. This should include

**DIRECT TESTIMONY OF JAMES F. WILSON OBO MICHIGAN ENVIRONMENTAL COUNCIL
MPSC CASE NO. U-21050**

1 specific reporting of when and in what quantities the various transportation, storage and
2 contractual services DTE Electric controls were used, all relevant prices that indicate the
3 potential value of these services, and explanations for why services were unused at times
4 when prices suggest there was value.

5 In addition or alternatively, the Commission should encourage the Company to use an
6 Asset Manager to manage the Company's assets under an enhanced Asset Management
7 Agreement that contains strong incentives for the Asset Manager to minimize customer
8 cost.

9 **VI. ON THE REASONABLENESS OF THE NEXUS COST AND CAPACITY**

10 **Q 38: Earlier in your testimony you noted four substantial changes regarding the NEXUS**
11 **capacity: BWEC coming into service, the NEXUS contract quantity increasing, new**
12 **transportation and storage contracts and services to supply BWEC, and the**
13 **expiration of the TEAL Amendment. Do you expect the NEXUS contract will**
14 **continue to impose a net cost on DTE Electric's customers in the coming years?**

15 **A:** Yes. The NEXUS contract quantity will increase, and the Company will have some
16 flexibility to acquire supply without NEXUS. However, as shown above, forward prices
17 continue to suggest that the value of gas flows through NEXUS from Kensington will be
18 far short of the NEXUS transportation cost.

MPSC Case No: U-21051

Requester: MEC

Question No.: MECDE-1.4a

Respondent: E. R. Bidlingmaier

Page: 1 of 1

Question: Regarding DTE's decisions about when to operate its fossil-fuel power plants in 2022, provide the following:

- a. A narrative explanation of how DTE makes its unit commitment and dispatch decisions for all its fossil fuel power plants. If there are any differences by plan or fuel types, please include that in the narrative explanation.

Answer: As described in my direct testimony page 8 lines 18-25 and page 9 lines 1-5, DTE Electric makes commitment decisions based on several factors including: the units' current commitment status, cycling costs, system reliability concerns, unit testing, environmental compliance, unit constraints, and a 14-day forecast published on standard business days called the Economic Reserve and Cycling (ER&C) Report. The Economic Reserve and Cycling report is a daily-run report that forecasts gross margin for certain power plants, including Monroe, Blue Water, Belle River, and Greenwood, in addition to peaking units at the Renaissance, Dean, Delray, Belle River, and Greenwood sites. The 14-day forecast is based on LMP forecasts for the MICHIGAN.HUB node, in addition to forecasted unit costs, and known unit availability at the time the report is run. For the fossil-fuel power plants, this forecast is used to determine economic periods to commit these long lead units. For the peaking units included in the report, the forecast is used to determine economic periods to run the units, and economic periods to complete testing.

For units not included in the report, DTE Electric offers the units as economic commit status to MISO who determines unit commitment. MISO makes dispatch decisions whether economic or for reliability with the exception of fixed dispatches submitted for testing purposes. In the case of testing, the test requirement determines the dispatch level.

Attachment: None.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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.

Case No. U-21051

PROOF OF SERVICE

On the date below, an electronic copy of **Direct Testimony and Exhibits by Devi Glick on behalf of Michigan Environmental Council (Exhibits MEC-1 through MEC-2, MEC-5 through MEC-8, and MEC-10)** was served on the following:

Name/Party	E-mail Address
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[signature page to follow]

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

TROPOSPHERE LEGAL
Counsel for MEC

Date: March 8, 2024

By: _____

Breanna Thomas, Legal Assistant
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STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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. Case No. U-21051

CONFIDENTIAL PROOF OF SERVICE

On the date below, an electronic copy of **Direct Testimony and Exhibits by Devi Glick on behalf of Michigan Environmental Council (Exhibits MEC-1 through MEC-10)** was served on the following:

Name/Party	E-mail Address
Administrative Law Judge Sally L. Wallace	wallaces2@michigan.gov
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The statements above are true to the best of my knowledge, information and belief.

TROPOSPHERE LEGAL
Counsel for MEC

Date: March 8, 2024

By: _____

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