

1 STATE OF MICHIGAN
2 BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION
3 In the matter of the application
4 of CONSUMERS ENERGY COMPANY for Case No. U-21258
5 reconciliation of its power supply Volume 2
6 recovery plan (Case No. U-21257)
7 for the twelve months ended
8 December 31st, 2023. * PUBLIC *

6 _____/

7 REVISED
8 CROSS-EXAMINATION

9 Proceedings held via Microsoft Teams
10 in the above-entitled matter before Sally L. Wallace,
11 Administrative Law Judge with MOAHR, for the Michigan
12 Public Service Commission, Lansing, Michigan, on
13 Thursday, March 20, 2025, at 9:07 AM.

14 APPEARANCES:

15 EVAN B. KEIMACH, ESQ.
16 Consumers Energy Company
17 One Energy Plaza
18 Jackson, Michigan 49201

On behalf of Consumers Energy Company

19 THOMAS J. WATERS, ESQ.
20 The Running Wise Law Firm
21 1501 Cass Street, Suite D
22 Traverse City, Michigan 49684-4157

On Behalf of Biomass Merchant Plants

23
24
25 (Continued)

1 AMIT SINGH, ESQ.
 ANNA STIRLING, ESQ.
2 Assistant Attorneys General
 Public Service Division
3 7109 West Saginaw Highway
 P.O. Box 30221
4 Lansing, Michigan 48909
5 On Behalf of Michigan Public Service
 Commission Staff

6
 CELESTE R. GILL, ESQ.
7 Assistant Attorney General
 525 West Ottawa Street
8 6th Floor Williams Building
 Lansing, Michigan 48933
9
 On Behalf of Attorney General Dana Nessel

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

REPORTED BY: Suzanne Duda, CSR-3199, RPR, CRR

- - -

1	I N D E X	PAGE
2	WITNESS:	
3	(CONSUMERS)	
4	ZACHERY S. COLE	
5	Direct Testimony bound in	24
6	LAURA M. CONNOLLY	
7	Direct Testimony bound in	37
8	LEANNA E. FEAZEL	
9		
10	Revised Direct Testimony bound in	45
11	JOSHUA W. HAHN	
12		
13	Revised Direct Testimony bound in	55
14	NATHAN J. HOFFMAN	
15	Revised Direct Testimony bound in	65
16	Rebuttal Testimony bound in	98
17	HANNAH L. PATTON	
18	Direct Testimony bound in	123
19	ANGELA K. RISSMAN	
20	Direct Testimony bound in	130
21	RAYMOND T. SCAIFE	
22	Revised Direct Testimony bound in	144
23	Rebuttal Testimony bound in	155
24		
25	(Continued)	

1	I N D E X	PAGE
2	WITNESS:	
3	BETH A. SKOWRONSKI	
4	Direct Testimony Bound in	163
5	Rebuttal Testimony bound in	173
6	(BIOMASS MERCHANT PLANTS)	
7	RYAN PUTVIN	
8	Direct Testimony bound in	179
9	THOMAS A. CLIFT	
10	Direct Testimony bound in	198
11	EDWARD A. GOING, SENIOR	
12	Direct Testimony bound in	227
13	ROBERT JOE TONDU	
14	Direct Testimony bound in	251
15	DON ADAMS	
16	Direct Testimony bound in	293
17	(ATTORNEY GENERAL DANA NESSEL)	
18	SEBASTIAN COPPOLA	
19	Direct Testimony bound in	314
20	Appendix A bound in	338
21	(MPSC STAFF)	
22	DOLORES A. MIDKIFF-POWELL	
23	Qualifications and Revised Direct	365
24	Testimony bound in	
25	(Continued)	

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

I N D E X

WITNESS:	PAGE
RAUSHAWN D. BODIFORD	
Redacted Public Direct Testimony bound in	375
Confidential Direct Testimony bound into	---
Confidential record	
ROBERT F. NICHOLS	
Qualifications and Direct	395
Testimony bound in	

E X H I B I T S		
NUMBER	DESCRIPTION	RECD
A-1	PA 295 Purchased Power and Company Owned Renewables-2023	36
A-2	Summary of FCM Collections	44
A-3	Calculation of the FCM Surcharge	44
A-4	Proposed Financial Compensation Mechanism Surcharge Tariff	44
A-5 Rev.	2023 Power Supply Cost Recovery Reconciliation	54
A-6 Rev.	PSCR Interest Calculation - 2023	54
A-7 Rev.	Forecasted and Actual Generation Requirements and Purchased and Interchange Expenses	64
A-8	2023 Expense and Revenue Resulting From Congestion, FTR and ARR Transactions	64
A-9	Ludington Lost MWh	64
A-10	Event Summary Report, January 2023 to December 2023	122
A-11	Event Identification - Outages	122
A-12	Periodic Outage Reports	122
A-13	2023 Fossil and Pumped Storage Outages Occurring for Twenty-Eight Days or More	122
A-14	Generation Performance Statistics (January 1, 2023 to December 31, 2023)	122
A-15	Comparison of Consumers Energy and GADS Averages for Similar Units Equivalent Availability	122
(Exhibits continued)		

	E X H I B I T S		
	NUMBER	DESCRIPTION	RECD
1			
2			
3			
4	A-16	2023 Base Load Generation Power Plant Cost Efficiency	122
5	A-17	Chemical Reagent Expense (January 1, 2023 to December 31, 2023)	122
6			
7	A-18	2023 Wind Asset Performance Data	122
8			
9	A-19 Rev.	2023 Ludington Outages	122
10			
11	A-20	Summary of the FCM Recovery	129
12			
13	A-21	Financial Compensation Mechanism (FCM) Earned	129
14	A-22	FCM Interest Calculation	129
15	A-23	2023 Coal Receipts - Plan and Actual	142
16	A-24	2023 Projected vs. Actual - Coal Volumes & Costs	142
17			
18	A-25	2023 Projected vs. Actual - Natural Gas Volumes & Costs	142
19	A-26 Rev.	2023 - Purchased, Interchanged and Renewable Power Transactions	162
20			
21	A-27	2023 - Summary of MISO Market and Tariff Administration Charges/Credits Settlement	162
22			
23	A-28	2023 - Energy Sales Revenue Net of Fuel Cost	162
24	A-29 Rev.	2023 Purchased Power and Cogeneration - Energy and Expense	162
25			
	A-30	2023 Interchange Delivered by Counterparties to MISO	162
		(Exhibits continued)	

E X H I B I T S			
NUMBER	DESCRIPTION	RECD	
A-34	TES Filer Booked Expense Reconciliation	162	
A-35	Cadillac Booked Expenses Reconciliation 2023	162	
A-31	Purchased Power Contract Rates and MPSC Approval Orders	177	
A-32	Financial Compensation Mechanism Forecast	177	
A-36	Discovery Response No. U21258-AG-CE-120	177	
A-37	Discovery Response No. U21258-AG-CE-124	177	
BMP-1	Summary Data for Capped Fuel and Variable Operation and Maintenance Costs	312	
BMP-2	Reconciliation of Fuel and Variable Operation and Maintenance Costs	312	
BMP-3	Cadillac Renewable Energy, LLC Costs	312	
BMP-4	Genesee Power Station Limited Partnership Costs	312	
BMP-5	Grayling Generating Station Limited Partnership Costs	312	
BMP-6	Intentionally Omitted	--	--
BMP-7	TES Filer City Station Limited Partnership	312	
BMP-8	National Energy of Lincoln, LLC Costs	312	
BMP-9	National Energy of McBain, LLC Costs	312	
(Exhibits continued)			

	E X H I B I T S		
	NUMBER	DESCRIPTION	RECD
1			
2			
3	BMP-10	Consumer Price Index Data from 1968-2023	312
4			
5	BMP-11	Correspondence - ARP & SCAPR Allowance Deadlines	312
6	BMP-12	40 CFR; Vol. 75, No. 147	312
7	BMP-13	40 CFR; Vol. 76, No. 152	312
8	BMP-14	12 CFR; Vol. 76, No. 199	312
9	BMP-15	40 CFR; Vol. 76, No. 248	312
10	BMP-16	40 CFR; Vol. 79, No. 232	312
11	BMP-17	Independent Accountants' Report - Cadillac Renewable Energy, LLC	312
12			
13	BMP-18	Independent Accountants' Report Genesee Power Station Limited Partnership	312
14			
15	BMP-19	Independent Accountants' Report - Grayling Generating Station	312
16	BMP-20	Intentionally Omitted	-- --
17	BMP-21	Accountants' Report - National Energy and McBain LLC	312
18			
19	BMP-22	Independent Accountants' Report - TES Filer City Station Limited Partnership	312
20	BMP-23	BMPs' Response to Attorney General's Fourth Discovery Requests dated	312
21		March 11, 2025	
22	BMP-24	BMPs' Response to Attorney General's Fifth Discovery Requests dated	312
23		March 18, 2025	
24			
25		(Exhibits continued)	

	E X H I B I T S		
	NUMBER	DESCRIPTION	RECD
1			
2			
3	AG-1	CECo Response Campbell 2 Outages 108-11	363
4			
5	AG-2	CECo Response Campbell 3 Outages 111	363
6	AG-3	CECo Response Campbell 3 Outages 231	363
7	AG-4	CECo Response Zeeland 3,4,5 Outages 21, 22, 29	363
8	AG-5	Calculation of PPA cost with BMPs	363
9	AG-6	CECo Response BMP cost Comparisons	363
10	AG-7	Adjusted Under-Recovery with AG Adjustments	363
11			
12	AG-8	DR AG-CE-0117	363
13	AG-9	DR AG-CE-0118 and 0119	363
14	AG-10	DR AG-CE-0121	363
15	AG-11	DR AG-CE-0123	363
16	AG-12	DR AG-CE-0126 and 0127	363
17	AG-13	DR AG-CE-0131 Supp (with ATT 1) and 0132	363
18	AG-14	DR AG-CE-0133	363
19	AG-15	BMP Response AG4 27	363
20	S-1.0 Rev	Monthly Over (Under) Recovery	374
21	S-1.1 Rev	BMP Summary Calculation	374
22	S-2.0	Consumers' Responses to Staff's Discovery Request	394
23			
24			
25		(Exhibits continued)	

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

E X H I B I T S

NUMBER	DESCRIPTION	RECD
S-2.1	Confidential - Excerpt from Discovery Response U21258-AG-CE 0032_Ludington_ Events_2023_Confidential.xlsa	394

- - -

1 Thursday, March 20, 2025

2 9:07 AM

3 - - -

4 (Hearing resumes following adjournment of
5 Wednesday, May 8, 2024.)

6 JUDGE WALLACE: We are back on the
7 record in Case Number U-21258 in the matter of the
8 application of Consumers Energy Company for
9 reconciliation of its power supply cost recovery plan,
10 which was Case Number U-21257, for the 12 months ended
11 December 31st, 2023. I am Sally Wallace, and I'm the
12 Administrative Law Judge who's been assigned, or
13 reassigned, to hear this matter.

14 Let's go ahead and begin with
15 appearances starting with you, Mr. Keimach.

16 MR. KEIMACH: Good morning, Your Honor.
17 My name is Evan Keimach. I'm appearing alongside
18 Spencer Sattler and Bret Totoraitis on behalf of the
19 Company.

20 JUDGE WALLACE: Good morning,
21 Mr. Keimach.

22 Mr. Waters, go ahead.

23 MR. WATERS: Your Honor, Thomas Waters
24 of The Running Wise Law Firm on behalf of the Biomass
25 Merchant Plants.

1 JUDGE WALLACE: Good morning,
2 Mr. Waters.

3 Mr. Singh?

4 MR. SINGH: Good morning, Your Honor.
5 Amit Singh and Anna Stirling on behalf of the Michigan
6 Public Service Commission Staff.

7 JUDGE WALLACE: Good morning, Mr. Singh.
8 Ms. Gill?

9 MS. GILL: Good morning, Your Honor.
10 Celeste Gill on behalf of Attorney General Dana Nessel.

11 JUDGE WALLACE: Good morning, Ms. Gill.

12 All right. The parties have
13 discussed this pretty extensive matter over the
14 last couple of weeks and have determined that all
15 parties are waiving cross of all witnesses, so this
16 morning we will be binding the case in.

17 I do want to remind everybody that,
18 you know, after we're all done today -- well, even
19 if a little bit before -- please make sure to send
20 all of your testimony and a list of exhibits to the
21 court reporter. And then please do not forget to
22 file your official exhibits after, you know,
23 everything's been admitted. We've had a couple of
24 glitches in a couple of cases where people have
25 forgotten to file official exhibits, particularly

1 ones that were hearing room exhibits. So make sure
2 that you file all of your official exhibits after
3 the close of the hearing.

4 All right. Let's go ahead and get
5 started with binding in leading with the Company.

6 MR. KEIMACH: Good morning. Pursuant to
7 the agreement of the parties, I move to bind in the
8 testimony and admit the exhibits of Consumers Energy
9 witnesses starting first with the direct testimony of
10 Zachery S. Cole which consists of a cover page and 11
11 pages of questions and answers. Mr. Cole also
12 sponsored Exhibit A-1.

13 JUDGE WALLACE: Is there any objection
14 to binding in the testimony of Mr. Cole?

15 Hearing none, the testimony is bound
16 in.

17 (Testimony bound in)

18 - - -

19
20
21
22
23
24
25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
ZACHERY S. COLE
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Zachery S. Cole, and my business address is 1945 West Parnall Road, Jackson,
3 Michigan 49201.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 where I am a Renewables Engineer responsible for Renewable Resources within the
7 Electric Supply Regulatory Strategies team.

8 **Qualifications**

9 **Q. Please describe your educational background.**

10 A. I received a Bachelor of Science Degree in Civil Engineering in 2020 from Michigan
11 Technological University.

12 **Q. Please describe your business and professional experience.**

13 A. From 2021 to 2022 I worked as a Design Engineer at Spicer Group Inc., where I was
14 responsible for permitting, design, construction administration, and cost estimating of
15 water resource related projects. In 2022, I joined Consumers Energy as an Associate
16 Economics Engineer responsible for economic analyses related to new power purchase
17 agreements (“PPAs”) and renegotiation of existing PPAs, and analysis for various projects
18 that support the Company’s renewable energy electric generation strategy. In September
19 2023, I transitioned to my current role as a Renewables Engineer on the Electric Contract
20 Strategy team where my responsibilities were expanded to include implementation and
21 ensure compliance of the Company’s Renewable Energy Plan (“RE Plan”). In December
22 2023, my position was moved to the Electric Supply Regulatory Strategies team which
23 removed my responsibilities relating to PPAs.

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 **Q. What are your present responsibilities and duties as a Renewables Engineer?**

2 A. My responsibilities include the implementation of the RE Plan, including: (1) the
3 development of competitive solicitations that add generation under the RE Plan;
4 (2) negotiations and development of PPAs; (3) Transfer Price modeling and related
5 analyses; and (4) ensuring compliance with the RE Plan.

6 **Q. Have you provided testimony before the Michigan Public Service Commission**
7 **(“MPSC” or the “Commission”)?**

8 A. Yes. I provided testimony in:

- 9
 - MPSC Case No. U-21049 (direct), the Company’s 2022 Power Supply Cost
10 Recovery (“PSCR”) Reconciliation Case, regarding 2022 RE Plan expenses
11 recovered through PSCR.

12 **Q. What is the purpose of your direct testimony?**

13 A. My direct testimony will address: the Renewable Energy Transfer Price (“Transfer Price”)
14 included in the PSCR expenses and the allocation of costs to the Renewable Resource Fund
15 (“RRF”).

16 **Q. Are you sponsoring any exhibits?**

17 A. Yes. I am sponsoring the following exhibit:

18 Exhibit A-1 (ZSC-1) PA 295 Purchased Power and Company Owned
19 Renewables – 2023

20 **TRANSFER PRICE**

21 **Q. What is the Transfer Price?**

22 A. The Transfer Price is the price at which the cost of renewable energy is recovered through
23 the Company’s PSCR clause pursuant to MCL 460.1047 and MCL 460.1049 of 2008 PA
24 295 (“PA 295”) and as established by the Commission.

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 **Q. Do recent changes to Michigan’s energy laws—specifically, changes found in Public**
2 **Act 235 of 2023 (“PA 235”)—impact how the Transfer Price is calculated in this case?**

3 A. No. Transfer price schedules have historically fluctuated from one renewable energy
4 reconciliation proceeding to the next. This has resulted in different schedules for different
5 resources added over time. Under MCL 460.1049(3)(c), transfer price schedules will
6 continue to be set in renewable energy reconciliation proceedings. Further changes to
7 transfer price schedules precipitated by PA 235, if any, would impact new renewable
8 energy resources going forward; changes would not impact the transfer price calculated in
9 this case, which is based on renewable energy resources already in the Company’s
10 portfolio. Moreover, in Case No. U-21568, the Commission said that until amended REPs
11 are approved, “renewable energy compliance and renewable energy reconciliations will be
12 considered pursuant to Act 342.” As a result, it is not yet clear if or how PA 235 will
13 impact transfer price schedules.

14 **Q. What is the estimated Transfer Price for 2023?**

15 A. The estimated Transfer Price for 2023 is approximately \$86.28 per MWh, as shown on
16 Exhibit A-1 (ZSC-1), line 27, column (i).

17 **Q. What is the Transfer Cost?**

18 A. The Transfer Cost is the total cost that the Company will transfer to power supply costs, in
19 accordance with MCL 460.1047(2)(b)(iv), associated with renewable generation obtained
20 in accordance with MCL 460.1028.

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 **Q. How much renewable generation, for which the Transfer Price applies, was produced**
2 **in 2023?**

3 A. A total of 2,315,681 MWh of Transfer Price-applicable renewable generation was booked
4 in 2023, as shown on Exhibit A-1 (ZSC-1), line 27, column (b).

5 **Q. Please describe Exhibit A-1 (ZSC-1).**

6 A. Exhibit A-1 (ZSC-1) details the calculation of the total amount of Transfer Price-applicable
7 renewable energy expenses to be recovered through the PSCR mechanism from renewable
8 generation delivered in 2023. Exhibit A-1 (ZSC-1), column (a), lists all generators for
9 both counterparties and Company-owned facilities from which the Company received
10 renewable energy or renewable energy capacity in 2023 for which costs were expensed in
11 2023. Column (b) details the Energy Delivered in MWh or the applicable generation
12 production for counterparties and Company-owned facilities to which the transfer price
13 methodology was applied in 2023. Column (c) shows the total Energy Cost associated
14 with energy production for 2023. Column (d) shows the total Administrative Fees
15 associated with the energy production for 2023. Column (e) shows the Net Energy costs
16 associated with energy production for 2023. Column (f) shows the total Capacity Cost
17 associated with capacity value of each generator. Column (g) shows the Total Net Transfer
18 Cost expensed in 2023 for each generator. Total Net Transfer Cost is calculated by
19 summing columns (e) and (f). Column (h) represents the energy portion of the Transfer
20 Price for each generator by dividing column (e) by column (b). Column (i) is the total
21 Transfer Price for each generator calculated by dividing the total Transfer Cost in column
22 (g) by the Transfer Price-applicable generation in column (b).

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 **Q. How are the total transfer costs associated with PA 295 PPAs and Company-Owned**
2 **Renewables as shown on Exhibit A-1 (ZSC-1) reflected in this PSCR Reconciliation?**

3 A. The Transfer Price-applicable generation, total Transfer Cost, and calculated Transfer Price
4 for the PA 295 PPAs and the subscribed portions of the Solar Gardens Program are shown
5 on Exhibit A-1 (ZSC-1), line 17. The subscribed portion of the Large Customer Renewable
6 Energy Program (“LC-REP”) is shown on Exhibit A-1 (ZSC-1), line 28. The sum of these
7 values (lines 17 & 28) is included on Exhibit A-26 (RTS-1), line 2, as *Purchased Power &*
8 *Programs – PA 295*. The Transfer Price-applicable generation, total Transfer Cost,
9 calculated Transfer Price of the Company-owned New Build Renewables, the
10 unsubscribed portions of the Solar Gardens Program, and the unsubscribed portion of the
11 LC-REP are shown on Exhibit A-1 (ZSC-1), line 26. These values are included as PA 295
12 Company Owned Renewables on Exhibit A-26 (RTS-1), line 13.

13 **Q. Please describe the LC-REP – Unsubscribed and Subscribed as shown on lines 18 and**
14 **28, respectively, of Exhibit A-1 (ZSC-1).**

15 A. The “*LC-REP – Unsubscribed*” line item consists of Cross Winds Energy Park – Phase II
16 and Cross Winds Energy Park – Phase III generation that was not utilized by the LC-REP.
17 This generation would be handled in the same manner as other Company Owned
18 Renewables, however, as seen on line 18, the LC-REP was fully subscribed in 2023. The
19 “*LC-REP – Subscribed*,” line 28, consists of the credits provided to customers through the
20 LC-REP. Participants of the LC-REP pay a subscription fee and are credited on their
21 monthly bills at a rate based on the Midcontinent Independent System Operator, Inc.
22 (“MISO”) Locational Marginal Price and annual Planning Resource Auction clearing price
23 for that year. LC-REP is designed in such a way that the customers who voluntarily enroll

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 in the Program are paying for the costs of the renewable energy subscribed. Therefore, the
2 subscription fees collected will be treated as revenue and directly offset the costs in the
3 REP. The revenue the Company has received from selling the renewable energy and
4 capacity of the subscribed portion of the LC-REP into the MISO market, and booked in the
5 PSCR, has been directly offset by credits to participating customers.

6 **Q. Please describe the impact of the LC-REP – Subscribed to the PSCR value and the**
7 **total Transfer Cost.**

8 A. The subscribed portion of the LC-REP has no effect on the overall value of PSCR or total
9 Transfer Cost. As shown on Exhibit A-1 (ZSC-1), line 28, the subscribed portion of the
10 LC-REP is not included in the calculation of the Transfer Cost (line 27). Expenses shown
11 in Exhibit A-1 (ZSC-1), line 28, are credited to the subscribed customers in the LC-REP.
12 This same amount is offset by the revenue received from MISO for the generation which
13 is included in Exhibit A-26 (RTS-1), line 9.

14 **Q. Explain why there is such a large divergence in the Average Total Cost per MWh,**
15 **which ranges from \$23.80/MWh to \$145.31/MWh.**

16 A. The average total cost ranges from \$23.80/MWh to \$145.31/MWh for several reasons.
17 New renewable energy portfolio resources are filed with the MPSC and include a Transfer
18 Price Schedule which must be approved by the Commission before adding to the company
19 portfolio. The Company's REP was originally approved in 2009 and the average cost of
20 renewable resources has generally dropped from 2009 through 2023. Additionally, the
21 applicable transfer price schedules and methodologies have changed over time resulting in
22 different schedules for different resources. The MPSC's December 4, 2008 Order in Case
23 No. U-15800 provides additional explanation on this question.

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 **Q. Explain why the Capacity Cost on line 17 for Purchased Power averages 7% of the**
2 **Total Transfer Cost while the Capacity Cost for Company Owned Renewables on line**
3 **26 is approximately 18% of the Total Transfer Cost.**

4 A. Capacity Costs on line 17 are generally a lower percentage of the Total Transfer Cost
5 compared to Capacity Costs on line 26 (for Company Owned Renewables) due to the
6 Transfer Price Schedules and the total PPA costs associated with each generator. Refer to
7 the MPSC's December 4, 2008 Order in Case No. U-15800.

8 **Q. Explain how the Capacity Cost and the Energy Cost for the Company Owned**
9 **Renewables on lines 18 to 25 owned by the Company were determined.**

10 A. Capacity Costs for Company Owned Renewables on lines 19 to 25 owned by the Company
11 were determined by multiplying the Capacity Transfer Price for each generator by either
12 the Total MWh listed in Exhibit A-1 (ZSC-1) or Resource Adequacy Capacity (MW)
13 depending upon how the Capacity Transfer Price Schedule was set. Energy Costs for the
14 Company Owned Renewables on lines 19 to 25 owned by the Company were determined
15 for each generator by adding the On-Peak Energy Costs to the Off-Peak Energy Costs.
16 On-Peak Energy Costs were calculated for each generator by multiplying the portion of
17 MWh which were produced during On-Peak hours from the Total MWh listed in Exhibit
18 A-1 (ZSC-1) by the On-Peak Energy Transfer Price. Off-Peak Energy Costs were
19 calculated for each generator by multiplying the portion of MWh which were produced
20 during Off-Peak hours from the Total MWh listed in Exhibit A-1 (ZSC-1) by the Off-Peak
21 Energy Transfer Price.

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 **Q. Based on these calculations, what is the Transfer Price?**

2 A. As discussed above, the Company calculates the Transfer Price for 2023 to be \$86.28 per
3 MWh as shown on Exhibit A-1 (ZSC-1), line 27, column (i). The Company calculates the
4 total Transfer Cost to be \$199,808,366 as shown on Exhibit A-1 (ZSC-1), line 27,
5 column (g).

6 **Allocation of Costs to the RRF**

7 **Q. Please explain the Renewable Resource Program (“RRP”).**

8 A. In Case No. U-13843, the Commission directed the Company to develop a RRP¹ in which
9 the Company purchases Renewable Energy from various suppliers and recovers the cost of
10 such purchases through several funding mechanisms, including the PSCR, voluntary
11 contributions from customers, and the RRF.

12 **Q. How will the purchase of Renewable Energy for this program be treated for purposes
13 of the PSCR reconciliation?**

14 A. In Case No. U-13843, the Commission authorized Consumers Energy to implement a
15 renewable resource funding mechanism to recover Green Generation Program costs. The
16 Commission established the RRF to be used exclusively for compensating Consumers
17 Energy for costs associated with offering the program as follows:

18 The fund will be used to compensate Consumers Energy for
19 costs that are not recovered from customers who voluntarily
20 choose the Green Power Program or are not recovered
21 through the PSCR process. Renewable energy contracts
22 entered into by Consumers Energy will be included in its
23 PSCR factor at the average PSCR cost so that inclusion of
24 these contracts will have no effect on the PSCR factor. The
25 difference between the contract price and the average PSCR
26 cost will be recovered through the fund, except for those
27 costs that are being recovered from customers who
28 voluntarily choose the Green Power Program. Consumers

¹ The RRP is marketed as the Company’s Green Generation Program.

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 Energy should enter into renewable contracts commensurate
2 with the anticipated amount of the fund. [May 18, 2004
3 Order in MPSC Case No. U-13843, pages 20-21.]

4 The energy purchased for the RRP is recognized as part of the total mix of energy supplied
5 by Consumers Energy to its customers. However, the purchase cost of the Renewable
6 Energy in excess of the average PSCR costs will not have any impact on the PSCR because
7 the cost of the energy purchased for the RRP is included in this reconciliation at the average
8 PSCR cost. The only exception to this general treatment of RRP PPAs is the cost recovery
9 associated with the PPA with Commonwealth for the output of the LaBarge facility.

10 **Q. How are costs recovered for the LaBarge PPA?**

11 A. As discussed in the Company's July 26, 2019 Application in Case No. U-20604, the
12 LaBarge PPA was entered into through negotiations between the Company and
13 Commonwealth under the Company's must-buy obligation in accordance with the Public
14 Utility Regulatory Policies Act of 1978 ("PURPA"). The negotiations resulted in an
15 agreement where the Company purchases energy and capacity and acquires all the
16 Renewable Energy Credits ("RECs") from the LaBarge plant. The RECs are bundled with
17 energy and conveyed to the Company as part of the energy payment. The cost of the RECs
18 is allocated to the Green Generation Program and not recovered from PSCR customers.
19 The remaining amount of the Company's avoided cost rates is recovered through the PSCR
20 like other PURPA PPAs and not recovered through the Transfer Price mechanism.

21 **Q. How have the Company's RRF credits been reflected in the calculation of the**
22 **Company's Purchased and Interchange ("P&I") Power Expense?**

23 A. The cost of energy delivered by suppliers under this program consists of two components:
24 (i) the average PSCR, which is booked as P&I Power Expense and included in Exhibit

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 A-29 (RTS-4); and (ii) the cost in excess of average PSCR costs, which are paid from the
2 RRF and are not booked as P&I Power Expense.

3 **Q. Did any new generating facilities associated with the RRP's PPAs commence**
4 **operations in 2023?**

5 A. No.

6 **Q. How many facilities are currently operating to supply energy for the RRP?**

7 A. The Company had four Green Generation Program supply facilities in operation in 2023.
8 These facilities are identified on Exhibit A-31 (BAS-1), page 3, lines 85 through 88.

9 **Q. How much energy was delivered from the RRP facilities during 2023?**

10 A. There were 54,431 MWh of energy purchases booked by Consumers Energy under the
11 RRP agreements during 2023. Expense booked for the RRP deliveries during the year
12 totaled \$4,230,394 as detailed in the Green Generation Annual Report as made available
13 to MPSC Staff.

14 **Q. How is the cost of energy purchased under these agreements handled so that the**
15 **PSCR is not impacted, as directed by the Commission?**

16 A. The RRP PPAs are structured such that payment occurs in two parts: (i) an energy purchase
17 expense; and (ii) a renewable purchase expense. The renewable purchase expense of
18 \$1,749,866 is offset by the RRF and is not a PSCR expense. The booked energy purchase
19 expense of \$2,480,528 is based on the estimated average PSCR cost of energy, less the
20 administrative charge included in the PPAs. The PSCR will not be impacted by the energy
21 purchase expenses under these agreements since these expenses are equal to the average
22 PSCR expense that would have been incurred absent these expenses.

ZACHERY S. COLE
U-21258 DIRECT TESTIMONY

1 **Q. For most of the RRP PPAs, you stated that the energy purchase expense is based on**
2 **the estimated average PSCR cost of energy. How is Consumers Energy proposing to**
3 **handle the difference between the actual average PSCR cost of energy and the**
4 **estimated average PSCR cost of energy?**

5 A. Since the actual average PSCR cost of energy for 2023 is being determined by this
6 proceeding, Consumers Energy cannot reconcile the difference between estimated and
7 actual until the Commission issues an order in this case and the actual cost has been
8 established. Any reconciled amount related to the actual 2023 average PSCR cost of
9 energy will be booked in the year that the Commission's order is issued and reconciliation
10 occurs. The reconciliation for the 2021 variance between the actual average PSCR cost of
11 energy results in an increase to the total PSCR costs of \$65,428.71, as the 2021 estimated
12 average PSCR costs were lower than the actual final average PSCR costs, which will be
13 recorded and reflected in the 2024 PSCR reconciliation case.

14 **Q. Does this complete your direct testimony?**

15 A. Yes.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Exhibit A-1?

3 Hearing none, the exhibit is
4 admitted.

5 MR. KEIMACH: Next we have the direct
6 testimony of Laura M. Connolly which consists of a
7 cover page and six pages of questions and answers.
8 Ms. Connolly also sponsored Exhibits A-2, A-3, and A-4.

9 JUDGE WALLACE: Is there any objection
10 to binding in the testimony of Ms. Connolly?

11 Hearing none, the testimony is bound
12 in.

13 (Testimony bound in)

14 - - -

15

16

17

18

19

20

21

22

23

24

25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
LAURA M. CONNOLLY
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

LAURA M. CONNOLLY
U-21258 DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Laura M. Connolly, and my business address is One Energy Plaza, Jackson,
3 Michigan 49201.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 as Director of Cost and Pricing in the Rates and Regulation Department.

7 **Q. Please describe your educational background and business experience.**

8 A. I received a Bachelor of Business Administration degree in Finance in December 2000
9 from the University of Michigan – Flint. In January 2001, I joined Consumers Energy as
10 a Rate Analyst in the Revenue Requirements section of the Rates Department, where I held
11 positions of increasing responsibility. I joined the Cost Analysis, Pricing and Tariff section
12 of the Rates Department in 2012 and was promoted to Director of Regulated Pricing in
13 July 2021.

14 **Q. What are your responsibilities as Director of Regulated Pricing for Consumers
15 Energy?**

16 A. In my current role I oversee the development of the Company’s cost of service study, load
17 research, rate design, and other rate-related analyses.

18 **Q. Have you previously filed testimony with the Michigan Public Service Commission
19 (“MPSC” or the “Commission”)?**

20 A. Yes. I have filed testimony in the following cases:

21 Case No. U-12575-R Gas Cost Recovery Reconciliation;

22 Case No. U-13220 Gas Cost Recovery Plan;

23 Case No. U-13570 Gas Cost Recovery Plan;

24 Case No. U-13570-R Gas Cost Recovery Reconciliation;

LAURA M. CONNOLLY
U-21258 DIRECT TESTIMONY

1	Case No. U-13730	Gas General Rate Case;
2	Case No. U-13916	Gas Cost Recovery Plan;
3	Case No. U-13917-R	Power Supply Cost Recovery (“PSCR”) Reconciliation;
4	Case No. U-14274-R	PSCR Reconciliation;
5	Case No. U-14347	Electric General Rate Case;
6	Case No. U-14403	Gas Cost Recovery Plan;
7	Case No. U-14403-R	Gas Cost Recovery Reconciliation;
8	Case No. U-14701-R	PSCR Reconciliation;
9	Case No. U-14716	Gas Cost Recovery Plan;
10	Case No. U-14716-R	Gas Cost Recovery Reconciliation;
11	Case No. U-15001-R	PSCR Reconciliation;
12	Case No. U-15415-R	PSCR Reconciliation;
13	Case No. U-15454	Gas Cost Recovery Plan;
14	Case No. U-15675-R	PSCR Reconciliation;
15	Case No. U-16045	PSCR Plan;
16	Case No. U-16045-R	PSCR Reconciliation;
17	Case No. U-16736	Energy Optimization Reconciliation;
18	Case No. U-16432	PSCR Plan;
19	Case No. U-16432-R	PSCR Reconciliation;
20	Case No. U-16890	PSCR Plan;
21	Case No. U-17197	Gas General Rate Case;
22	Case No. U-17281	Energy Optimization Reconciliation;
23	Case No. U-17601	Energy Optimization Reconciliation;
24	Case No. U-17688	Public Act 169 of 2014;
25	Case No. U-17735	Electric General Rate Case;

LAURA M. CONNOLLY
U-21258 DIRECT TESTIMONY

1	Case No. U-17990	Electric General Rate Case;
2	Case No. U-18322	Electric General Rate Case;
3	Case No. U-20134	Electric General Rate Case;
4	Case No. U-20102	Electric Tax Credit A;
5	Case No. U-20286	Electric Tax Credit B;
6	Case No. U-20563	Demand Response Reconciliation;
7	Case No. U-20889	Securitization of Karn Units 1 and 2;
8	Case No. U-20803	PSCR Reconciliation;
9	Case No. U-21308	Gas General Rate Case;
10	Case No. U-21049	PSCR Reconciliation; and
11	Case No. U-21321	Energy Waste Reduction Plan.

PURPOSE OF TESTIMONY

13 **Q. What is the purpose of your testimony in this filing?**

14 A. The purpose of my testimony is to calculate the Financial Compensation Mechanism
15 (“FCM”) surcharge that will be implemented in January 2026.

16 **Q. Are you sponsoring any exhibits?**

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

18	Exhibit A-2 (LMC-1)	Summary of FCM Collections;
----	---------------------	-----------------------------

19	Exhibit A-3 (LMC-2)	Calculation of the FCM Surcharge; and
----	---------------------	---------------------------------------

20	Exhibit A-4 (LMC-3)	Proposed Financial Compensation Mechanism
21		Surcharge Tariff.

22 **Q. Were these exhibits prepared by you or under your direction?**

23 A. Yes.

LAURA M. CONNOLLY
U-21258 DIRECT TESTIMONY

1 **Q. Please describe the method used to reconcile the FCM.**

2 A. The Company implemented an FCM surcharge beginning January 1, 2021. The final order
3 in Case No. U-20697 directed the Company to file a reconciliation and establish a new
4 surcharge in its PSCR Reconciliation proceedings. In Case No. U-20803, the Commission
5 approved a methodology for reconciling the FCM and establishing a new surcharge. The
6 Company is proposing the same methodology in the instant case. Company witness
7 Hannah L. Patton calculates the total incentive earned and the total surcharge billed by the
8 Company through 2023. She has calculated an over recovery of \$2,518,161.

9 **Q. How is the new FCM surcharge amount calculated?**

10 A. The new FCM surcharge amount to be implemented on January 1, 2026 is calculated by
11 starting with the over recovered FCM amount from Company witness Patton, adding the
12 forecasted FCM amounts for 2024, 2025, and 2026 from Company witness Beth A.
13 Skowronski, and subtracting the forecasted FCM collection amounts from 2024 and 2025.
14 This gives a total FCM amount that needs to be collected from customers starting in
15 January 2026.

16 **Q. Will the surcharge implemented on January 1, 2024 remain in place until the FCM
17 surcharge is adjusted for the outcome of this FCM reconciliation?**

18 A. No. The Company's proposed 2025 FCM surcharge is currently pending approval in Case
19 No. U-21049. Once approved, that surcharge will replace the current surcharge starting in
20 January 2025. Any amounts billed between January 1, 2024 and December 31, 2025 will
21 become part of the reconciliation of (i) the actual 2024 billed FCM surcharge to the actual
22 2024 FCM level, and (ii) the actual 2025 billed FCM surcharge to the actual 2025 FCM
23 level.

LAURA M. CONNOLLY
U-21258 DIRECT TESTIMONY

1 **Q. Please describe Exhibit A-2 (LMC-1).**

2 A. Exhibit A-2 (LMC-1) is a summary of the actual and forecasted collections over the
3 reconciliation period. Line 1 shows the 2023 ending over recovery amount from Company
4 witness Patton. Line 2 shows the forecasted collections for the 2024 calendar year
5 compared to the forecasted incentive amount from Company witness Skowronski. Line 3
6 shows the forecasted collections for the 2025 calendar year compared to the forecasted
7 amount from Company witness Skowronski. Line 4 shows the total expected under
8 recovery amount through the 2025 period. This is the amount that needs to be collected
9 through the new surcharge along with the forecasted amount for the 2026 calendar year,
10 which is shown on line 5.

11 **Q. Please describe Exhibit A-3 (LMC-2).**

12 A. Exhibit A-3 (LMC-2) takes the forecasted amount for the 2026 calendar year plus the
13 expected under recovered amount through 2025 divided by the sales forecast for 2026 to
14 develop the 2026 FCM surcharges. These surcharges would be implemented starting with
15 bills on and after January 1, 2026 and are reflected in the proposed Financial Compensation
16 Mechanism Surcharge Tariff, which is Exhibit A-4 (LMC-3).

17 **Q. Why is the Company proposing to start the new surcharge in January 2026?**

18 A. The Company based this expected implementation date on the amount of time previous
19 PSCR reconciliation cases have taken to receive a final order. Past cases have taken up to
20 18 months to process. Planning for a January 2026 implementation allows sufficient time
21 for an order and simplifies the reconciliation by keeping it to a calendar year. Going
22 forward, the surcharge adjustment would be effective January 1 of every year to allow for
23 consistent reconciliations.

LAURA M. CONNOLLY
U-21258 DIRECT TESTIMONY

1 | **Q. Does this conclude your direct testimony?**

2 | A. Yes.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Exhibits A-2 through A-4?

3 Hearing none, those exhibits are
4 admitted.

5 MR. KEIMACH: All right. Next we have
6 the direct testimony of Leanna E. Feazel which consists
7 of a cover page and eight pages of questions and
8 answers. Ms. Feazel also filed a revised testimony, so
9 the revised testimony was still a cover page and nine
10 pages of questions and answers for a total of ten
11 pages.

12 Ms. Feazel sponsored Exhibits A-5
13 and A-6. A-5 was revised as well as A-6 which is
14 also a revised exhibit.

15 JUDGE WALLACE: Is there any objection
16 to binding in the revised testimony of Ms. Feazel?

17 Hearing none, the testimony is bound
18 in.

19 (Testimony bound in)

20 - - -

21

22

23

24

25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

REVISED DIRECT TESTIMONY
OF
LEANNA E. FEAZEL
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

LEANNA E. FEAZEL
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Leanna E. Feazel, and my business address is One Energy Plaza, Jackson,
3 Michigan 49201.

4 **Q. By whom are you employed?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”).

6 **Q. What is your position at Consumers Energy?**

7 A. I am a Principal Accounting Analyst in the Revenue and Fuel Accounting section of the
8 General Accounting Department.

9 **Q. Please state your educational background and work experience.**

10 A. I graduated from Grand Valley State University in August 2010 with a Bachelor of
11 Business Administration degree in Accounting and in Finance. I graduated from Grand
12 Valley State University in August 2011 with a Master of Science in Accounting. I began
13 working for the Company in September 2014 in the Revenue and Fuel Accounting Section
14 of the General Accounting Department. I was a Division Order Analyst employed by
15 Noble Energy, Inc. from December 2011 through August 2014. I obtained my Certified
16 Public Accountant license in May 2013.

17 **Q. What are your responsibilities in your present position?**

18 A. My primary responsibilities include the accounting for power supply expenses, power
19 supply cost, over- or under-recoveries, electric revenue and gross margin analysis, as well
20 as all accounting, Regulation Asset-Backed Securities reporting, and servicing functions
21 of securitization.

LEANNA E. FEAZEL
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Have you previously filed testimony with the Michigan Public Service Commission**
2 **(“MPSC” or the “Commission”)?**

3 A. Yes. I filed testimony in the following cases:

- 4 • Case No. U-20526, the Company’s 2020 Power Supply Cost Recovery (“PSCR”) Reconciliation Case;
- 5
- 6 • Case No. U-20803, the Company’s 2021 PSCR Reconciliation Case; and
- 7 • Case No. U-21049, the Company’s 2022 PSCR Reconciliation Case.

8 **Q. What is the purpose of your direct testimony in this proceeding?**

9 A. The purpose of my direct testimony is to provide the methodology and calculation of the
10 Company’s over- or under-recovery amount related to the operation of the PSCR clause
11 during 2023.

12 **Q. Are you sponsoring any exhibits?**

13 A. Yes. I am sponsoring the following exhibits:

14 Exhibit A-5 (LEF-1) Revised 2023 Power Supply Cost Recovery
15 Reconciliation; and

16 Exhibit A-6 (LEF-2) Revised PSCR Interest Calculation – 2023.

17 **Q. Were these exhibits prepared by you or under your supervision?**

18 A. Yes.

19 **PSCR**

20 **Q. Would you please describe the procedures used by the Company to derive the amount**
21 **of over- or under-recovery recorded each month during 2023 under the PSCR clause?**

22 A. The monthly over- or under-recovery amounts were derived by comparing the Company’s
23 PSCR revenues for a given month with the PSCR costs for the same month. Exhibit A-5
24 (LEF-1) Revised provides such a comparison.

LEANNA E. FEAZEL
U-21258 REVISED DIRECT TESTIMONY

1 **Q. How did the Company determine the monthly amount of PSCR Revenue as shown on**
2 **Exhibit A-5 (LEF-1) Revised, line 17?**

3 A. The PSCR cycle billed sales revenue as shown on Exhibit A-5 (LEF-1) Revised, line 13,
4 (PSCR cycle billed sales multiplied by the sum of the current month's PSCR factor and the
5 base cost recovery factor) is added to the current month's unbilled PSCR revenue as shown
6 on Exhibit A-5 (LEF-1) Revised, line 14, (current month's unbilled PSCR sales multiplied
7 by the sum of the next month's PSCR factor and the base cost recovery factor). From this
8 sum the prior month's unbilled PSCR revenue, as shown on Exhibit A-5 (LEF-1) Revised,
9 line 15, (prior month's unbilled PSCR sales multiplied by the sum of the prior month's
10 PSCR factor and the base cost recovery factor) is subtracted. Lastly the Long-Term
11 Industrial Load Retention Rate's ("LTILRR") PSCR Revenue, line 16, is added to this
12 sum.

13 **Q. Please describe what is included in the LTILRR Revenue on line 16 of Exhibit A-5**
14 **(LEF-1) Revised.**

15 A. Pursuant to the terms of the LTILRR contract, the LTILRR customer will pay the cost of
16 the transmission service and fuel and transportation costs, market energy purchases,
17 ancillary services, and aqueous ammonia based on the Zeeland combined cycle generating
18 unit. These costs are included in line 16 and are recorded by the Company on a calendar
19 basis.

20 **Q. How were recoverable power supply costs determined?**

21 A. Recoverable power supply costs are power supply costs actually incurred during 2023,
22 which include costs incurred in accordance with the Company's 2023 PSCR Plan filed in
23 Case No. U-21257. These costs consist of the Company's fuel and purchased power costs,

LEANNA E. FEAZEL
U-21258 REVISED DIRECT TESTIMONY

1 transmission costs, urea and aqueous ammonia costs, costs for lime, costs for activated
2 carbon, net oxides of nitrogen (“NO_x”) and sulfur dioxide (“SO₂”) emission allowance
3 costs, and Transfer Costs associated with renewable energy, less the cost to supply
4 non-PSCR sales.

5 **Q. Are all Company sales included in this PSCR Reconciliation case?**

6 A. No.

7 **Q. Please describe non-PSCR sales and identify how the costs of these sales are**
8 **determined.**

9 A. Non-PSCR sales include three categories of sales: (i) sales to the Company’s
10 nonjurisdictional interruptible wholesale customers, which are priced at the current
11 monthly incremental fuel and purchased and interchanged power cost; (ii) firm
12 nonjurisdictional wholesale sales and the Grand Rapids special contract sales, both of
13 which are priced at the average monthly power supply cost excluding the cost of the
14 incrementally priced sales; and (iii) sales to Rates GSG-2 and GI2 customers, which are
15 priced at Midcontinent Independent System Operator, Inc. real-time locational marginal
16 price plus allocated capacity and transmission charges.

17 **Q. Have you prepared an exhibit that sets forth the Company’s PSCR revenues and the**
18 **recoverable costs for 2023?**

19 A. Yes, Exhibit A-5 (LEF-1) Revised provides this information. This exhibit has been
20 prepared on the same basis and using the same methodology that the Company has
21 presented in the 2022 PSCR Reconciliation case. As shown on line 28, column (n), of this
22 exhibit, the 2023 PSCR Reconciliation results in a total net under-recovery of \$
23 242,976,563. Including statutory interest, as set forth in Exhibit A-6 (LEF-2) Revised, the

LEANNA E. FEAZEL
U-21258 REVISED DIRECT TESTIMONY

1 total net under-recovery for 2023 is \$ 258,979,967, shown on line 30, column (n) of Exhibit
2 A-5 (LEF-1) Revised. This under-recovery includes the 2022 under-recovery discussed
3 later in my direct testimony.

4 **Q. How does the Company propose to treat this under-recovery?**

5 A. The Company has rolled the under-recovery amount into the calculation of its 2024 PSCR
6 factors to be treated in accordance with the Order received on February 23, 2023 in the
7 Company's 2023 PSCR Plan case, Case No. U-21257 ("February Order"), and the roll-in
8 approach that was approved by the Commission in its December 21, 2006 Order in Case
9 No. U-15001. In its February Order, the Commission approved the Company's Motion
10 to incorporate \$149,692,109 of its projected 2022 power supply cost under-recovery in its
11 2023 PSCR Plan and remove the remaining amount for later inclusion in the 2024 and 2025
12 PSCR Plan years in equal parts.

13 **Q. Please continue.**

14 A. Exhibit A-5 (LEF-1) Revised details the PSCR Reconciliation Report for the 12-month
15 period ended December 31, 2023, for all classes of customers. Lines 1 through 3 show
16 PSCR sales in kWh by month and in total. Lines 5 through 7 calculate total sales less
17 interruptible wholesale, Rates GSG-2 and GI2 sales for each of the 12 months and in total.
18 Line 8 depicts the jurisdictional percentage for each of the 12 months. Lines 9 through 12
19 show the authorized PSCR factor for the entire year of 2023, including the base recovery
20 factor (line 9) as well as the monthly factors (lines 10 through 12) per kWh for each of the
21 12 months. Lines 13 through 16 show PSCR revenues for each of the 12 months and in
22 total. The total for lines 13 through 16 is shown on line 17. Lines 18 and 19 show fuel for
23 generation and purchased and interchange power costs for each month and in total. Line 20

LEANNA E. FEAZEL
U-21258 REVISED DIRECT TESTIMONY

1 shows environmental costs for each month and in total. Line 20 includes costs related to
2 urea, NO_x and SO₂ allowances, aqueous ammonia, lime, and activated carbon. The total
3 for lines 18 through 20 is shown on line 21. Line 22 shows the reduction to PSCR costs
4 for the costs related to the interruptible wholesale, Rates GSG-2 and GI2 sales. Line 23 is
5 the difference between line 21 and line 22. Line 24 shows the percentage of jurisdictional
6 sales, excluding interruptible wholesale, Rate GSG-2, and Rate GI-sales for each of the
7 12 months. Line 25 is the product of lines 23 and 24 and represents the costs allocated to
8 PSCR customers. Line 26 shows the over- or under-recovery for each month and for the
9 12-month period. Line 27 shows the roll-in of the 2022 under-recovery. Line 28 shows
10 the cumulative over- or under-recovery by month during the PSCR year. Line 29 shows
11 the total PSCR Interest as calculated on Exhibit A-6 (LEF-2) Revised. Line 30 shows the
12 total cumulative over- or under-recovery, including interest, for the PSCR year.

13 **Q. Does line 19 exclude all replacement power costs for outages associated with Toshiba**
14 **related defects at Ludington?**

15 A. Yes, the \$ 927,907 of replacement power costs for outages associated with Toshiba related
16 defects at Ludington have been removed from the purchased and interchange power costs,
17 line 19, on Exhibit A-5 (LEF-1) Revised. See the revised testimony and Exhibit A-19
18 (NJH-10) Revised provided by Company witness Nathan J. Hoffman for further details.

19 **Q. How were PSCR revenues shown on line 17 determined?**

20 A. Monthly PSCR revenues consist of billed PSCR revenues and net unbilled PSCR revenues.
21 Billed PSCR revenues result from multiplying current cycle billed sales by the sum of the
22 base fuel factor and the billed PSCR factor (line 1 multiplied by the sum of line 9 and
23 line 10). Current month unbilled PSCR revenues result from multiplying current month

LEANNA E. FEAZEL
U-21258 REVISED DIRECT TESTIMONY

1 unbilled sales by the sum of the base fuel factor and the current month unbilled PSCR
2 factor (line 2 multiplied by the sum of line 9 and line 11). Prior month unbilled PSCR
3 revenues result from multiplying prior month unbilled sales by the sum of the base fuel
4 factor and the prior month PSCR factor (line 3 multiplied by the sum of line 9 and line 12).
5 The total LTILRR PSCR revenue on line 16 represents the PSCR expenses exclusively
6 recovered under the LTILRR contract. The sum of lines 13 through 16 equals the total
7 PSCR revenue amount on line 17.

8 **Q. Please discuss the derivation of the power supply costs allocated to PSCR customers**
9 **on line 25.**

10 A. This amount was derived by adding fuel for generation costs with net purchased and
11 interchange power costs (which include transmission costs) and environmental costs. Total
12 costs were then reduced by the costs associated with interruptible wholesale, Rate GSG-2,
13 and Rate GI2 sales. This result was then multiplied by the jurisdictional percentage to
14 arrive at the total recoverable power supply costs allocated to PSCR customers.

15 **Q. How is the over- or under-recovery amount shown on line 26 calculated?**

16 A. The amount on line 26 is the difference between line 17 and line 25. When line 17 is larger
17 than line 25 there is an over-recovery. When line 17 is smaller than line 25, there is an
18 under-recovery.

19 **Q. Please explain line 27.**

20 A. In its December 21, 2006 Order in Case No. U-15001, the Commission granted the
21 Company authority to roll prior year under- and over-recoveries into its future PSCR plans.
22 The amount on line 27 represents the Company's anticipated 2022 PSCR under-recovery
23 of \$ 415,386,250. This balance ties to Revised Exhibit S-1.0 sponsored by Staff witness

LEANNA E. FEAZEL
U-21258 REVISED DIRECT TESTIMONY

1 Dolores A. Midkiff-Powell in the 2022 PSCR Reconciliation, Case No. U-21049, with the
2 exception of the anticipated \$330,563 disallowance and related interest impact relating to
3 a Campbell 2 outage as proposed in the Case No. U-21049 Proposal for Decision, which
4 was an adjustment that the Company accepted in Case No. U-21049 and which the
5 Company is now including in the prior year under-recovery for this revised filing.

6 **Q. How were the monthly interest amounts on Exhibit A-6 (LEF-2) Revised calculated?**

7 A. The monthly interest amounts on Exhibit A-6 (LEF-2) Revised were calculated in a manner
8 consistent with the assumption that each month's over- or under-recovery was incurred
9 uniformly over the current month. Monthly interest was calculated using the following
10 formula: (half of the current month's over- or under-recovery plus the over- or
11 under-recovery balance at the beginning of the current month) multiplied by (the applicable
12 annual interest rate divided by 12). The applicable interest rate is the Company's monthly
13 average short-term annual interest rate of borrowing for under-recoveries, or the authorized
14 rate of return on common equity in the electric business for over-recoveries. The monthly
15 over/(under) recovery amounts on Exhibit A-6 (LEF-2) Revised are from Exhibit A-5
16 (LEF-1) Revised.

17 **Q. What does the total interest amount on Exhibit A-6 (LEF-2) Revised represent?**

18 A. This exhibit sets forth the interest owed to the Company or to customers as a result of any
19 under- or over-recovery. The total interest amount on line 13, column (f), of Exhibit A-6
20 (LEF-2) Revised represents the amount of interest owed to the Company for the 2023
21 PSCR under-recovery.

22 **Q. Does this conclude your direct testimony in this proceeding?**

23 A. Yes.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Revised Exhibits A-5 and A-6?

3 Hearing none, those exhibits are
4 admitted.

5 MR. KEIMACH: Thank you, Your Honor.

6 Next we have the direct testimony of
7 Joshua W. Hahn who filed direct testimony
8 consisting of a cover page and eight pages of
9 questions and answers. Joshua Hahn's testimony was
10 also revised which was also a cover page and eight
11 pages of questions and answers. Mr. Hahn also
12 filed -- submitted Exhibits A-7, A-8, and A-9. A-7
13 was revised.

14 JUDGE WALLACE: Is there any objection
15 to binding in the revised testimony of Mr. Hahn?

16 Hearing none, the testimony is bound
17 in.

18 (Testimony bound in)

19 - - -

20

21

22

23

24

25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

REVISED DIRECT TESTIMONY
OF
JOSHUA W. HAHN
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

JOSHUA W. HAHN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Joshua W. Hahn, and my business address is 1945 West Parnall Road, Jackson,
3 Michigan 49201.

4 **Q. By whom are you employed?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”).

6 **Q. In what capacity are you employed?**

7 A. I am a Principal Engineer in the Electric Supply Operations and Power Supply Cost
8 Recovery (“PSCR”) Section of the Electric Supply Department.

9 **Qualifications**

10 **Q. Please describe your educational background.**

11 A. I received a Bachelor of Science Degree in Mechanical Engineering in 2008 from Michigan
12 Technological University.

13 **Q. Please describe your business and professional experience.**

14 A. I joined the Company’s Transactions and Resource Planning Department in January 2010.
15 I was responsible for analysis of Financial Transmission Rights (“FTRs”) and acquisition
16 of FTRs through monthly and annual allocations and auctions, as well as maintaining the
17 Company’s short-term Load and Market Price models using MetrixIDR. In June 2012,
18 I assumed primary responsibilities for the maintenance of the PROMOD IV Full
19 Transmission production cost model. From January to September 2013, I assumed
20 temporary responsibility for maintenance of the PROMOD IV production cost model and
21 all analyses developed using the tool, including all fuel and purchased and net interchange
22 forecasting. Later, in June 2015, I was again assigned responsibility to maintain the model
23 and perform all analyses developed using PROMOD IV. In January 2016, I assumed

JOSHUA W. HAHN
U-21258 REVISED DIRECT TESTIMONY

1 responsibilities as the primary PROMOD IV modeler for near-term fuel and purchased
2 power expenses.

3 **Q. What are your present responsibilities and duties as a Principal Engineer?**

4 A. I am responsible for modeling and analysis of fuel and purchased and net interchange
5 power costs that are used in developing the PSCR Plan and updating the PSCR factor.
6 Additionally, I am responsible for generation unit outage analyses.

7 **Q. Have you provided testimony before the Michigan Public Service Commission**
8 **(“MPSC” or the “Commission”)?**

9 A. Yes. I provided testimony in the following MPSC cases:

- 10 • Case No. U-17918-R 2016 PSCR Reconciliation;
- 11 • Case No. U-18402 2018 PSCR Plan;
- 12 • Case No. U-20068 2017 PSCR Reconciliation;
- 13 • Case No. U-20219 2019 PSCR Plan;
- 14 • Case No. U-20202 2018 PSCR Reconciliation;
- 15 • Case No. U-20525 2020 PSCR Plan;
- 16 • Case No. U-20220 2019 PSCR Reconciliation;
- 17 • Case No. U-20649 2020 Voluntary Green Pricing Update;
- 18 • Case No. U-20802 2021 PSCR Plan;
- 19 • Case No. U-20526 2020 PSCR Reconciliation;
- 20 • Case No. U-21009 2020 Renewable Energy Reconciliation;
- 21 • Case No. U-21048 2022 PSCR Plan;
- 22 • Case No. U-20803 2021 PSCR Reconciliation;
- 23 • Case No. U-21257 2023 PSCR Plan; and

JOSHUA W. HAHN
U-21258 REVISED DIRECT TESTIMONY

- 1 • Case No. U-21049 2022 PSCR Reconciliation.

2 **Q. What is the purpose of your direct testimony?**

3 A. My direct testimony will address the following: the projected costs in the Company’s 2023
4 PSCR Plan, Case No. U-21257, and the actual generation requirements and purchased and
5 interchange expenses incurred by the Company in 2023 and the costs and revenues
6 associated with the Company’s participation in the Midcontinent Independent System
7 Operator, Inc.’s (“MISO’s”) FTR and Auction Revenue Rights (“ARR”) markets. In
8 addition, I will support the calculations of lost MWh for the Ludington Pumped Storage
9 Plant (“Ludington”) Units.

10 **Q. Are you sponsoring any exhibits?**

11 A. Yes. I am sponsoring the following exhibits:

12 Exhibit A-7 (JWH-1) Revised	Forecasted and Actual Generation Requirements
13	and Purchased and Interchange Expense – 2023;
14 Exhibit A-8 (JWH-2)	2023 Expense and Revenue Resulting from
15	Congestion, FTR and ARR Transactions; and
16 Exhibit A-9 (JWH-3)	Ludington Lost MWh.

17 **Q. Were these exhibits created by you or at your direction?**

18 A. Yes.

19 **Forecasted and Actual Generation Requirements and Purchased and**
20 **Interchange Expense**

21 **Q. Please describe Exhibit A-7 (JWH-1).**

22 A. Exhibit A-7 (JWH-1) shows the forecasted amount of electric energy (measured in MWh)
23 generated and purchased, as presented in the Company’s 2023 PSCR Plan, Case
24 No. U-21257, the actual amounts of electric energy generated and purchased in 2023, and
25 the variance of actual from the plan. This exhibit also shows the Purchased and Net

JOSHUA W. HAHN
U-21258 REVISED DIRECT TESTIMONY

1 Interchange Power costs as forecasted in the 2023 PSCR Plan case, the actual 2023
2 Purchased and Net Interchange Power costs, and the variance of actual from the plan.

3 **Q. How did the total amount of electric energy required to serve PSCR customers in**
4 **2023 vary from the Company's 2023 PSCR Plan?**

5 A. The total amount of electric energy required to service customers in 2023 was 2.60% lower
6 than forecasted, as is shown on Exhibit A-7 (JWH-1), line 14, column (d).

7 **Q. Please explain the reasons for the major increases or decreases in generation, by**
8 **category, shown on Exhibit A-7 (JWH-1), lines 1 through 13.**

9 A. The actual Steam Coal generation shown on Exhibit A-7 (JWH-1), line 1, is 34.67% lower
10 than planned due primarily to higher than forecasted random outage rates. The actual Gas
11 and Oil generation shown on Exhibit A-7 (JWH-1), line 2, is 15.57% lower than planned
12 due to higher than forecasted random outage rates at the Zeeland Combined Cycle and the
13 Covert units. The actual random outage rates are discussed in the testimony of Company
14 witness Nathan J. Hoffman. The actual Combustion Turbine ("Peaker") generation shown
15 on Exhibit A-7 (JWH-1), line 5, is 277.16% higher than planned primarily due to increased
16 utilization of the Zeeland Peaker units due to the decreased availability of the coal units
17 and the Zeeland Combined cycle and Covert units as well as lower than forecasted natural
18 gas prices causing the units to be more economic in the market. Actual utilization of the
19 Ludington Pumped Storage facility, shown on Exhibit A-7 (JWH-1), lines 6 and 8, was
20 lower than planned due to a higher than forecasted random outage rate. The actual
21 Interchange Received energy from the Energy Market operated by MISO, shown on
22 Exhibit A-7 (JWH-1), line 12, was 44.64% higher than planned. The actual Interchange
23 Delivered energy, shown on Exhibit A-7 (JWH-1), line 13, is 23.62% higher than planned

JOSHUA W. HAHN
U-21258 REVISED DIRECT TESTIMONY

1 due primarily to decreased overall MWh requirements and higher than forecasted
2 purchased power MWhs.

3 **Q. Please explain the reasons for the major increases or decreases in purchased and**
4 **interchange power expenses or revenues, by category, shown on Exhibit A-7 (JWH-1),**
5 **lines 15 through 22.**

6 A. The actual MISO Interchange Received expense shown on Exhibit A-7 (JWH-1) Revised,
7 line 17, is 30.59% lower than planned primarily due to significantly lower than planned
8 MISO market prices. The expense for the purchase of Zonal Resource Credits (“ZRCs”)
9 in year 2023 is shown on line 18. This expense is higher than forecast due to a 212 ZRC
10 bilateral capacity purchase for ZRC replacement per MISO’s Business Practice Manual
11 (BPM-011) to replace derated generation capacity that was committed to the market. The
12 revenue for the sale of ZRCs by the Company in MISO’s annual Planning Resource
13 Auction (“PRA”) is discussed by Company witness Raymond T. Scaife. The actual
14 Transmission Service expense shown on Exhibit A-7 (JWH-1), line 19, is 6.21% lower
15 than planned due to lower than forecasted MWh Requirements. The actual MISO
16 Interchange Delivered revenue shown on Exhibit A-7 (JWH-1), line 21, is 56.63% lower
17 than planned primarily due to significantly lower than planned MISO market prices. The
18 actual revenue for Schedule 2-Reactive Supply shown on Exhibit A-7 (JWH-1), line 22, is
19 2.27% lower than planned.

20 **FTR and ARR Markets**

21 **Q. Did the Company participate in the MISO FTR and ARR Market in 2023?**

22 A. Yes.

JOSHUA W. HAHN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Are you familiar with the Commission's August 22, 2006 Order in Case No. U-14701**
2 **regarding FTRs?**

3 A. Yes. In that Order, the Commission concurred with the Company's position that costs and
4 revenues associated with FTRs are to be included in the Company's PSCR plan and
5 reconciliation proceedings at their ultimate settled value. The Commission declined to
6 authorize interim adjustments to the fair value of FTRs as regulatory assets and liabilities
7 for purposes of regulatory reporting to the Commission.

8 **Q. Has the Company included its FTR and ARR costs and revenues in this case**
9 **consistent with the Commission's August 22, 2006 Order in Case No. U-14701?**

10 A. Yes. FTR and ARR costs and revenues included in this reconciliation case are based on
11 the settled value of the FTRs. My direct testimony reports the expenses and revenues for
12 all FTRs and ARRs that were settled for each month of 2023; however, the amount
13 requested for recovery includes only those FTRs for which the settlement was booked in
14 2023.

15 **Q. Please explain the projected expense associated with the Company's participation in**
16 **the FTR and ARR market in the Company's 2023 PSCR Plan, Case No. U-21257.**

17 A. The FTR and ARR expense projected for that case was \$290,269 as sponsored by Company
18 witness Daniel S. Alfred. See MPSC Case No. U-21257, Exhibit A-1 (DSA-1), page 1,
19 line 22, Schedule 16 expense.

20 **Q. What was the actual expense the Company incurred as a result of the Company's**
21 **participation in the FTR and ARR Market in 2023?**

22 A. The Company incurred an actual FTR and ARR expense net of congestion charges of
23 (\$19,440,760), as shown in Exhibit A-8 (JWH-2), line 7, column (m).

JOSHUA W. HAHN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Was any of the expense shown on Exhibit A-8 (JWH-2), line 7, column (m), incurred**
2 **in a prior year?**

3 A. Yes. For instance, the Company purchased FTRs for January 2023 in the MISO monthly
4 FTR auction that occurred in December 2022. The costs of those purchases were not
5 recovered with the Company's 2022 power supply costs but were instead deferred for
6 recovery in the year for which the FTRs applied, which in this case was 2023.

7 **Q. Was any of the expense shown on Exhibit A-8 (JWH-2), line 7, column (m), incurred**
8 **for FTRs that were applicable in a future year?**

9 A. No.

10 **Q. Do you believe the Company was prudent in its participation in the FTR and ARR**
11 **Market in 2023?**

12 A. Yes.

13 **Ludington Lost MWh Calculation**

14 **Q. Please describe Exhibit A-9 (JWH-3).**

15 A. Exhibit A-9 (JWH-3) presents the Company's calculations of the economic MWh loss for
16 each of the outage events for the Ludington Units during 2023 and supplements
17 Exhibit A-10 (NJH-1). These calculations are being provided pursuant to the Settlement
18 Agreement approved in the Commission's June 28, 2018 Order in Case No. U-17918-R.
19 This exhibit provides the outage event number, the start and end dates of the outage, the
20 duration of the outage in hours, the potential MWh loss (simple product of the unit's net
21 demonstrated capacity and the duration of the outage), and the economic MWh loss.

JOSHUA W. HAHN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. What does the economic MWh loss represent?**

2 A. The economic MWh loss reflects the theoretical economic dispatch of the unit given
3 day-ahead energy market prices in each hour.

4 **Q. Does this complete your direct testimony?**

5 A. Yes.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Revised Exhibit A-7, Exhibit A-8,
3 and A-9?

4 Hearing none, those exhibits are
5 admitted.

6 MR. KEIMACH: Thank you, Your Honor.

7 Next we have the direct testimony of
8 Nathan J. Hoffman which consists of a cover page
9 and 32 pages of questions and answers for a total
10 of 33 pages. Mr. Hoffman's cover page and
11 questions and answers were also revised, still a
12 total of 33 pages. Mr. Hoffman also filed rebuttal
13 testimony. The rebuttal testimony consists of a
14 cover page and 23 pages of questions and answers.

15 Mr. Hoffman also sponsored Exhibits
16 A-10, A-11, A-12, A-13, A-14, A-15, A-16, A-17,
17 A-18, A-19, and A-33 with A-19 being revised.

18 JUDGE WALLACE: Okay. So that was A-10
19 through A-19, A-19 was revised, and then A-33; correct?

20 MR. KEIMACH: Correct, Your Honor.

21 JUDGE WALLACE: Is there any objection
22 to binding in the revised direct testimony and rebuttal
23 testimony of Mr. Hoffman?

24 Hearing none, the testimony is bound
25 in.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257))
for the 12 months ended December 31, 2023.)
_____)

Case No. U-21258

REVISED DIRECT TESTIMONY
OF
NATHAN J. HOFFMAN
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Nathan J. Hoffman, and my business address is One Energy Plaza, Jackson,
3 Michigan 49201.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 as Executive Director – Fossil Generation.

7 **Q. Please describe your educational background.**

8 A. In 2003, I received a Bachelor of Science degree in Welding Engineering Technology from
9 Ferris State University. In 2017, I received a Master of Business Administration with a
10 concentration in Advanced Management Tools and Concepts from Ferris State University.

11 **Q. Please describe your business experience.**

12 A. In 2005, I joined Consumers Energy at the J.H. Campbell (“Campbell”) Generating
13 Complex and progressed through positions from Engineering Technical Analyst to the
14 Executive Director – Fossil Generation. In my various roles at Consumers Energy, I served
15 as a subject matter expert for boiler and piping systems and was an embedded engineering
16 resource in the Operations Department responsible for monitoring plant performance and
17 troubleshooting. I also planned and executed outages to ensure that they were performed
18 in a prudent and expeditious manner, as well as managed the site maintenance organization
19 tasked with maintaining the plant systems and equipment. As the Executive Director –
20 Fossil Generation, I have overall responsibility for the safe and excellent operations of the
21 Fossil Generation Fleet. In this role, I also manage the overall Operating and Maintenance
22 and Capital budgets, develop site specific staffing plans, develop strategies to meet
23 Company objectives, and instill a culture of continuous improvement. I further oversee

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 the performance of the Site's Operations, Maintenance, Fuel Handling, and Environmental
2 and Technical Services departments.

3 **Q. Have you previously provided testimony before the Michigan Public Service
4 Commission ("MPSC" or the "Commission")?**

5 A. Yes, I provided testimony in the Company's 2023 Power Supply Cost Recovery ("PSCR")
6 Plan, Case No. U-21257; the Company's 2024 PSCR Plan, Case No. U-21423; and the
7 Company's 2022 PSCR Reconciliation, Case No. U-21049.

8 **Purpose of Direct Testimony**

9 **Q. What is the purpose of your direct testimony in this proceeding?**

10 A. The purpose of my direct testimony is to:

- 11 • Describe the reasonableness and prudence of certain outages experienced in
12 2023 at the Company's fossil-fueled electric generating units and the River
13 Hydroelectric generating units ("River Hydros");
- 14 • Describe the outages experienced in 2023 at the Company's Ludington Pumped
15 Storage Plant ("Ludington"), including the outages at Ludington resulting from
16 faulty work performed by Toshiba America Energy Systems Corporation
17 ("TAES"), and the associated costs, which the Company has recorded to the
18 regulatory asset approved by the Commission in Case No. U-21310;
- 19 • Explain the expense associated with emission allowances for oxides of nitrogen
20 ("NO_x") and Sulfur Dioxide ("SO₂");
- 21 • Explain the expense associated with the consumption of urea, aqueous
22 ammonia, lime, and activated carbon;
- 23 • Explain the 2023 performance of the Company's owned wind assets; and
- 24 • Explain the treatment of the replacement power costs associated with Ludington
25 unit outages resulting from the defective work performed by TAES.

26 **Q. Are you sponsoring exhibits with your direct testimony?**

27 A. Yes, I am sponsoring the following exhibits:

28	Exhibit A-10 (NJH-1)	Event Summary Report, January 2023 to December
29		2023;

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1	Exhibit A-11 (NJH-2)	Event Identification – Outages;
2	Exhibit A-12 (NJH-3)	Periodic Outage Reports;
3	Exhibit A-13 (NJH-4)	2023 Fossil and Pumped Storage Outages Occurring for Twenty-Eight Days or More;
4		
5	Exhibit A-14 (NJH-5)	Generation Performance Statistics (January 1, 2023 to December 31, 2023);
6		
7	Exhibit A-15 (NJH-6)	Comparison of Consumers Energy and GADS Averages for Similar Units Equivalent Availability;
8		
9	Exhibit A-16 (NJH-7)	2023 Base Load Generation Power Plant Cost Efficiency;
10		
11	Exhibit A-17 (NJH-8)	Chemical Reagent Expense (January 1, 2023 to December 31, 2023);
12		
13	Exhibit A-18 (NJH-9)	2023 Wind Asset Performance Data; and
14	Exhibit A-19 (NJH-10) Revised	2023 Ludington Outages.

15 **Q. Were these exhibits prepared by you or under your direction and supervision?**

16 A. Yes.

17 **2023 Outages**

18 **Q. Have you provided a listing of all 2023 outages?**

19 A. Yes. The Event Summary Report, Exhibit A-10 (NJH-1), lists all unit outages and trips.
20 The report shows 35 events on the coal units, 124 on the Ludington Units, 64 on the
21 Zeeland Combined Cycle Plant (“Zeeland CC”) (Units 3, 4, and 5), Covert Gas Plant
22 (“Covert”), and Jackson Gas Plant (“Jackson”), 37 on D.E. Karn (“Karn”) Units 3 and 4,
23 22 on the Zeeland Simple Cycle (“Zeeland SC”) (Units 1 and 2), and 142 on the River
24 Hydro units. The total number of outage events for the fleet was 424 in 2023, 99 fewer
25 than in 2022.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 Exhibit A-10 (NJH-1) provides a description of each event, including the event start
2 time, event end time, cause code,¹ duration in equivalent hours, and equivalent MWh. The
3 equivalent MWh calculation assumes that the units would have operated at 100% capacity
4 factor.

5 **Q. Has the Company also calculated the lost generation for the Ludington Units in**
6 **accordance with the Settlement Agreement approved in the Commission's June 28,**
7 **2018 Order in Case No. U-17918-R?**

8 A. Yes. Company witness Joshua W. Hahn provides the economic MWh loss calculations for
9 the Ludington Units assuming they were operating and dispatchable. These calculations
10 are presented in Exhibit A-9 (JWH-3).

11 **Q. Would you please define the words "outage," "trip," and "event"?**

12 A. A unit "outage" on a base-load unit is defined as the period from when the circuit breaker
13 opens, separating the unit from the electric system, to when it closes, tying the unit to the
14 electric system and making it available for dispatch, and the unit is not in economic reserve
15 status. A unit "outage" on a cycling or peaking unit is defined as the period from when the
16 Company's Electric Supply Operations Department releases a unit, making it unavailable,
17 to when the plant reports to Electric Supply Operations that the unit is available for service.
18 For the purposes of these definitions, the coal and river hydro units are considered base-
19 load units, and the Zeeland, Jackson, Covert, and Karn Units 3 and 4 are all considered
20 cycling units. Zeeland Units 1 and 2 are considered peakers. Base load generation refers
21 to the minimum amount of electric power required to be delivered to customers over a

¹ Cause codes used are taken from the Data Reporting Instructions of the North American Electric Reliability Corporation ("NERC") Generating Availability Data System. Explanations for the cause codes can be found at: [Data Reporting Instructions \(nerc.com\)](https://www.nerc.com/Data-Reporting-Instructions)

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 given period of time at a steady rate. Base load generating units are units which are
2 typically operated to serve customer loads on an around-the-clock basis.

3 A “trip” is a unit outage that begins when protective devices automatically separate
4 a unit from the electric system, or the operator initiates a manual and immediate separation.
5 This is in contrast to the normal controlled shutdown process where operators may spend
6 several hours slowly reducing pressure and load before separating the unit from the system.

7 An “event” is a one-line entry on the Event Summary Report. Each line on the
8 Report contains an outage “event.” The outage event classification is divided into eight
9 distinct event types: (i) Planned Outage; (ii) Maintenance Outage; (iii) Planned Outage
10 Extension; (iv) Maintenance Outage Extension; (v) Startup Failure; (vi) Unplanned
11 (Forced) Outage-Immediate; (vii) Unplanned (Forced) Outage-Delayed; and
12 (viii) Unplanned (Forced) Outage-Postponed. Exhibit A-11 (NJH-2) explains the different
13 types of outages shown on Exhibit A-10 (NJH-1).

14 **Q. Have you documented outage occurrences in more detail?**

15 A. Yes. In addition to documenting all of the 2023 outages reported on page 3 of this
16 testimony and reflected in Exhibit A-10 (NJH-1), outage information sheets were also
17 prepared for generating units that had lower availability averages than those shown in
18 Generating Availability Data System (“GADS”) data discussed later in my direct
19 testimony. The information sheets are provided as Exhibit A-12 (NJH-3). Each sheet
20 contains the same statistical data found on Exhibit A-10 (NJH-1), as well as: (i) an
21 expanded description of the event; (ii) a cause of the event; (iii) the work that was done to
22 correct the root cause for forced outages or the work that was performed during
23 maintenance and periodic outages; (iv) other work, if any, that was performed; (v) a

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 description of work that extended the outage, if any extension occurred; and (vi) why that
2 work was performed.

3 Additionally, the Company prepared a Periodic Outage, Maintenance Outage, or
4 Forced Outage Information sheet for each of the events lasting 28 days or more on the
5 fossil, pumped storage, peaking, and River Hydro units shown on Exhibit A-10 (NJH-1).

6 **Q. Before discussing specific outages, do you have any general comments about outages
7 in the Company's generation fleet?**

8 A. Yes, particularly concerning the Company's older units. Some of these units were built in
9 the 1960s, and given the ages and designs of the systems, replacement parts are not always
10 readily available. In some instances, replacement parts do not exist at all. The start-up
11 boiler feed pump ("SUBFP") at Campbell Unit 2 is one of those systems. Keeping spare
12 parts on hand is neither cost effective nor practical since replacements do not exist, and
13 while I outline the incredible efforts taken to repair the SUBFP, it remains offline.

14 **Fossil, Cycling, and Pumped Storage Outages Planned for 28 Days or More**

15 **Q. In Case No. U-21257, how many outages were planned for 28 days or more?**

16 A. My direct testimony and Exhibit A-11 (NJH-1) identified twelve such outages.

17 **Q. Were all twelve outages completed during the plan year?**

18 A. No. Only eight of the planned outages were completed during the plan year; the planned
19 outages for Campbell Unit 1, Karn Unit 2, Karn Unit 3, and Karn Unit 4 were not
20 performed.

21 **Q. Why wasn't the planned outage at Campbell Unit 1 performed?**

22 A. The Campbell Unit 1 outage was scheduled to begin on October 13, 2023 and last for
23 31 days. However, the unit had been placed into economic reserve status on February 19,
24 2023 and subsequently began a maintenance outage on March 7, 2023. The maintenance

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 outage lasted for 14 days, ending on March 21, 2023. During this timeframe, all priority
2 work scope that was scheduled for the fall outage was completed, obviating the need for
3 the planned outage scheduled to begin on October 13, 2023.

4 **Q. Why wasn't the planned outage at Karn Unit 2 performed?**

5 A. The outage at Karn Unit 2 was scheduled to begin May 1, 2023 and was projected to last
6 for 30 days – concluding May 31, 2023. The outage was scheduled to perform preparation
7 activities for unit cessation on May 31, 2023. However, due to the need to burn down the
8 remaining coal, the outage was not taken as planned. A maintenance outage was taken for
9 11 days in early May to perform visual inspections of backpass, pulse jet fabric filters, and
10 the selective catalytic reduction vessels to quantify the ash accumulation needing to be
11 abated upon cessation of operations.

12 **Q. Why weren't the planned outages for Karn Units 3 and 4 performed?**

13 A. The Karn Unit 3 and 4 outages were not performed due to availability of materials for the
14 major work that was planned. Due to the uncertainty of the retirement of Karn Units 3
15 and 4 as proposed in the Company's 2021 Integrated Resource Plan ("IRP"), the
16 preparation for these outages was not complete, including material delivery. As such the
17 planned work was deferred to 2024.

18 **Q. Did the Company conduct additional outages of 28 days or more in 2023?**

19 A. Yes. In addition to the eight planned outages which lasted longer than 28 days, the
20 Company conducted two additional outages for a total of ten outages that lasted 28 days or
21 more. The additional outages included Campbell Unit 2 and Karn Unit 3. All ten outages
22 are identified in Exhibit A-13 (NJH-4).

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Has your review of the outages listed in Exhibit A-13 (NJH-4) led you to a conclusion**
2 **concerning these outages?**

3 A. Yes. I have concluded that all of the outages listed in Exhibit A-13 (NJH-4) were carefully
4 planned, prudently managed, and free of negligence on the part of Consumers Energy as
5 to either causation or extension of outage time. Below is a brief summary of each of the
6 outages listed in Exhibit A-13 (NJH-4).

7 **Campbell Unit 2**

8 The Campbell Unit 2 outage began on August 4, 2023 due to a tube leak in the hydraulic
9 coupling circuit oil cooler. The tube leak resulted in water intrusion into the oil system,
10 thereby forcing the unit to be removed from service. Subsequently, on August 10, 2023,
11 the SUBFP experienced a thrust event causing damage to the internal flow element, thrust
12 bearing, and drive coupling. The unit was out of service for the remainder of the year, a
13 total of 149 days. A detailed discussion of the extended outage is provided later in this
14 direct testimony.

15 **Campbell Unit 3**

16 The outage at Campbell Unit 3 was scheduled to begin April 1, 2023 and was projected to
17 last for 42 days – concluding May 13, 2023. The outage began on March 31, 2023 and
18 lasted 40 days, ending on May 10, 2023. The outage was necessary for the planned
19 replacement of a catalyst layer in the Selective Catalytic Reduction (“SCR”) vessel and
20 repair of a suspected boiler waterwall leak. In addition, performance of NERC testing was
21 required following substation modifications necessary to support site decommissioning.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Karn Unit 3**

2 The outage at Karn Unit 3 was scheduled to begin March 5, 2023 and was projected to last
3 for 41 days – concluding April 15, 2023. The outage began on March 5, 2023 and lasted
4 for 41 days, ending on April 15, 2023. The outage was necessary for the performance of
5 cooling tower repairs. In addition, the Company conducted NERC relay testing, replaced
6 substation generator circuit breaker controls, performed miscellaneous balance of plant
7 mechanical repairs, and removed three cooling fan assemblies for overhaul.

8 **Karn Unit 3**

9 The outage at Karn Unit 3 began on May 31, 2023 and lasted 102 days – concluding
10 September 10, 2023. The outage was caused by the failure of one of the J-strap connectors
11 which connects the exciter rotor to its windings. The work required to restore the unit to
12 service included disassembly of the exciter for shipment to a vendor for inspection and
13 rewind of the rotor windings. A detailed discussion of the extended outage is provided
14 later in this direct testimony.

15 **Ludington Unit 5**

16 The outage at Ludington Unit 5 was scheduled to begin May 15, 2023 and was projected
17 to last for 40 days – concluding June 24, 2023. The outage began on May 15, 2023 and
18 lasted for 46 days, ending on June 30, 2023. The outage was necessary for the annual
19 periodic outage warranty inspections, main transformer bank #3 inspections, turbine lube
20 oil coolers maintenance, and wicket gate thrust collar and seal inspections and repairs. The
21 outage was extended due to failure of the emergency intake gate hoist control. A failed
22 silicon-controlled rectifier and power resistor for the DC control led to this failure and the
23 replacement of those components rectified the issue.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Ludington Unit 6**

2 The outage at Ludington Unit 5 was scheduled to begin May 15, 2023 and was projected
3 to last for 40 days – concluding June 24, 2023. The outage began on May 15, 2023 and
4 lasted for 39 days, ending on June 23, 2023. The outage was necessary for the annual
5 periodic outage warranty inspections, main transformer bank #3 inspections, turbine lube
6 oil coolers maintenance, and wicket gate thrust collar and seal inspections and repairs.

7 **Zeeland Unit 1**

8 The Zeeland Unit 1 outage began on December 27, 2022 and lasted for a total of 100 days,
9 96 days in 2023, ending on April 7, 2023. The outage was necessary due to the need for
10 the Company to move the leased generator step-up (“GSU”) transformer from Zeeland
11 Unit 1 to Zeeland Unit 5. The basis for the decision to move the leased GSU transformer
12 to Zeeland Unit 5 is the increased economics of Zeeland Unit 5 due to its operation as a
13 combined cycle unit versus that of Zeeland Unit 1 which is a single cycle unit. A detailed
14 discussion of the extended outage is provided later in this direct testimony.

15 **Zeeland Unit 3**

16 The outage at Zeeland Unit 3 was scheduled to begin September 22, 2023 and was
17 projected to last for 57 days – concluding November 18, 2023. The outage began on
18 November 4, 2023 and lasted for 40 days, ending on December 14, 2023. The outage was
19 necessary for the planned inspection and repair of the unit pursuant to requirements of the
20 Long-Term Service Agreement (“LTSA”) based upon unit operating hours.

21 **Zeeland Unit 4**

22 The outage at Zeeland Unit 4 was scheduled to begin September 22, 2023 and was
23 projected to last for 57 days – concluding November 18, 2023. The outage began on

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 November 4, 2023 and lasted for 39 days, ending on December 13, 2023. The outage was
2 necessary for the planned inspection and repair of the unit pursuant to requirements of the
3 LTSA based upon unit operating hours.

4 **Zeeland Unit 5**

5 The outage at Zeeland Unit 5 was scheduled to begin September 22, 2023 and was
6 projected to last for 57 days – concluding November 18, 2023. The outage began on
7 November 4, 2023 and lasted for 39 days, ending on December 13, 2023. The outage was
8 necessary for the planned inspection and repair of the unit pursuant to requirements of the
9 LTSA based upon unit operating hours.

10 **Q. Did the Company conduct any outages that exceeded 90 days in duration?**

11 A. Yes. The Company conducted three outages during 2023 that exceeded 90 days in
12 duration. The first of these was the Zeeland Unit 1 outage which began in December 2022
13 and lasted for 96 days during 2023. The additional outages that exceeded 90 days in
14 duration were the Campbell Unit 2 outage which lasted for 149 days during 2023 and the
15 Karn Unit 3 outage which lasted for 102 days during 2023.

16 **Q. Why did the Zeeland Unit 1 outage exceed 90 days?**

17 A. As previously discussed in this direct testimony, the Zeeland Unit 1 outage began on
18 December 27, 2022, upon the economic changeout of the spare GSU (leased) transformer
19 from Zeeland Unit 1 to Zeeland Unit 5. The leased GSU transformer was installed on
20 Zeeland Unit 1 in May 2022, subsequent to the failure of the originally-installed GSU
21 transformer on Zeeland Unit 1. The outage lasted for a total of 100 days, 96 days in 2023,
22 and the unit was returned to service on April 7, 2023, upon return of the repaired GSU
23 transformer.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Why was the original GSU transformer for Zeeland Unit 1 removed?**

2 A. The original equipment manufacturer recommended that the original transformer not be
3 re-energized due to elevated and rising acetylene gas concentrations measured in the
4 transformer. High concentrations of acetylene in a transformer are an indication of defects
5 that may induce transformer failure. As a result, the original transformer was removed
6 from service after efforts to identify the cause of elevated acetylene indicated evidence of
7 possible low voltage winding damage.

8 **Q. Does the Company routinely monitor the condition of its GSU transformers?**

9 A. Yes. Specifically, at Zeeland, the Company monitors all GSU transformers with
10 continuous gas analyzers. In addition, oil testing is performed on an annual basis and
11 routine transformer maintenance is regularly performed to help prevent unplanned failures.
12 The Company reasonably and prudently monitored and maintained its transformer and did
13 not cause the transformer to fail nor cause the outage extension. The Company's
14 monitoring efforts allowed it to identify imminent failure of the GSU transformer for
15 Zeeland Unit 5 and take actions to swap the leased GSU transformer installed on Zeeland
16 Unit 1 and install it on Zeeland Unit 5 in order to minimize customer power costs.

17 **Q. Please discuss the condition of Zeeland Unit 5?**

18 A. On August 24, 2022, an alarm for the Unit 5 GSU Transformer on rising levels of Methane
19 was noted by a plant operator. An investigation of the dissolved gas analysis trends
20 revealed that there was an exponential increase in dissolved gases starting around
21 August 10, 2022. The rate of rise continued to increase until the unit went into a planned
22 outage on September 17, 2022. During that period Hydrogen increased from 36 to
23 135 ppm, Methane 81 to 218 ppm, Ethane 43 to 90 ppm, and Ethylene 36 to 157 ppm. The

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 gassing ratios indicated a thermal fault 300 to 700 C and possible carbonization of paper,
2 per IEEE C57.104-2019 interpretation. Due to the alarming rate of rise, the Company
3 performed an unplanned internal inspection of the transformer during the fall 2022 Phase 2
4 outage. The internal inspection and testing revealed:

- 5 • The Low Voltage (“LV”) bushings had effectively failed in service;
- 6 • The transformer core ground connection was missing since commissioning in
7 2001;
- 8 • The LV connections internal to the transformer had indications of severe
9 heating; and
- 10 • The IsoPhase bus shielding duct was in contact with the LV bushing housings
11 on all three phases potentially creating a local circulating current and heat.

12 As result of the findings, the following corrective actions were taken:

- 13 • The transformer was drained;
- 14 • The LV bushings were replaced with surplus bushings. The “new” bushings
15 were not a “like-for like” replacement and several modifications were made to
16 the bus bar connections to adapt them to the existing configuration;
- 17 • The core ground was terminated;
- 18 • IsoPhase bus was isolated from the LV bushing housings with an air gap; and
- 19 • The transformer was then filled with oil.
- 20 • Electrical tests on the transformer were repeated to ensure equipment
21 functionality. The tests indicated that the LV winding insulation had moderately
22 aged, but was acceptable to put the transformer back in service.
- 23 • The transformer was returned to service on October 11, 2022.

24 **Q. What were the results of the corrective actions?**

25 A. The corrective actions had little effect on the rate of gassing after the transformer was
26 returned to service. The unit was removed from service on December 17, 2022 and shipped

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 to Hitachi (Stoney Creek) for overhaul and a temporary mobile GSU was installed in place,
2 to keep Phase 2 available for customers.

3 **Q. Why did the Karn Unit 3 outage exceed 90 days?**

4 A. As previously discussed in this direct testimony, the outage was unplanned and was a result
5 of failure of one of the j-strap connectors which led to a failure to provide proper excitation
6 to the generator. The j-strap connectors are used to provide flexibility as the exciter heats
7 up under load.

8 **Q. When was the exciter last inspected for condition?**

9 A. The exciter was last electrically tested during the 2022 outage with no indication of pending
10 failure. The j-straps are not able to be visually inspected without removal of the rotor's
11 end caps, an activity that can only be performed during a tear down in a vendor's shop.

12 **Q. What action did the Company take to resolve the exciter failure?**

13 A. As a result of the failure, the exciter was disassembled and shipped to a vendor facility for
14 inspection and repair of the rotor windings. The Company has reasonably and prudently
15 inspected the exciter during the previous outage and did not cause the exciter to fail. The
16 Company's actions did not extend the outage in any manner.

17 **Q. Why did the Campbell Unit 2 outage exceed 90 days?**

18 A. As previously discussed in this direct testimony, the Campbell Unit 2 outage began on
19 August 4, 2023 because of a tube leak in the hydraulic coupling circuit oil cooler which
20 resulted in water intrusion into the oil system, thereby forcing the unit to be removed from
21 service.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. What work was performed to address the tube leak and what was the root cause of**
2 **the failure?**

3 A. The tube leak was repaired by plugging the tube and water was removed from the oil system
4 by vacuum dehydrating the oil. The mode of failure for the tube leak was not determined
5 as the tube bundle was not pulled due to short plant life remaining and the fact that no spare
6 tube bundle was available. During post-maintenance testing on August 10, 2023, the
7 SUBFP experienced a thrust event which resulted in damage to the SUBFP internal flow
8 element, thrust bearing, and drive coupling.

9 **Q. What was the root cause of the SUBFP failure?**

10 A. During testing, the SUBFP was unable to generate sufficient pressure and mass flow rate
11 to allow for unit escalation. This resulted in damage to the internal flow element, thrust
12 bearing, and drive coupling. This damage was a result of operational contact between the
13 internal flow element and the pump housing that occurred during the thrust event. The
14 cause of the failure was the thrust event, and the cause of that event is still under
15 investigation.

16 **Q. What work was performed to restore the SUBFP?**

17 A. Following the thrust event, the SUBFP was disassembled and rebuilt. An exact
18 replacement for the drive coupling was not readily available, so the SUBFP was rebuilt
19 with a replacement drive coupling. An identical replacement coupling had a 33-week lead
20 time, and the Company made a decision to get the unit back on-line with a replacement
21 drive coupling. On September 29, 2023, subsequent to the SUBFP rebuild, post
22 maintenance testing was performed which resulted in unacceptably high vibration levels;

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 the SUBFP experienced high radial vibrations during start up on both the inboard and
2 outboard bearings. As such, the SUBFP was deemed unsafe to operate.

3 **Q. What work was performed to resolve the high vibration levels for the SUBFP?**

4 A. The SUBFP was again disassembled and inspected. While still under investigation, the
5 root cause of the high vibration was assessed to be related to replacement of the drive
6 coupling which is approximately 67 pounds heavier than the original. Additional repair
7 efforts included performance of high-speed balance with no success, inspection of the
8 structural frame and housing of the SUBFP for damage that could cause a shift in the
9 natural operating frequency of the SUBFP with no findings, and installation of dynamic
10 vibration absorbers on both the inboard and outboard bearings to shift the structural natural
11 frequency away from the pump operating frequency. While this last effort resulted in an
12 improvement in radial vibration, the improvement did not bring the vibration within
13 acceptable levels, and vibration anomalies were transmitted to the pump motor placing that
14 component at risk of failure.

15 **Q. What additional work is the Company performing to resolve the high vibration levels
16 for the SUBFP?**

17 A. The Company has been performing detailed modeling of the pump/motor/gearbox
18 assembly in order to select and/or design new coupling options. Detailed analysis by
19 industry experts (HydroAire) point to the source of the vibrations related to the change in
20 rotational inertia caused by the change in coupling mass. Unfortunately, none of the
21 Company's efforts had yielded positive results through year-end 2023 and the unit was out
22 of service for the remainder of the year, a total of 149 days.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 The Company rigorously investigated, evaluated, and implemented alternatives to
2 restore the SUBFP to service, and continues to do so. The unavailability of an identical
3 drive coupling (lead time of 33 weeks) led the Company to pursue reasonable alternatives
4 to restore Campbell Unit 2 to service. The Company did not cause the failure of the
5 SUBFP, nor did its actions extend the outage, rather it managed the SUBFP restoration
6 activities in a reasonable, prudent, and responsible manner throughout the 2023 outage
7 duration.

8 **Q. Have you reviewed the peaker and hydro unit outages?**

9 A. Yes. I reviewed the events for each peaker and hydro unit shown on the Event Summary
10 Report, Exhibit A-10 (NJH-1). As previously discussed, Zeeland Unit 1 was the only
11 peaker outage that lasted longer than 28 days in 2023.

River hydro outages greater than 28 days are summarized in the table below:

Line No.	Hydro Unit	Actual Days in 2023	Event Number(s)
1	CROTON 1	271	1
2	CROTON 2	271	1
3	CROTON 4	35	6
4	FIVE CHANNELS 1	46	6
5	FIVE CHANNELS 2	112	3
6	HARDY 2	107	3, 5
7	HODENPYL 1	151	4
8	MIO 2	59	2
9	MIO 2	122	4, 5
10	ROGERS 3	210	1
11	ROGERS 4	210	1
12	WEBBER 1	53	1, 2
13	WEBBER 2	110	3, 4

12 My review of these events and the additional information provided on Exhibit A-12
13 (NJH-3) leads me to conclude that those outages were conducted in a prudent manner.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

Outages with a Duration of Fewer Than 28 Days

1
2 **Q. How many periodic outages less than 28 days but greater than one day in length**
3 **occurred on the fossil and Ludington Units in 2023?**

4 A. As shown on Exhibit A-10 (NJH-1), 34 short periodic (planned) outages occurred on the
5 fossil and Ludington Units in 2023.

6 **Q. What was the purpose of these periodic outages?**

7 A. In general, the purpose of these outages was to perform preventative maintenance activities
8 on equipment that has been assessed as being non-functional or having gone more than one
9 to two years without preventative or corrective maintenance.

10 **Availability**

11 **Q. Please discuss the Company's 2023 generation unit availability.**

12 A. The Company's 2023 generation unit availability data is shown on Exhibit A-14 (NJH-5).
13 The Company's Total Fossil MWh availability slightly decreased from 74.76% in 2022
14 (see Case No. U-21049, Exhibit A-13 (NJH-5), line 11, column (c)) to 74.58% in 2023 (see
15 Exhibit A-14 (NJH-5), line 12, column (c)), due to decreases in MWh availability at
16 Campbell Units 2 and 3, Karn Unit 2, and the Zeeland combined cycle units. The lower
17 MWh availability at the aforementioned units was offset by the increased MWh availability
18 at Campbell Unit 1 and the addition of the Covert units to the generation resource mix.
19 The MWh availability at Campbell Unit 2 was lower due to an extended outage as
20 discussed earlier in this direct testimony, the MWh availability at Campbell Unit 3 was
21 lower due to several forced outages due to boiler and superheat tube leaks, the MWh
22 availability at Karn Unit 2 was lower due to a forced outage to repair boiler leaks and a
23 maintenance outage to perform pre-retirement cessation activities, and the MWh

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 availability for the Zeeland combined cycle units was lower due to the removal of the GSU
2 transformer for Zeeland Unit 5 and its replacement with the leased GSU transformer from
3 Zeeland Unit 1. Despite the slight decrease in MWh availability for these generating units,
4 the Company provided customer benefit in 2023. The Company quantifies this customer
5 benefit through Net Energy Value (“NEV”). At a high level, the NEV of a generating unit
6 is the difference between the market value of the energy produced and the cost of producing
7 and supplying that energy. The Company’s estimated 2023 NEV was \$225.7 million² as
8 compared to the 2022 amount of \$700.7 million, including the Company’s owned wind
9 assets, an amount which is directly attributable to MWh availability.

10 The Company’s 2023 base load fossil MWh availability decreased from 71.20% in
11 2022 (see MPSC Case No. U-21049, Exhibit A-13 (NJH-5), line 12, column (c)) to 63.99%
12 in 2023 (see Exhibit A-14 (NJH-5), line 13, column (c)), due to decreases in MWh
13 availability at Campbell Units 2 and 3, and Karn Unit 2. The primary cause of the drop in
14 the Company’s 2023 base load fossil MWh availability was the extended outage at
15 Campbell Unit 2, as previously discussed in this direct testimony, dropping the Campbell
16 Unit 2 MWh availability from 63.80% in 2022 to 38.70% in 2023.

17 **Comparison to GADS Data**

18 **Q. What is GADS?**

19 A. GADS is the Generator Availability Data System. NERC’s GADS maintains operating
20 histories for more than 5,000 generating units in North America. GADS is recognized as
21 a valuable source of reliability information for total unit and major equipment groups.
22 GADS contains information about the performance of electric generating equipment and

² The NEV calculation is based upon data pulled from PCI P&L actuals on January 16, 2024. The reduction in NEV from 2022 to 2023 was due to lower market prices in 2023 versus market prices in 2022.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 provides assistance to those researching information on power plant outages and supports
2 equipment availability analyses. GADS is a mandatory industry program for conventional
3 generating units 20 MW and larger.

4 **Q. Did you compare the availability of the Company's base load fossil units to GADS**
5 **data?**

6 A. Yes. I compared the availability of the Company's base load fossil units to both the 2022
7 and 2018 through 2022 GADS data for comparable sized and fueled units. The results are
8 shown on my Exhibit A-15 (NJH-6). The availability of Campbell Unit 3 was higher than
9 the five-year GADS data and the availability of Karn Unit 2 was higher than the one-year
10 GADs data. The availability of Campbell Unit 2, Campbell Unit 3, Karn Unit 1, and Karn
11 Unit 2 were below both the one-year and five-year comparisons.

12 **Q. Please explain the outages that contributed to lower-than-average availability on a**
13 **MWh basis.**

14 A. Campbell Unit 2 experienced a total of eleven outages during 2023: three maintenance,
15 and eight unplanned. The maintenance outages were taken for boiler tube leak repair,
16 reheater tube leak repair, ash pit trough repair, and turbine overspeed testing. The eight
17 unplanned outages resulted from a forced draft fan trip, a loss of auxiliary steam/steam
18 seals, a circuit oil cooler leak, and SUBFP failures.

19 Campbell Unit 3 experienced a total of seven outages during 2023: one planned,
20 two maintenance, and four unplanned. The planned outage was for replacement of a layer
21 of catalyst in the SCR vessel and repair of a suspected boiler waterwall leak. The
22 maintenance outages were for performance of the turbine safety required overspeed trip
23 test and resolution of #2 turbine bearing vibration issues. The four unplanned outages

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 resulted from a drum level swing resulting in hot restart, required boiler leak repairs,
2 superheat tube leak repairs, and drum level swings after south side mills tripped due to a
3 breaker issue.

4 Karn Unit 1 experienced five outages during 2023: all unplanned outages. The five
5 unplanned outages were taken for coal leaks due to excessive pyrites, south upper intercept
6 valve stuck open, valve failure on the boiler circulating water pump, a faulty feedwater
7 control valve, and poor fuel quality/SO₂ emission limited.

8 Karn Unit 2 experienced two outages during 2023: one maintenance outage and
9 one unplanned outage. The maintenance outage was taken to perform pre-retirement
10 cessation activities. The unplanned outage was for the repair of a boiler leak.

11 **Q. Did you review all of the outages shown on Exhibit A-10 (NJH-1)?**

12 A. Yes. I reviewed all the base load fossil and pumped storage outages that lasted longer than
13 24 hours.

14 **Q. In your opinion, did Consumers Energy act in a reasonable and prudent manner in
15 connection with the outages you reviewed on Exhibit A-10 (NJH-1)?**

16 A. Yes.

17 **NO_x Allowance Expenses**

18 **Q. Did Consumers Energy forecast NO_x expenses in the 2023 PSCR Plan case?**

19 A. No. Consumers Energy did not forecast NO_x expenses in the 2023 PSCR Plan case because
20 Selective Catalytic Reductions (“SCRs”) were installed and have significantly reduced
21 NO_x emissions and offset the need to purchase allowances. The SCRs were installed to
22 comply with the Clean Air Interstate Rule (“CAIR”), which was replaced by the
23 Cross-State Air Pollution Rule (“CSAPR”). CSAPR is a cap and trade rule much like

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 CAIR. CSAPR governs the emission of SO₂ and NO_x from fossil-fueled electric generating
2 units through the use of an allowance based “cap and trade” program. Under CSAPR, NO_x
3 is regulated on both an annual basis and during the ozone season (May through September).
4 Each allowance (annual or seasonal) permits the emission of one ton of NO_x, with the
5 emissions cap and number of allocated allowances decreasing over time. SO₂ is regulated
6 on an annual basis only, with the emissions cap decreasing over time. Phase I of CSAPR
7 took effect on January 1, 2015 and Phase II became effective on January 1, 2017. In 2023,
8 no allowance purchases were required for either the annual or seasonal requirements and
9 there were no expenses associated with the allowances allocated by the Michigan
10 Department of Environment, Great Lakes, and Energy.

11 **Q. Did Consumers Energy receive revenue credits in 2023 related to the sale of NO_x**
12 **allowances?**

13 A. No. The Company did not sell NO_x emission allowances in 2023. As such, Company
14 witness Leanna E. Feazel’s Exhibit A-5 (LEF-1) Revised does not reflect any expense or
15 revenue credits for NO_x emission allowances.

16 **SO₂ Allowance Expenses**

17 **Q. Did Consumers Energy incur expenses or receive revenue credits in 2023 related to**
18 **the SO₂ Allowance Program?**

19 A. Yes. Although the Company did not sell SO₂ emission allowances out of its inventory in
20 2023, it did receive revenue for a portion (\$60) of the Company-allocated SO₂ emission
21 allowances during the annual US Environmental Protection Agency auction.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Are the actual expenses and credits for SO₂ contained in Consumers Energy's 2023**
2 **Reconciliation?**

3 A. Yes. Company witness Feazel includes the actual SO₂ expenses and credits in Exhibit A-5
4 (LEF-1) Revised, line 20.

5 **Urea Expenses**

6 **Q. What was Consumers Energy's estimate of urea expenses for the 2023 PSCR Plan**
7 **case?**

8 A. Consumers Energy projected the cost of urea for 2023 to be \$4.145 million as reflected on
9 Exhibit A-17 (NJH-8), line 8, column (b), based on projected generation and SCR
10 operations at the Campbell Complex for Campbell Units 2 and 3.

11 **Q. What were the actual urea expenses?**

12 A. As reflected on Exhibit A-17 (NJH-8), line 8, column (c), actual urea expense for 2023 was
13 \$2.070 million, \$2.075 million lower than projected.

14 **Q. Why were actual urea expenses lower than projected?**

15 A. Urea expenses were lower than forecast as a result of lower than projected urea prices as
16 well as lower than projected generation. Urea prices are commodity based and are tied to
17 natural gas prices which experienced significant increases during 2022 but dropped back
18 down in 2023. The forecasted urea price was \$832/ton whereas the actual urea cost came
19 in at only \$563/ton. The extended outage at Campbell Unit 2 as well as the lower
20 availability at Campbell Unit 3 contributed to the remaining cost decrease.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Aqueous Ammonia**

2 **Q. What was Consumers Energy's estimate of aqueous ammonia for the 2023 PSCR Plan**
3 **case?**

4 A. Consumers Energy projected the cost of aqueous ammonia for 2023 to be \$0.799 million
5 as reflected on Exhibit A-17 (NJH-8), line 8, column (d), based on projected generation
6 and SCR operations at Karn Units 1 and 2 and Zeeland Combined Cycle.

7 **Q. What was the actual aqueous ammonia expense?**

8 A. As reflected on Exhibit A-17 (NJH-8), line 8, column (e), actual aqueous ammonia expense
9 for 2023 was \$1.449 million, \$0.650 million higher than projected.

10 **Q. Why were actual aqueous ammonia expenses higher than projected?**

11 A. Total actual aqueous ammonia expense for 2023 was higher due to the addition of Covert
12 to the Company's fleet on June 1, 2023. Aqueous ammonia expenses for Karn Units 1
13 and 2 were slightly higher than forecast despite the fact that total generation was below
14 that amount projected in the 2023 PSCR Plan, Case No. U-21257. The actual unit cost of
15 aqueous ammonia for Karn Units 1 and 2 was approximately 5% higher than the average
16 unit cost projected in the 2023 PSCR Plan, Case No. U-21257. In addition, with the
17 shutdown of Karn Units 1 and 2 on May 31, 2023, not all of the aqueous ammonia delivered
18 to the Karn site was utilized at the site; the unused quantity was utilized at Covert.

19 The aqueous ammonia expense for Zeeland was lower than projected due to the
20 fact that the actual unit cost was almost 26% below the projected unit cost. In addition, the
21 capacity factor for the Zeeland combined cycle units was lower than projected.

22 The aqueous ammonia expense for Covert was higher than projected as the
23 projected aqueous ammonia expense was not reflected in the Company's 2023 PSCR Plan,

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 Case No. U-21257. The addition of Covert to the Company's generation fleet was
2 approved in the MPSC's June 23, 2022 Order in the Company's 2021 IRP, Case
3 No. U-21090.

4 **Lime**

5 **Q. What was Consumers Energy's estimate of lime expense in the 2023 PSCR Plan case?**

6 A. Consumers Energy projected the cost of lime for 2023 to be \$8.205 million as reflected on
7 Exhibit A-17 (NJH-8), line 8, column (f), based on projected generation and Spray Dry
8 Absorber ("SDA") and Dry Sorbent Injection ("DSI") operations at the Karn and Campbell
9 plants.

10 **Q. What were the total actual lime expenses?**

11 A. As reflected on Exhibit A-17 (NJH-8), line 8, column (g), actual lime expense for 2023
12 was \$7.761 million, \$0.444 million lower than projected. The Company consumes
13 hydrated lime at Campbell Units 1 and 2 and consumes pebble lime at Campbell Unit 3
14 and Karn Units 1 and 2. The hydrated lime expense at Campbell Units 1 and 2 was 6.7%
15 or \$0.295 million above forecast and the pebble lime expense at Campbell Unit 3 and Karn
16 Units 1 and 2 was 19.6% or \$0.740 million below forecast.

17 **Q. Why were the actual hydrated lime expenses higher than projected?**

18 A. 2023 hydrated lime expenses were higher than projected for Campbell Units 1 and 2,
19 primarily due to the quality of the coal delivered and consumed at Campbell Units 1 and 2,
20 despite the lower than projected generation. Prior to 2022, most of the higher sulfur trains
21 were being taken at Karn because it was easier to consume the higher sulfur coal at Karn
22 than at Campbell Units 1 and 2 due to the challenges with removing SO₂ with their DSI
23 system utilizing hydrated lime. The planned unit outage at Campbell Unit 3 in the spring

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 of 2023 also increased the amount of higher sulfur coal that had to be consumed by
2 Campbell Units 1 and 2 during 2022.

3 **Q. Please discuss the actual pebble lime expense.**

4 A. 2023 pebble lime expense was \$0.166 million lower for Karn Units 1 and 2 and
5 \$0.574 million lower for Campbell Unit 3. The lower than projected capacity factors for
6 Karn Units 1 and 2 and Campbell 3 was the primary reason for reduced pebble lime expense
7 during 2023. In addition to the lower than projected capacity factor at Campbell Unit 3,
8 the unit operated almost exclusively in “Recycle Mode” vs “Lime Only Mode” during
9 2023, and Lime Only Mode uses significantly more pebble lime than recycle mode.

10 **Activated Carbon**

11 **Q. What was Consumers Energy’s estimate of activated carbon for the 2023 PSCR Plan**
12 **case?**

13 A. Consumers Energy projected the cost of activated carbon for 2023 to be \$2.271 million as
14 reflected on Exhibit A-17 (NJH-8), line 8, column (h), based on projected generation and
15 Activated Carbon Injection operations at Karn and Campbell.

16 **Q. What were the actual activated carbon expenses?**

17 A. As reflected on Exhibit A-17 (NJH-8), line 8, column (i), actual activated carbon expenses
18 for 2023 were \$1.684 million, \$0.587 million lower than projected.

19 **Q. Why were activated carbon expenses lower than projected?**

20 A. The 2023 activated carbon expense was \$0.480 million lower than projected at the
21 Campbell site due to lower-than-projected generation, the consumption of higher sulfur
22 coal which generally contains less mercury, and better management of the operating limits
23 for mercury.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 The 2023 activated carbon expense was \$0.106 million lower than projected at the
2 Karn site due to the fact that no new deliveries of activated carbon were made to Karn in
3 2023. The last delivery was made in December 2022 and was sufficient for remaining
4 plant operation in 2023.

5 **2023 Base Load Power Plant Generating Cost Efficiency**

6 **Q. Why was Exhibit A-10 (NJH-7) included in this filing?**

7 A. This information was provided in response to the MPSC's Report on Status of Power
8 Quality in Michigan in Case No. U-15945.

9 **Wind Asset Performance Data**

10 **Q. Please describe Exhibit A-18 (NJH-9).**

11 A. Exhibit A-18 (NJH-9) presents performance details regarding the Company's owned wind
12 assets. The Commission's September 28, 2023 Order in Case No. U-20803 required this
13 information to be included in future PSCR reconciliation proceedings. Specifically,
14 Exhibit A-18 (NJH-9) includes the 2023 gross actual generation, the 2023 actual and target
15 capacity factor, the 2023 actual and target time-based availability, and the 2023 lost
16 potential MWh due to planned maintenance, repair maintenance, and regulatory
17 curtailment.

18 **Q. Please describe Gross Actual Energy reflected in Exhibit A-18 (NJH-9), column (b).**

19 A. Gross Actual Energy is the gross volume of energy produced by a wind farm during a
20 specific period. The Gross Actual Energy does not represent any adjustment for station
21 power (amount of energy consumed by the wind farm during operations).

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Please describe capacity factor reflected in Exhibit A-18 (NJH-9), column (c).**

2 A. Capacity factor is the measure of how often a generation unit operates during a specific
3 period of time. Capacity factor is presented as a percentage and is calculated by dividing
4 the actual unit generation output by the maximum possible generation output. The
5 Company's target capacity factor is presented in Exhibit A-18 (NJH-9), column (d).

6 **Q. Please describe time-based availability reflected in Exhibit A-18 (NJH-9), column (e).**

7 A. Time-based availability is the measure of the hours during which the turbine is available
8 during a specific overall period of time. Time-based availability is presented as a
9 percentage, and 97% is generally considered first quartile performance in the industry. All
10 except one (which only narrowly missed this performance level) of the Company's parks
11 outperformed this high standard. The Company's targeted time-based availability and
12 actual availability is presented in Exhibit A-18 (NJH-9), column (f).

13 **Q. Please describe potential lost energy for planned and repair maintenance reflected in**
14 **Exhibit A-18 (NJH-9), columns (g) and (h).**

15 A. The potential lost energy for planned and repair maintenance is a calculation of how much
16 energy could have been generated during the periods in which the turbines were out of
17 service. The energy loss is only hypothetical because the calculation assumes sufficient
18 fuel (i.e. wind speed) would have been available for the turbines to operate during the time
19 frame in which they were unavailable for planned and repair maintenance, which in reality
20 would not always be true.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Please describe lost energy for regulatory curtailment reflected in Exhibit A-18**
2 **(NJH-9), column (i)?**

3 A. Curtailment reflects the adjustment of the wind turbine blade angles (i.e. parallel to the
4 wind) to slow them down or stop them from turning (also known as “idling”). Wildlife
5 curtailment is implemented when the risk of collision is expected to be high for bird and
6 bat migration through the turbine sweep area, resulting in a reduction in bird and bat
7 collision fatalities. Icing curtailment may also be implemented for local special use permit
8 compliance reasons. The last reason for curtailment is possible implementation for energy
9 market reasons, this typically does not affect the Consumers Energy wind fleet, due to
10 primary dispatch as a “must run” resource.

11 **Q. Did the Company experience any asset failures during 2023?**

12 A. Yes. The Company experienced five pad-mounted transformer failures during 2023, four
13 at Gratiot Farms and one at Crescent wind. Three of the failures were unexpected, one
14 failure had high levels of gassing so the Company took it off-line as a preventative measure,
15 and the last pad-mounted transformer experienced a bushing failure and oil was leaking.
16 This final failure was discovered on rounds before it flashed over internally.

17 **Q. How did the Company manage these failures to minimize lost energy?**

18 A. In each of these cases after the failure occurred, tagging was set in place and site personnel
19 performed an inspection. Upon inspection, the pad-mounted transformer was bypassed,
20 and the rest of the circuit was brought back online minus one tower. Typically the balance
21 of the circuit was returned to service in less than 12 hours except for the turbine that
22 experienced the failure. Employing this methodology significantly reduced the amount of

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 lost energy since it was usually a single turbine that was left out of service until the
2 pad-mounted transformer replacement was accomplished and testing could be arranged.

3 **Q. What other actions has the Company taken to minimize lost energy?**

4 A. The Company established an inventory of spare pad-mounted transformers to ensure repair
5 work could be accomplished in a more timely manner than could be achieved without the
6 spare transformers. One of the factors that led to this decision is the fact that pad-mounted
7 transformer delivery times have increased from 20-30 weeks to a full year.

8 In addition to the establishment of an inventory of spare pad-mounted transformers,
9 the Company is performing quarterly rounds and is performing annual dissolved gas
10 analysis testing. The Company believes that these practices allow for the early
11 identification of a potential transformer failure and leads to more timely and less costly
12 repairs. A summary of the 2023 failures is provided below.

Wind Asset	Pad-mounted transformer	Failiure Date	Returned to service date
Crescent Wind	#55	11/9/2023	1/26/2024
Gratiot Farms	#49	1/4/2023	1/7/2023
Gratiot Farms	#42	1/19/2023	9/13/2023
Gratiot Farms	#4	2/7/2023	6/9/2023
Gratiot Farms	#27	3/18/2023	6/9/2023

13 **Q. What is your assessment of the performance of the Company's wind generation assets**
14 **during 2023?**

15 A. Overall, the Company's wind assets exceeded their targeted time-based availability and, as
16 a result, generated value for customers. Although the actual capacity factors fell short of
17 target capacity factor, the wind generation fleet's exceedance of its time-based availability
18 reflects the fact that the Company maintained its wind generation assets in a condition
19 which would allow for creation of customer value.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Ludington Replacement Power Costs**

2 **Q. Please discuss Exhibit A-19 (NJH-10) Revised.**

3 A. Exhibit A-19 (NJH-10) Revised presents the 2023 Ludington outages which occurred as a
4 result of defective work performed by TAES. The Company has removed replacement
5 power expense associated with these outages from this reconciliation and has recorded
6 these replacement power costs into a regulatory asset account that was established pursuant
7 to the Commission's May 18, 2023 Order in Case No. U-21310. Specifically, this order
8 approved the joint application of Consumers Energy and DTE Electric Company for cost
9 deferral accounting and a regulatory asset for the costs incurred with remediating the
10 defective work performed by TAES. In total, the Company has recorded into the regulatory
11 asset account \$927,907 of replacement power costs incurred in 2023 as a result of defective
12 TAES work. Company witnesses Hahn, Feazel, and Raymond T. Scaife reflect the removal
13 of these replacement power costs in their direct testimony and exhibits.

14 **Q. How did the Company identify Ludington unit outages that occurred as a result of**
15 **defective work performed by Toshiba?**

16 A. The Company documents its unit outages on the Ludington units and reports the outage
17 information to GADS. To identify whether the outage should be evaluated for replacement
18 power costs, the Company reviews the cause of the outage and the work performed. If the
19 outage was caused by or related to required inspections and/or repairs of equipment which
20 was subject to issues with Toshiba workmanship, the outage is attributed to Toshiba. In
21 evaluating the cause of the outage and/or the work performed, the Company also considers
22 whether the scope of normal planned maintenance activities has increased and resulted in
23 extending normal maintenance outages.

NATHAN J. HOFFMAN
U-21258 REVISED DIRECT TESTIMONY

1 **Conclusion**

2 **Q. Please provide a conclusion of your testimony.**

3 A. My testimony described certain outages experienced in 2023 at the Company's
4 fossil-fueled electric generating units and the Ludington Pumped Storage Plant, explained
5 the expense associated with emission allowances for oxides of nitrogen and Sulfur Dioxide
6 and explained the expense associated with the consumption of urea, aqueous ammonia,
7 lime, and activated carbon. All generator outages were performed in a reasonable and
8 prudent manner on the part of Consumers Energy. All expenses associated with emissions
9 allowances and consumption of urea, aqueous ammonia, lime, and activated carbon were
10 incurred in a reasonable and prudent manner. Finally, the Company's time-based
11 availability for its wind generation fleet exceeded its plan.

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

13 A. Yes.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257))
for the 12 months ended December 31, 2023.)
_____)

Case No. U-21258

REBUTTAL TESTIMONY
OF
NATHAN J. HOFFMAN
ON BEHALF OF
CONSUMERS ENERGY COMPANY

January 2025

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Nathan J. Hoffman, and my business address is One Energy Plaza, Jackson,
3 Michigan 49201.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 as Executive Director – Fossil Generation.

7 **Q. Are you the same Nathan J. Hoffman who submitted direct testimony in this case?**

8 A. Yes.

9 **Q. What is the purpose of your rebuttal testimony?**

10 A. The purpose of my rebuttal testimony is to rebut the direct testimony of Attorney General
11 witness Sebastian Coppola and explain why the Michigan Public Service Commission
12 (“MPSC” or the “Commission”) should reject his recommendation to disallow a total of
13 \$4,622,074¹ in replacement power costs for a single outage at J. H. Campbell (“Campbell”)
14 Unit 2, two separate outages at Campbell Unit 3, and a single outage Zeeland Units 3
15 through 5. I will also rebut the direct testimony of MPSC Staff (“Staff”) witness
16 Raushawn D. Bodiford and explain why the Commission should reject his
17 recommendation to disallow a total of \$52,199 in replacement power costs for a single
18 outage at Ludington Unit 3.

19 Company witness Raymond T. Scaife will be rebutting Mr. Coppola’s direct
20 testimony which recommends a \$4,272,892 increase in expense for the Biomass Merchant
21 Plants (“BMPs”).

¹ The Company calculated a total disallowance of \$4,622,164 based upon the specific outages.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Are you sponsoring exhibits with your rebuttal testimony?**

2 A. Yes, I am sponsoring the following exhibit:

3 Exhibit A-33 (NJH-11) Campbell Unit 2 SUBFP Checksheet.

4 **Q. Was this exhibit prepared by you or under your direction and supervision?**

5 A. Yes.

6 **REBUTTAL OF ATTORNEY GENERAL WITNESS COPPOLA**

7 **Q. At page 8, line 4, of his direct testimony, Mr. Coppola states that, “[t]he total potential**
8 **amount of lost power from the 424 outages was 13,676,568 MWh. Exhibit A-10**
9 **(NJH-1) lists the 2023 outages in summary form with the related lost power. Exhibit**
10 **A-12 (NJH-3) provides additional details with causes and corrective actions for 51 of**
11 **the outages where the generating units had lower availability than the established**
12 **industry standards (NERC-GADS).” Do you agree with Mr. Coppola’s summary of**
13 **the Company’s outages?**

14 A. Not entirely. Mr. Coppola states that the Company’s 424 outages resulted in the potential
15 loss of 13,676,568 MWh of power. While I agree that the Company’s generating units had
16 the theoretical capability of generating that amount of power during the 2023 outages, it is
17 not true that they could have or would have generated that amount of power had they been
18 available to generate. The Company schedules planned outages during periods in which
19 the Midcontinent Independent System Operator, Inc. (“MISO”) energy market demands
20 are projected to be lower than at other times during the year. In addition, the Company
21 also considers the impact of its outage schedule on generating unit capacity accreditation
22 in the MISO Planning Resource Auction (“PRA”). As such, the likelihood that the
23 Company’s generating units would have been fully dispatched during the outage periods

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 is low. With respect to Mr. Coppola's reference to the 51 outages on Exhibit A-12 (NJH-3),
2 while the exhibit does include all outages for a generating unit which had a lower
3 availability than the industry standard, it also includes all the generating unit outages which
4 exceeded 28 days in duration.

5 **Q. Are there other considerations which may lead to unit outages?**

6 A. Yes. The settlement agreement in the Company's 2021 Integrated Resource Plan ("IRP"),
7 Case No. U-21090, reflects the retirement of Campbell Units 1 through 3 on May 31, 2025.
8 As a result, the Company has ceased to economically invest in the units due to their short
9 remaining life and has focused investment on the maintenance of safe and regulatory
10 compliant units. This strategy has likely contributed to the reduced equivalent availability
11 for both Campbell Units 2 and 3 during 2023. While the equivalent availability for
12 Campbell Unit 1 was higher than the five-year history for the unit, this was due in part to
13 the fact that the Company did not have any planned outages for this unit in 2023.

14 **Q. How did the 424 outages during 2023 compare to the number of outages experienced**
15 **by the Company during 2022?**

16 A. The total of 424 outages during 2023 compared favorably to the 523 outages experienced
17 in 2022. What Mr. Coppola also fails to acknowledge is that the Company's generating
18 units provided more than \$225 million of customer value in 2023. The Company measures
19 customer value through net energy value ("NEV") and NEV is the difference between the
20 market value of the energy produced and the cost of producing and supplying that energy.
21 Had the Company's generating units not provided that customer value through their
22 performance in 2023, the Company's total Power Supply Cost Recovery ("PSCR")
23 expense would have been \$225 million higher.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Can the Company, as a practical matter, avoid outages at generating facilities?**

2 A. No. All planned outages or planned outage extensions are necessary to perform equipment
3 inspections and both routine and major maintenance work to maintain the safety,
4 environmental compliance, and reliability of plant equipment. Further, some of the
5 required inspections are necessary to maintain compliance with laws or licenses such as
6 boiler internal inspections and Ludington/hydro internal unit inspections. The failure to
7 perform the equipment inspections or the maintenance work could result in the failure of
8 plant equipment, resulting in unplanned and likely extended outages for repair or loss of
9 certifications or licenses. A significant level of planning and control is required to execute
10 a planned outage in a safe and efficient manner. Maintenance and unplanned outages are
11 also unavoidable and are necessary to address emerging equipment conditions which
12 require resolution in a relatively short time frame.

13 **Q. At page 8, line 9, of his direct testimony, Mr. Coppola states that, “[a]fter reviewing**
14 **the outage information in Exhibits A-10, A-12, and responses to discovery requests, I**
15 **have determined that there are nine outage incidents where the Company or its**
16 **contractors failed to exercise proper care and diligence, resulting in higher power**
17 **costs to PSCR customers during 2023.” Do you agree with Mr. Coppola’s assessment**
18 **of the Company’s 2023 outage performance?**

19 A. No. It is my opinion that the Company executed all 424 of its 2023 outages in a safe,
20 efficient, and cost-effective manner. At no time did the Company fail to exercise proper
21 management and diligence. I will address Mr. Coppola’s recommended disallowance for
22 each of the nine outages for which Mr. Coppola alleges were the result of deficiencies in

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 operating procedures, a result of employee errors, or a result of a failure to follow proper
2 procedures.

3 **Campbell Unit 2 Outage Events 108 through 111**

4 **Q. At page 9, line 13, of his direct testimony, Mr. Coppola discusses the information**
5 **contained in root cause analysis reports (“RCAs”) provided in response to discovery**
6 **and states that, “(t)he reports also explain that the root cause of the pump failure is**
7 **attributed to an error during reassembly of the pump following its July 2023**
8 **overhaul.” Do you agree with Mr. Coppola’s conclusion?**

9 A. No. Mr. Coppola completely misinterprets the RCAs that were provided by the Company
10 and presented in Exhibit AG-1. Specifically, on page 7 of Exhibit AG-1, the Company
11 RCA presents the following:

- 12 (4) Why was there an error during reassembly of the pump following
13 overhaul?
14 • No evidence to support this, pump was reinstalled with vendor oversight.
15 No issues noted during disassembly of the pump (aside from the damage
16 found from the thrust event).

17 While the Company’s RCA considered errors in reassembly as a potential cause of the
18 pump failure, the RCA determined that there was no evidence to support this hypothesis.

19 **Q. Did the Company’s RCA consider other potential failure modes?**

20 A. Yes. As reflected in the Company’s RCA and presented on page 5 of Exhibit AG-1, the
21 Company considered the following failure causes of the pump thrusting event:

- 22 (1) Non-compressible gasses trapped in pump?
23 (2) Seal water not adequately lubricating pump seals?
24 (3) Undetermined mechanical issue/failure inside the pump?
25 (4) Error during reassembly of the pump, following the July overhaul?

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Did the Company's RCA perform a thorough analysis of these failure causes?**

2 A. Yes. The Company employed its continuous improvement tools to evaluate the various
3 failure causes listed above. The Company's RCA evaluated all reasonable factors that
4 could have resulted in the thrusting event. In doing so, the Company identifies what had
5 to be true for the factor to have led to the failure cause. Mr. Coppola erroneously
6 interpreted the Company's standard methodology as concluding fault.

7 **Q. What did the Company's RCA conclude after its evaluation of the four potential**
8 **failure causes?**

9 A. After a thorough evaluation of the four potential failure causes, the Company determined
10 there was no evidence to support two of the possible causes of the thrust event, leaving the
11 seal water injection issue and the compressible gas issue as the remaining possibilities.

12 Page 8 of Exhibit AG-1 presents the following:

13 **ROOT CAUSE**

14 Undetermined. Evidence suggests (1) seal water injection was not
15 sufficiently getting through the pump seals and (2) the SUBFP [Start-Up
16 Boiler Feed Pump] had non-compressible gasses (air bubble) trapped in the
17 pump.

18 Both of these could have caused the pump to seize.

19 **Q. At page 9, line 14, of his direct testimony, Mr. Coppola continues to discuss**
20 **information contained in RCAs provided in response to discovery and states that,**
21 **“(a)pparently, the pump was no completely purged of non-compressible gasses**
22 **(vented) or an air bubble was trapped in the pump. According to the root cause**
23 **reports, the Company had no set procedure to ensure complete purging of the pump**
24 **and relied on basic operator knowledge. The operator failed to fully purge the pump**
25 **of trapped gases in the pump.” Do you agree with Mr. Coppola's conclusion?**

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 A. No. The potential causes of the thrusting event were concluded to be seal water not getting
2 to the pump seals and non-compressible gasses trapped in the pump. However, there is no
3 evidence that an error in operation of the pump led to seal water not getting to the pump
4 and/or non-compressible gases being trapped in the pump.

5 Prior to the activity, a pre-job brief was held during which the activities to be
6 performed were discussed. Upon completion of the purging activity, the operator
7 confirmed completion of this activity on the prestart checksheet. Exhibit A-33 (NJH-11)
8 is the checksheet which acknowledges the completion of the purging activity.

9 **Q. Has the Company experienced other instances of problems with startup of the SUBFP**
10 **following proper purging?**

11 A. Yes. As discussed on page 5 of Exhibit AG-1, a significant increase in balance drum
12 leak-off line² temperature was observed despite more than sufficient venting of the pump.
13 Thus, there is evidence that despite proper venting of the pump, pump failure could have
14 still resulted. Again, there is no evidence to suggest that the operator did not properly vent
15 the pump, as he acknowledged completion of purging both verbally and on the prestart
16 checksheet. Further, there is no determination that the thrusting event was caused by
17 non-compressible gasses being trapped in the pump. It simply was not *ruled out* as a
18 possible cause.

² The balance drum is a cylindrical component within the pump designed to counteract the axial thrust generated by the impellers. The leak-off line is a small pipe that allows a controlled amount of fluid to leak from the pump's internal balancing mechanism. The temperature increase in the leak-off line is indicative of increased temperatures within the pump internals.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Has the Company experienced additional instances of inadequate lubrication of the**
2 **seals with the seal water?**

3 A. Yes. During the period from August 2023 through March 2024, the Company made
4 multiple observations of erratic seal water pressure. The pressure control valve, pressure
5 control valve controls, associated piping, and seal water filters were all inspected to
6 determine a cause of the erratic pressure control with no causes identified. Through
7 guidance provided by the pump repair vendor, the seal water pressure setpoint was
8 increased during the initial startup of the pump and subsequently reduced upon SUBFP
9 operation with seal water flow established. Subsequent startups of the SUBFP using this
10 procedure have gone without issue. It remains unclear what changed in the system that
11 required such a significant increase in seal water pressure, as the SUBFP has operated for
12 many years in the prior configuration.

13 **Q. At page 10, line 5, of his direct testimony, Mr. Coppola discusses his conclusion that**
14 **the root cause of the power outages was an improper purging of the SUBFP,³ which**
15 **allegedly led to aborting the Campbell Unit 2 startup and the unit being out for the**
16 **remainder of 2023. Mr. Coppola subsequently recommends a disallowance of**
17 **\$2,355,042 in replacement power costs. Do you agree with Mr. Coppola's conclusion**
18 **and recommendation?**

19 A. No. Again, the Company conducted thorough evaluations of the thrusting event and settled
20 on two possible causes. The evidence suggested that there were two failure causes that
21 could have led to the event: (1) seal water injection was not sufficiently getting through the

³ Mr. Coppola references boiler feed pump but the actual piece of equipment that failed is the SUBFP. The SUBFP is a motor-driven pump that only operates during startup and shutdown operations when sufficient steam is unavailable to operate the main boiler feed pump.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 pump seals; and (2) the SUBFP had non-compressible gasses (air bubble) trapped in the
2 pump. While the Company's thorough evaluation of each of these potential causes of the
3 thrusting event did consider operator error, it did not identify any errors performed by the
4 Company which may have led to the outage.

5 **Q. What is your opinion regarding Mr. Coppola's recommended disallowance of**
6 **\$2,355,042 for replacement power costs for the Campbell Unit 2 outage events**
7 **108-111?**

8 A. It is my recommendation that the MPSC reject Mr. Coppola's recommendation for a
9 disallowance of \$2,355,042 for replacement power costs associated with these outages. At
10 no time were the Company's actions either unreasonable or imprudent and there is no
11 evidence that the thrusting event was a result of Company error.

12 **Campbell Unit 3 Outage Event 111**

13 **Q. Please discuss the origin of the superheat platen tubing that failed and caused**
14 **Event 111?**

15 A. The tubing was fabricated by an approved supplier, per the Company's specifications, in
16 the early 2000s and installed by a contractor in approximately 2006/2007 to support the
17 Company's Powder River Basin ("PRB") western coal conversion. Prior to shipment, the
18 tubing would have been inspected by the supplier's authorized inspector and then shipped
19 to the Campbell site for installation by the Company's contractor. Subsequent to its
20 installation, the superheat platen tubing performed reliably until its failure in 2023. There
21 were no other failures in the superheat platen tubing associated with the incorrect material.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Beginning at page 12, line 9, of his direct testimony, Mr. Coppola states “the**
2 **Company’s claim that the visual inspection of the pipe did not identify incorrect**
3 **tubing had been installed is not relevant. Given the critical use of this tubing within a**
4 **superheated boiler, the Company or its contractor should have taken appropriate**
5 **precautions to ensure the correct material was used.” Do you agree with**
6 **Mr. Coppola’s conclusions?**

7 A. No. First of all, the visual inspection of tubing is relevant because it helps the Company
8 identify tubing that requires replacement. Indications of swelling would have signaled a
9 need to replace the tubing due to pending failure and that work would have been planned
10 for the next available outage.

11 With respect to taking measures to ensure the correct material was used, the
12 Company provided tubing specification, and the tubing was inspected prior to shipment.
13 Short of performing a material test on every superheat platen tube element, the Company
14 employed reasonable and prudent practices to ensure that it had received the proper tubing.
15 17 years of in-service operation is also reasonable evidence that it had received the proper
16 material.

17 **Q. What is the normal service life of superheat platen tubing?**

18 A. Superheat platen tubing can be expected to last up to 25 years or more although it is not
19 uncommon to experience tube failures from time to time. The actual life expectancy of the
20 superheat platen tubing depends on the material, service conditions,⁴ and design margins.
21 Operation of the unit is monitored and maintained to prevent overheating of not just the
22 superheater platen tubing, but all the boiler steam and water circuits. Superheat tube metal

⁴ Platen superheat tubing just below the roof line close to the outlet header experiences 1,100 degrees F and 2900 psig.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 temperatures are measured, monitored, and will alarm in the Company's distributed control
2 system. When superheat tubing metal temperatures reach an alarm point, firing is backed
3 off and the unit derated to remain out of alarm.

4 **Q. Beginning at page 12, line 9, of his direct testimony, Mr. Coppola states "the Company**
5 **has admitted that an incorrect section of tubing was installed in the boiler which did**
6 **not conform to the required grade of pipe." How do you respond?**

7 A. Following the outage, the superheat platen tubing which failed after 17 years of in-service
8 operation was tested for material properties and the testing revealed that the material did
9 not conform to the requested material specifications. The incorrect tubing material was
10 determined to be the root cause of the tubing failure, thereby resulting in the outage.
11 However, it is also not uncommon for tubing to fail due to continued operation under
12 temperature and pressure.

13 **Q. What is your opinion of the superheat platen tubing that failed?**

14 A. The superheat platen tubing was nearing end of life, and if the plant had not been scheduled
15 for closure on May 31 of this year, we likely would have installed replacement tubing.
16 However, this did not make financial sense.

17 **Q. Beginning at page 12, line 19, of his direct testimony, Mr. Coppola states "[t]he**
18 **incremental power costs for this outage that the Company seeks to recover in this**
19 **reconciliation case are the result of a Company error. Customers should not pay for**
20 **the incremental cost of replacement power resulting from errors by Company**
21 **employees or its contractors. Therefore, I recommend that the Commission disallow**
22 **\$565,977 of power costs for this outage from the total power costs included in this**
23 **reconciliation case." Do you agree with Mr. Coppola's recommendation?**

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 A. No. It is my recommendation that the MPSC reject Mr. Coppola’s recommendation for a
2 disallowance of \$565,977 for replacement power costs associated with this outage. At no
3 time were the Company’s actions either unreasonable or imprudent. The Company
4 employed reasonable and prudent measures over 20 years ago to specify and procure the
5 proper material for the conversion to western coal to save customers a significant amount
6 of expense (versus the continued use of more expensive eastern coal). Further, the
7 Company performed visual inspections, and its control system monitored the condition of
8 the superheat tubes in order to take corrective actions to protect the equipment.

9 If these replacement power costs were disallowed under the circumstances, it would
10 leave the Company in an untenable position moving forward. To avoid future
11 disallowances in similar circumstances, the Company would need to perform material
12 testing on all tubing installed in its fleet to avoid potential tubing failure. The costs of this
13 testing, however, would be extraordinary – particularly in comparison to the benefit of such
14 testing – leaving the Company with no real options to mitigate the risk of failure due to a
15 supplier’s error.

16 **Campbell Unit 3 Outage Event 231**

17 **Q. Please describe the sequence of events associated with Campbell Unit 3 outage event**
18 **231.**

19 A. Campbell Unit 3 tripped due to a fault in the motor control center (“MCC”)⁵ 33D1 2B
20 breaker cubicle. Work to restore the 2B breaker cubicle had been completed. The MCC

⁵ A MCC is an assembly that controls several or all-electric motors centrally. There are multiple enclosed sections and a common power bus. Each section has a combination starter, which consists of a motor starter, fuses or circuit breakers, and a power disconnect.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 33D1 had been meggered⁶ following the cleaning of the breaker cubicle with the test results
2 being satisfactory and, as a result, the MCC was deemed suitable for use. Campbell Unit 3
3 was in the process of recovering from the initial trip event and going back into a restart. In
4 parallel, electricians and operations were performing post maintenance testing and
5 restoring the MCC 33D1 back to service when an arc flash event occurred in cubicles 2A
6 and 2B. At that point, individuals went to investigate what had occurred when a third arc
7 flash event occurred, injuring individuals. At that point, the startup was aborted out of an
8 abundance of caution for the safety of the employees and the safe operation of MCC 33D1.

9 **Q. What did the Company's investigation determine?**

10 A. Following the abortion of the startup, further investigation identified a concern for the
11 potential of a missing protective grommet through which the conductors pass through from
12 the line side into the breaker cubicle. This design, with protective grommets, was unique
13 to MCC 33D1 and other MCCs in the plant, and missing or dislodged grommets were the
14 cause of two prior faults elsewhere in the plant. By contrast, causal analysis determined
15 that the fault on MCC 33D1 breaker 2B was due to degradation of insulation, likely the
16 result of breaker cycling over time and not a missing grommet.

17 **Q. What immediate actions did the Company take at that point?**

18 A. Out of an abundance of caution, seven out of the thirteen Furnas Brand MCC's were
19 inspected while Campbell Unit 3 remained offline. The additional inspection resulted in
20 only a 2% defect rate for missing/dislodged grommets. This led to the conclusion that the
21 fault associated with the 2B cubicle was related to insulation degradation from cycling and
22 vibration of the breaker and not due to a missing or dislodged grommet.

⁶ Meggering consists of measuring the resistance of insulation using high voltage. Meggering is used to identify potential issues with insulation before it causes equipment failures or costly downtime.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Does the Company perform post-maintenance testing to validate the integrity of**
2 **insulation?**

3 A. Yes. As previously discussed, the Company meggered the MCC following the
4 maintenance to ensure the integrity of the insulation and the results were satisfactory prior
5 to the restoration of the MCC. In this instance, the Company performed additional
6 meggering as part of the troubleshooting as the cause of the breaker failure was unclear.
7 The additional meggering was performed from the Powdex backwash pump breaker to the
8 Powdex backwash pump and the backwash pump motor. Meggering is a test method used
9 to measure the insulation resistance in an electrical component, where a voltage is applied
10 to a circuit and the current that flows through the insulation is measured. In this case the
11 X,Y, and Z phase of the MCC bus was tested as well as the feed conductor to the pump
12 and the motor of the pump. The results of the megger test did not indicate any additional
13 concerns with the operation of the MCC.

14 **Q. Beginning at page 13, line 18, of his direct testimony, Mr. Coppola states “[t]he root**
15 **cause analysis report provided by the Company also points out that the standardized**
16 **operational process was not followed, the process document was not clear and**
17 **sufficient, and the team member was not sufficiently qualified or trained on the**
18 **standardized process.” Do you agree with Mr. Coppola’s summary?**

19 A. No. Although I agree that the Company identified improvements to its standard preventive
20 maintenance of Furnas MCCs and has implemented those improvements since the failure,
21 the Company’s practice has been to perform preventive maintenance (inspection and
22 cleaning) on the MCCs during outages. See Exhibit AG-3, page 9. Further, the root cause

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 analysis did *not* find that the process document was not clear or that team members were
2 not sufficiently qualified or trained as discussed further below.

3 **Q. Would the performance of standard preventive maintenance have detected the fault**
4 **and eliminated the outage?**

5 A. No. Standard preventive maintenance on the MCC, before the standard was updated,
6 would not have prevented the MCC failure as it would not have addressed the location of
7 the fault. As previously mentioned, the Company also employed rigorous meggering to
8 validate the integrity of the insulation and the pending failure was not detected.

9 **Q. Beginning at page 14, line 11, of his direct testimony, Mr. Coppola states “[a]s**
10 **described in the root cause analysis report, the Company failed to properly train its**
11 **employees on the standardized process to maintain the MCC equipment and failed to**
12 **perform preventive maintenance that could have avoided the power outage.” Do you**
13 **agree with Mr. Coppola’s conclusion?**

14 A. No. While the Company did identify improvements to its MCC maintenance and has
15 implemented that process going forward, the Company reasonably and prudently
16 performed electrical testing to detect insulation degradation prior to returning the MCC to
17 service. The intensive meggering resulted in satisfactory results, thereby indicating that
18 the integrity of the insulation should have been appropriate for plant operation.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Beginning at page 14, line 16, of his direct testimony, Mr. Coppola states “[t]he**
2 **incremental power costs for this outage that the Company seeks to recover in this**
3 **reconciliation case are the result of negligence by the Company.” Do you agree with**
4 **Mr. Coppola’s conclusion?**

5 A. No. As previously discussed, the Company performed post-maintenance testing to validate
6 the integrity of the insulation, and the failure to perform more standard training would not
7 have prevented the outage. Further, the Company took actions to abort the startup in order
8 to evaluate other like equipment to ensure that other MCCs were not susceptible to the
9 same failure. This was done to protect co-workers and equipment alike. There is no
10 evidence that the Company was unreasonable or imprudent when maintaining and
11 operating the MCCs, let alone evidence that it was negligent.

12 **Q. Beginning at page 15, line 3, of his direct testimony, Mr. Coppola states “[t]herefore,**
13 **I recommend that the Commission disallow \$1,046,270 of power costs for this outage**
14 **from the total power costs included in this reconciliation case.” Do you agree with**
15 **Mr. Coppola’s recommendation?**

16 A. No. It is my recommendation that the MPSC reject Mr. Coppola’s recommendation for a
17 disallowance of \$1,046,270 for replacement power costs associated with this outage. At
18 no time were the Company’s actions either unreasonable or imprudent. Campbell Unit 3
19 has been in operation since 1980 and the occurrence of this type of failure (insulation
20 degradation on this type of MCC) has only presented itself recently during this event.
21 While the Company has experienced previous failures, those failures were caused by
22 missing or dislodged grommets.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

Zeeland Units 3, 4, 5 and Outage Events 21, 22, 29

1
2 **Q. Beginning at page 15, line 8, of his direct testimony, Mr. Coppola states “[i]n**
3 **September 2023 there was an outage incident that contemporaneously affected three**
4 **of the power generating units at the Zeeland plant. This incident affected Zeeland**
5 **Unit 3 (Event 22), Zeeland Unit 4 (Event 21), and Zeeland Unit 5 (Event 29). On**
6 **September 3, 2023, a 10-foot section of pipe shared by the three units broke off the 28**
7 **HRH steam line shutting down all three units. According to the periodic outage**
8 **reports provided by the Company, the breakage was precipitated by weld fatigue due**
9 **to lack of proper pipe support. The Company stated that the original plant design did**
10 **not include proper pipe support.” Do you agree with Mr. Coppola’s summary?**

11 **A. Yes. Mr. Coppola provides an accurate summary of the incident which led to an outage**
12 **for the combined cycle units, Zeeland Units 3, 4, and 5.**

13 **Q. Beginning at page 16, line 9, of his direct testimony, Mr. Coppola states “[t]he root**
14 **cause analysis report provided by the Company shows that the design flaw of the pipe**
15 **was the cause of the power outage. The responsibility for that failure lies with the**
16 **Company.” Do you agree with Mr. Coppola’s summary?**

17 **A. Not entirely. While I agree that the root cause analysis report reflects that the design flaw**
18 **of the pipe was the cause of the outage, I do not agree that the responsibility for the failure**
19 **lies with the Company.**

20 **Q. Please explain your position that the Company is not responsible for the failure of the**
21 **pipings that led to the outage for the combined cycle units?**

22 **A. Zeeland Generating Station was neither designed nor constructed by Consumers Energy.**
23 **The construction for the simple cycle units (Zeeland Units 1 and 2) was completed in 2001**

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 and construction of the combined cycle units (Zeeland Units 3, 4 and 5) was completed in
2 2002. The Company purchased Zeeland Generating Station from LS Power Group in
3 December 2007.

4 **Q. Was the acquisition of Zeeland Generation Station from LS Power Group approved**
5 **by the Commission?**

6 A. Yes. In a December 18, 2007 Order in Case No. U-15245, the Commission found, among
7 other things, the following:

8 B. The purchase by Consumers Energy Company of the Zeeland Generating
9 Station on the terms provided by the Purchase and Sale Agreement is
10 reasonable and prudent.

11 C. The reasonable and prudent costs associated with purchasing, owning,
12 operating, and maintaining the Zeeland Generating Station, as determined
13 by this order, shall be recoverable in Consumers Energy Company's rates,
14 as provided in this order.

15 D. Consumers Energy Company's retail rates for the sale and distribution
16 of electric energy are increased by \$69.5 million on an annual basis through
17 use of an equal percentage surcharge on the company's rates effective on
18 the first day following closing of the Zeeland Generating Station transaction
19 and notice to the Commission as set forth in Attachment A.

20 **Q. When was the failed drain line designed and constructed?**

21 A. The failed drain line was a part of the original construction of the plant. The drain lines
22 were not present on any of the drawings associated with the construction of the plant and,
23 as such, would not have been a part of condition assessment or review when purchasing
24 the plant.

25 **Q. Does the Company plan to include this drain line in its future condition assessments?**

26 A. Yes. The Company has included this piping along with other instrument connections and
27 in its next planned iteration of high energy piping surveillances ("HEPS") at the Zeeland

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 Generating Station. The next planned iteration of the HEPS program the Company will be
2 expanded to voluntarily include instrument connections and drain lines.

3 **Q. Beginning at page 17, line 3, of his direct testimony, Mr. Coppola states “[a]lthough**
4 **the pipe may have been installed in the early 2000s by the previous owner of the plant,**
5 **it is still the responsibility of the Company to perform a thorough review of the facility**
6 **and make necessary modifications and improvements to ensure the equipment is in**
7 **proper working order and not prone to failure. It is now apparent that the Company**
8 **failed to identify the problem during the due-diligence phase of the plant acquisition**
9 **and after several years of ownership subsequent to the purchase of the plant for more**
10 **than 10 years.” Do you agree with Mr. Coppola’s conclusion?**

11 **A.** No. As previously discussed, the drain lines were not present on any drawings and the
12 MPSC found the acquisition to be reasonable and prudent. What Mr. Coppola is suggesting
13 is a complete design review of the entire plant, including those assets that do not even
14 appear on construction drawings. The fact of the matter is that while the design of the drain
15 line was inadequate, there was no indication of a problem for more than 20 years of
16 operation. The Company, as part of its condition assessments, does review operating
17 equipment (especially rotating equipment subject to wear) on a regular basis and does
18 propose modifications and improvements to provide economic value to its customers. It is
19 unrealistic to expect this level of review for a relatively static drain line.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **Q. Beginning at page 17, line 10, of his direct testimony, Mr. Coppola states “[t]he**
2 **incremental power costs for this outage that the Company seeks to recover in this**
3 **reconciliation case are the result of Company’s failure to correct an inherent**
4 **equipment design problem. Customers should not pay for the incremental cost of**
5 **replacement power resulting from errors or lack of corrective actions by the**
6 **Company or the prior owner of the plant.” Do you agree with Mr. Coppola’s**
7 **conclusion?**

8 A. Absolutely not. As I have previously discussed, the drain line was not present on any
9 drawing used to perform due diligence, the equipment operated adequately for
10 approximately 21 years despite the design flaw, and the Company cannot be reasonably
11 held responsible for actions of the prior plant owner that a condition assessment and review
12 would not reveal. The Company did not commit any errors, and it is unreasonable to expect
13 that the Company should have or could have identified the need for corrective action given
14 the information, or lack thereof, that was available for review.

15 **Q. Beginning at page 18, line 3, of his direct testimony, Mr. Coppola states “[t]herefore,**
16 **I recommend that the Commission disallow \$654,785 of power costs for this outage**
17 **from the total power costs included in this reconciliation case.” Do you agree with**
18 **Mr. Coppola’s recommendation?**

19 A. No. It is my recommendation that the MPSC reject Mr. Coppola’s recommendation for a
20 disallowance of \$654,785 for replacement power costs associated with this outage. At no
21 time were the Company’s actions either unreasonable or imprudent. It is unrealistic to
22 expect the Company to identify and remedy a design flaw attributable to a prior owner
23 when the equipment was not even reflected on drawings or otherwise identifiable in a

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 condition assessment. This would essentially require the Company to walkdown and
2 review the previous design of the entire plant. There were no problems identified with the
3 drain line through its first 21 years of operation and expecting it to be found, given the
4 circumstances, is unrealistic at best. Despite this outage for all three combined cycle units,
5 the combined cycle units generated over \$40 million of NEV during 2023.

6 **Rebuttal of Staff witness Bodiford**

7 **Ludington Unit 3 Outage Event 163**

8 **Q. Beginning at page 17, line 5, of his direct testimony, Mr. Bodiford discusses the**
9 **Ludington Unit 3 outage event 163 and states “[a]ccording to the Company’s report,**
10 **the root cause of the unplanned outage was determined to be that ‘The operator**
11 **applied the turbine generator’s pneumatic brakes to the incorrect unit.’” Do you**
12 **agree with Mr. Bodiford’s summary?**

13 **A.** Yes. The cause of the incident was related to the application of pneumatic brakes to the
14 incorrect Ludington Unit, Ludington Unit 3, rather than Ludington Unit 4 following
15 dewatering.⁷ The Company was dewatering Ludington Units 3 and 4 simultaneously and
16 the operator was instructed to enable the pneumatic brakes on Ludington Unit 4 as its rotor
17 stopped rotating. Unfortunately, the controls for both units are adjacent to each other and
18 the operator engaged the pneumatic brake for Unit 3, which was still operating.

19 **Q. What planning measures did the Company employ to deliver a successful outcome?**

20 **A.** Prior to the event, the Company held a pre-job brief to discuss the activities to be performed
21 and the actions that each co-worker was assigned. The action of performing the dewatering
22 on two adjacent units with adjacent controls led to the error. As a result of the event, the

⁷ The process of releasing water from the upper reservoir, allowing it to flow down through a turbine to generate electricity.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 Company has created and implemented controls which would prevent the braking of a unit
2 which is still operational. Specifically, the Company modified its distributed control
3 system to add logic to the data acquisition system for a “brakes engaged above speed”
4 alarm to alert the operators if the unit brakes show engaged above 15 RPM (slightly above
5 10% speed of 12.5 RPM).

6 **Q. Beginning at page 18, line 1, of his direct testimony, Mr. Bodiford states “Staff has**
7 **determined that replacement cost associated with this outage should be borne by the**
8 **Company and not collected through the PSCR. Staff is recommending the**
9 **Commission disallow recovery of \$52,199 in replacement power costs associated with**
10 **the event in question due to operator error.” Do you agree with Mr. Bodiford’s**
11 **recommendation?**

12 A. No. It is my recommendation that the MPSC reject Mr. Bodiford’s recommendation for a
13 disallowance of \$52,199 for replacement power costs associated with this outage. While
14 the Company did err in braking the incorrect unit, the adjacent nature of the controls and
15 the performance of unit operation on both units simultaneously led to the error. At no time
16 were the Company’s actions either unreasonable or imprudent. To the extent that the
17 MPSC does adopt Mr. Bodiford’s recommendation, the disallowance amount should be
18 revised to \$55,301 from the amount recommended by Mr. Bodiford. During the course of
19 reviewing its replacement power cost calculations resulting from discovery from ABATE,
20 the Company discovered an error in its original replacement power cost calculations for
21 the Ludington plant. As a result, the corrected amount of replacement power costs is
22 revised to \$55,301.

NATHAN J. HOFFMAN
U-21258 REBUTTAL TESTIMONY

1 **CONCLUSION**

2 **Q. What is your overall recommendation?**

3 A. Based upon the preceding discussion, it is my opinion that the Company was both
4 reasonable and prudent in its actions surrounding the four outage events at Campbell
5 Unit 2, Campbell Unit 3, and the combined cycle Zeeland Units 3, 4 and 5. As such, the
6 Commission should reject all of Mr. Coppola's recommended disallowances for
7 replacement power costs. In addition, I recommend that the Commission reject
8 Mr. Bodiford's recommendation for a disallowance of replacement power costs for the
9 Ludington Unit 3 outage event.

10 **Q. Does this conclude your rebuttal testimony?**

11 A. Yes, it does.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Exhibits A-10 through A-19 -- A-19
3 is a revised exhibit -- and Exhibit 33?

4 Hearing none, those exhibits are
5 admitted.

6 MR. KEIMACH: Okay. Next we have the
7 direct testimony of Hannah L. Patton which consists of
8 a cover page and five pages of questions and answers.
9 Ms. Patton also submitted Exhibits A-20, A-21, and
10 A-22.

11 JUDGE WALLACE: Is there any objection
12 to binding in the testimony of Ms. Patton?

13 Hearing none, the testimony is bound
14 in.

15 (Testimony bound in)

16 - - -

17

18

19

20

21

22

23

24

25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257))
for the 12 months ended December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
HANNAH L. PATTON
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

HANNAH L. PATTON
U-21258 DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Hannah L. Patton, and my business address is One Energy Plaza, Jackson,
3 Michigan 49201.

4 **Q. By whom are you employed?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”).

6 **Q. What is your position at Consumers Energy?**

7 A. I am an Accounting Manager in the Revenue and Fuel Accounting group of the General
8 Accounting Department.

9 **Q. Please state your educational background and work experience.**

10 A. I graduated from Albion College in May 2009 with a Bachelor of Arts degree in Economics
11 and Management. I began working for the Company in January 2012 in the Electric
12 Revenue and Fuel Reconciliation section of the General Accounting Department. I was an
13 external auditor employed by Rehmann Robson from December 2007 through December
14 2011. I obtained my Certified Public Accountant license in February 2011.

15 **Q. What are your responsibilities in your present position?**

16 A. My primary responsibilities include the supervision of the accounting for electric
17 generation and power supply expenses, the accounting for cost of gas, the analysis of gas
18 revenues and costs, and the associated gas cost over- or under-recoveries. Additionally, I
19 am responsible for the supervision of the accounting of the Company’s mandatory and
20 voluntary Renewable Energy (“RE”) programs, as well as the analysis of electric revenue
21 and gross margin.

HANNAH L. PATTON
U-21258 DIRECT TESTIMONY

1 **Q. Have you previously filed testimony with the Michigan Public Service Commission**
2 **(“MPSC” or the “Commission”)?**

3 A. Yes. I filed testimony in the following cases: U-17631, U-17803, U-17918-R, U-18081,
4 U18241, U-20068, U-20202, U-20220, U-20542, U-20802, U-20803, U-20815, U-21049,
5 U-21141, U-21063, U-21148, and U-21258.

6 **Q. What is the purpose of your direct testimony in this proceeding?**

7 A. The purpose of my direct testimony is to calculate the total amount of Financial
8 Compensation Mechanism (“FCM”) earned by the Company in 2023. Additionally, I will
9 present the total amount of FCM surcharge which was billed in 2023 and the resulting
10 over-recovery amount of FCM including the prior year over-recovery balance from 2022.

11 **Q. Are you sponsoring any exhibits?**

12 A. Yes. I am sponsoring the following exhibits:

13 Exhibit A-20 (HLP-1) Summary of the FCM Recovery;
14 Exhibit A-21 (HLP-2) Total Earned FCM Incentive Revenue; and
15 Exhibit A-22 (HLP-3) FCM Interest Calculation.

16 **Q. Were these exhibits prepared by you or under your supervision?**

17 A. Yes.

18 **Q. Please describe the regulatory order approving the FCM?**

19 A. The Company received an Order on July 7, 2019, in the Company’s 2018 Integrated
20 Resource Plan, Case No. U-20165, granting the Company the authority to earn an FCM on
21 all new Power Purchase Agreements (“PPAs”) approved by the Commission after
22 January 1, 2019.

HANNAH L. PATTON
U-21258 DIRECT TESTIMONY

1 **Q. Please describe the calculation of the FCM earned by the Company?**

2 A. The Order dated July 7, 2019 in Case No. U-20165 specified how the FCM should be
3 calculated. As described on page 9, “the Company will be authorized to annually earn an
4 FCM equal to the product of the PPA payments in that year multiplied by the Weighted
5 Average Cost of Capital (“WACC”).” Additionally, as described on page 9, the Order
6 indicated there would be a “cap” or a limit for the FCM, specifically stating that “the FCM
7 shall not exceed the WACC of the Company’s total capital structure multiplied by the
8 schedule of MWh prices in Attachment B to this Settlement agreement based on the time
9 of PPA execution.”

10 **Q. Has the implementation of the FCM been considered in any other proceedings?**

11 A. Yes. In the Company’s 2020 electric rate case, Case No. U-20697, the Company presented
12 a forecast of FCM revenue requirement for 2019 through 2021 and a methodology for the
13 FCM revenue recovery, in accordance with the terms of the Case No. U-20165 Settlement
14 Agreement. In its December 17, 2020 Order in Case No. U-20697, the Commission
15 approved the Company’s forecasted FCM revenue requirement, the surcharge to collect
16 those revenues, and the reconciliation process and directed the Company to file a
17 reconciliation and establish a new surcharge in its Power Supply Cost Recovery (“PSCR”)
18 Reconciliation proceedings. In Case No. U-20803, the Company proposed a methodology
19 for reconciling the FCM and establishing a new surcharge which was approved in the Order
20 dated September 28, 2023 in Case No. U-20803. In Case No. U-21049, the Company
21 proposed revised pricing of the FCM surcharge based on the over-recovery balance and the
22 projected collections and FCM revenue earned.

HANNAH L. PATTON
U-21258 DIRECT TESTIMONY

1 **Q. Please describe information presented in Exhibit A-21 (HLP-2)?**

2 A. This exhibit presents, by counterparty and date the contract was executed, the total amount
3 of MWh and total purchase power expense dollars subject to the FCM incentive. The
4 WACC and FCM Cap are displayed in columns (f) and (h), respectively, based on the time
5 of the PPA execution. Column (g) calculates the total FCM revenue based on the product
6 of the PPA payments in column (e) multiplied by the WACC for that contract. Column (i)
7 calculates the cap or limit for the FCM incentive by multiplying the \$/MWh cap the
8 contract is subject to by the WACC and by the total MWh purchased for each counterparty.
9 For each counterparty by year the total amount that the Company earned was limited to the
10 lesser of the FCM based on the WACC or the FCM cap based on the schedule of MWh
11 prices in the settlement agreement approved on June 9, 2019 in Case No. U-20165.

12 **Q. How much FCM Incentive was earned by the Company during 2023?**

13 A. The total amount of FCM incentive revenue that was earned and recorded by the Company
14 is shown on Exhibit A-21 (HLP-2), line 59, column (j), in the amount of \$2,568,664.

15 **Q. What was the total amount of FCM surcharge billed by the Company in 2023?**

16 A. The total amount of FCM surcharge billed during 2023 is shown on Exhibit A-20 (HLP-1),
17 line 2, in the amount of \$2,975,075.

18 **Q. How is the over-recovery amount shown on line 4 of Exhibit A-20 (HLP-1) calculated?**

19 A. The amount on line 4 is the sum of beginning balance over-recovery amount (line 1) plus
20 the total FCM surcharge billed during the year (line 2) less the total amount of earned FCM
21 revenue (line 3).

HANNAH L. PATTON
U-21258 DIRECT TESTIMONY

1 **Q. Please describe Exhibit A-22 (HLP-3)?**

2 A. Exhibit A-22 (HLP-3) calculates the interest expense or income associated with the FCM
3 over(under)-recovery balance. The beginning balance included on line 1 equals the balance
4 calculated by the Company in the 2022 PSCR reconciliation, Case No. U-21049, Exhibit
5 A-21 (HLP-2) Revised. The total amounts billed by the Company in 2023 associated with
6 the FCM surcharge is presented in column (a). Additionally, the Company has shown the
7 total amount of recorded FCM revenue which is estimated and recorded by the Company
8 on a quarterly basis. The average balance that the interest rate was applied to was
9 calculated by taking the sum of the prior month's over-recovery balance plus half of the
10 current month's activity.

11 **Q. What is the total over-recovery amount for the FCM including interest?**

12 A. The total FCM over-recovery amount, including interest, at the end of 2023 was \$2,518,161
13 as presented on Exhibit A-20 (HLP-1), line 6.

14 **Q. Does this conclude your direct testimony in this proceeding?**

15 A. Yes.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

JUDGE WALLACE: Is there any objection to admission of Exhibits A-20, A-21, and A-22?

Hearing none, those exhibits are admitted.

MR. KEIMACH: Thank you, Your Honor.

Next we have the direct testimony of Angela K. Rissman which consists of a cover page and 11 pages of questions and answers for a total of 12 pages.

Ms. Rissman also submitted three exhibits. Those exhibits are A-23, A-24, and A-25.

JUDGE WALLACE: All right. Is there any objection to binding in the testimony of Ms. Rissman?

Hearing none, the testimony is bound in.

(Testimony bound in)

- - -

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
ANGELA K. RISSMAN
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Angela K. Rissman, and my business address is 1945 West Parnall Road,
3 Jackson, Michigan 49201.

4 **Q. By whom are you employed?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 as the Fuel Procurement Manager in Fossil Fuel Supply.

7 **Q. Would you please describe your educational background and business experience?**

8 A. I graduated from Western Michigan University in 1996 with a Bachelor of Business
9 Administration in Accountancy and from Central Michigan University in 1999 with a
10 Master of Science in Administration. I began working for CMS Enterprises in 2005 and
11 for Consumers Energy in 2007. I have held several positions of increasing responsibility,
12 and specifically began work in Fossil Fuel Supply within the Electric Supply group in
13 November 2013. I was promoted to Fuel Procurement Manager in November 2017.

14 **Q. What are your duties as the Fuel Procurement Manager?**

15 A. My responsibilities include purchasing the coal, oil and natural gas used at the Company’s
16 electric generating plants; negotiating and managing associated contracts; assuring quality
17 standards are met; supporting relevant accounting functions; and the preparation of
18 testimony and filings for presentation before the Michigan Public Service Commission
19 (“MPSC” or the “Commission”).

20 **Q. Have you testified in other cases before the MPSC?**

21 A. Yes. I have previously provided testimony in the following cases:

- 22 • Case No. U-18142: 2017 Power Supply Cost Recovery (“PSCR”) Plan;
- 23 • Case No. U-20068: 2017 PSCR Reconciliation;
- 24 • Case No. U-18402: 2018 PSCR Plan;

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

- 1 • Case No. U-20202: 2018 PSCR Reconciliation;
- 2 • Case No. U-20219: 2019 PSCR Plan;
- 3 • Case No. U-20220: 2019 PSCR Reconciliation;
- 4 • Case No. U-20525: 2020 PSCR Plan;
- 5 • Case No. U-20526: 2020 PSCR Reconciliation;
- 6 • Case No. U-20802: 2021 PSCR Plan;
- 7 • Case No. U-20803; 2021 PSCR Reconciliation;
- 8 • Case No. U-21048: 2022 PSCR Plan;
- 9 • Case No. U-21049: 2022 PSCR Reconciliation; and
- 10 • Case No. U-21257: 2023 PSCR Plan.

11 **Q. What is the purpose of your direct testimony in this proceeding?**

12 A. I am sponsoring testimony with respect to the Company's 2023 actual volumes and costs
13 of coal, oil and natural gas used for electric generation.

14 **Q. Are you sponsoring any exhibits with your testimony?**

15 A. Yes, I am sponsoring the following exhibits that were prepared by me or under my
16 supervision:

17	Exhibit A-23 (AKR-1)	2023 Coal Receipts – Plan and Actual;
18	Exhibit A-24 (AKR-2)	2023 Projected vs. Actual – Coal Volumes & Costs;
19		and
20	Exhibit A-25 (AKR-3)	2023 Projected vs. Actual – Natural Gas Volumes &
21		Costs.

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 **COAL**

2 **Coal Procurement Strategy**

3 **Q. Can you describe the Company's coal procurement strategy it employed to provide**
4 **its coal supply for 2023?**

5 A. Yes. The Company's strategy for coal procurement provides for purchasing and securing
6 quantities of coal over time that typically enable the Company to have approximately
7 70% to 90% of its anticipated volume requirements secured by the fall of each year for the
8 following calendar year. The Company employs this strategy because the spot coal market
9 by its nature can be unpredictable and can easily become constrained by forces affecting
10 both supply and demand. Accordingly, the Company believes it is best to manage its coal
11 supply in a manner such that the risk of having an insufficient supply of coal is minimized,
12 while at the same time balancing pricing considerations by retaining some exposure to the
13 spot market. To manage this risk, the Company limits its exposure to the spot market by
14 contracting for a large percentage of its projected requirements ahead of time because it
15 does not believe it is reasonable or prudent to speculate that large quantities of coal will be
16 available when needed from the spot market. Furthermore, this strategy provides coal
17 supply protection should the Company's actual coal requirements change from its projected
18 requirements.

19 In addition, the Company layers its coal purchases in such a way that each year it
20 has a portfolio of coal purchase contracts that provides dollar cost averaging which is
21 instrumental in minimizing price risk to Consumers Energy's customers and also limits
22 their exposure to price volatility in the spot market. The portfolio for a given year consists

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 of contracts of various vintages, volumes, length of term, and prices. Exhibit A-23
2 (AKR-1) outlines all of the coal contracts the Company had in place during 2023.

3 **Q. Can you provide a more detailed comparison of volumes received versus those that**
4 **were planned?**

5 A. Yes. Exhibit A-23 (AKR-1) details the 2023 planned coal receipts, the 2023 actual coal
6 receipts, and the number of tons by which each contract varied from the plan. For a variety
7 of reasons, it is not uncommon for there to be differences between planned and actual
8 contract volumes. These reasons may include: (1) allowed contract tolerances;
9 (2) shipments that loaded in late 2022 but were not received at a Company generating plant
10 until early 2023; (3) shipments that loaded in late 2023 but were not received at a Company
11 generating plant until early 2024; (4) provisions that allowed the Company to defer receipt
12 of 2022 contract quantities until 2023; and (5) provisions that allowed the Company to
13 defer receipt of 2023 contract quantities until 2024.

14 **Q. In general, how was coal evaluated for purchase?**

15 A. For all coal purchases, the Company solicited competitive bids. All such bids were
16 evaluated on a delivered-cost basis with purchases made from the lowest cost eligible
17 suppliers that met the Company's purchase specifications.

18 **Delivered Coal Volumes & Costs**

19 **Q. How did actual 2023 delivered-coal volumes and costs compare with projected 2023**
20 **delivered-coal volumes and costs presented by the Company in the 2023 PSCR Plan?**

21 A. During 2023, 1,471,928 fewer tons of coal were delivered than projected. The projected
22 and actual 2023 delivered coal costs are as follows:

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

	<u>Plan \$/MMBtu</u>	<u>Actual \$/MMBtu</u>	<u>Variation</u>
Western (Sub-Bituminous)	\$2.640	\$2.664	0.91%

3 **Q. Please elaborate on the volumes received and the prices paid for coal in 2023.**

4 A. The Company projected the delivered price of western sub-bituminous coal to average
5 \$2.640/MMBtu for 5,948,394 tons. The actual average price for western sub-bituminous
6 coal delivered was \$2.664/MMBtu for 4,476,425 tons.

7 **Q. Why were the delivered coal volumes lower than projected?**

8 A. The burn volumes were lower than projected which resulted in less coal needing to be
9 delivered.

10 **Q. Why is the average delivered cost slightly higher than projected?**

11 A. The slight price increase in western sub-bituminous coal was due primarily to slightly
12 lower commodity costs offset by slightly higher transportation costs than planned, which
13 therefore increases the total delivered cost on a MMBtu basis.

14 **Q. Based on your previous responses, do you believe that the Company's 2023 coal
15 purchases were reasonable and prudent?**

16 A. Yes, I do.

17 **Burned Coal Volumes & Costs**

18 **Q. What were the actual as-burned coal tonnages and costs at the Company's coal-fired
19 generating plants in 2023, and how did they compare with the projected amounts?**

20 A. As shown in Exhibit A-24 (AKR-2), the Company projected it would burn 5,833,555 tons,
21 but the actual burn was 3,940,635 tons; a difference of 1,892,920 tons (32%) lower than
22 projected. The actual as-burned costs were \$192,520,035; a difference of \$83,295,469
23 (30%) lower than the projected costs of \$275,815,503.

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 **Q. Why were the total as-burned quantities and costs lower than projected?**

2 A. All five (5) coal units burned considerably less fuel than was projected in the Plan case.
3 This result was primarily driven by two (2) factors: 1) coal-fired generating units had lower
4 than projected availability, and 2) when available, the coal-fired generating units were
5 utilized (i.e., dispatched) less than they were projected to be. In his testimony, Company
6 witness Nathan J. Hoffman provides details related to unit outages that impacted their
7 availability. The lower-than-projected utilization rate was influenced by the lower-than-
8 forecast natural gas prices, which impacted the economic dispatch of all coal-fired units.
9 The total as-burned coal costs were also correspondingly lower, generally consistent with
10 the lower as-burned coal tonnage.

11 **Q. Based on your previous responses, do you believe that the 2023 as-burned coal costs**
12 **were reasonable and prudent?**

13 A. Yes, I do.

14 **NATURAL GAS**

15 **As-Burned Natural Gas Volumes and Costs**

16 **Q. What were the projected and actual natural gas burn values for electric generation**
17 **during 2023?**

18 A. The projected and actual burn volumes and costs are shown on Exhibit A-25 (AKR-3).

19 **Q. Please explain the major differences between the projected and actual costs of natural**
20 **gas burned for electric generation during 2023 as outlined in Exhibit A-25 (AKR-3).**

21 A. In total, the actual costs of natural gas burned on Consumers Energy's system in 2023 were
22 substantially lower than projected due primarily to lower commodity prices.

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 **Q. Please elaborate on the actual costs for gas burned for electric generation in 2023.**

2 A. The arrangements for gas purchases for the Zeeland Plant, the Jackson Plant, D.E. Karn
3 (Karn) Units 3 and 4, and Covert were made pursuant to competitive bidding processes,
4 with all three utilizing gas management services agents. The average projected cost of gas
5 burned at the Zeeland Plant was \$7.182 per MCF, while the average actual cost was
6 \$2.576 per MCF. The average projected cost of gas burned at the Jackson Plant was
7 \$7.667 per MCF, while the average actual cost was \$3.052 per MCF. The average
8 projected cost of gas burned at the Covert Plant was \$6.228 per MCF, while the average
9 actual cost was \$2.588 per MCF. The per unit price differences for gas burned at the
10 Zeeland, Jackson, and Covert plants were mainly due to lower than anticipated prices for
11 natural gas. The per-unit average price for gas burned at Karn was higher than the other
12 plants mainly due to the fixed transportation costs spread over the smaller burn volume.

13 **Gas Management Services Agents**

14 **Q. Can you elaborate on why the Company utilizes gas management services agents for**
15 **the Jackson, Zeeland, Covert and Karn plants?**

16 A. Utilizing gas management services (“GMS”) agents allows the Company to take advantage
17 of the Agent’s diversity of gas purchasing/transportation contracts, gas purchasing
18 experience, as well as the portfolio of arrangements the Agent has with pipelines in North
19 America. This expertise enables the Agent to provide transportation and balancing services
20 to the Company more economically than if the Company were required to obtain firm
21 transportation and storage directly from the pipeline companies. By using GMS agents,
22 the Company only pays for these services when natural gas is needed. If the Company
23 were to obtain its own firm transportation, storage, and balancing contracts directly from

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 the pipeline companies, the Company would have to pay for these services even when
2 natural gas is not needed.

3 **Q. Does the method for managing the natural gas supplies for the Jackson, Zeeland,**
4 **Covert, and Karn plants using GMS agents ensure a reliable and reasonably priced**
5 **gas supply to these facilities?**

6 A. Yes. The requirement for the Agent to hold the necessary firm transportation assets with
7 the pipelines to deliver the gas to the plants' delivery points (or utilize transportation assets
8 held by the Company) and gas pricing based on published indices ensures these facilities
9 are reliable and competitive participants in the Midcontinent Independent System
10 Operator, Inc. energy market.

11 **Q. Did the contracts for natural gas management services change in 2023?**

12 A. Except for Covert, there were no changes in the gas management services contracts for the
13 Zeeland, Jackson, and Karn plants. When the Company acquired the Covert plant, it
14 assumed and extended the existing GMS contract to provide a seamless transition in fuel
15 supply to the plant until such time the Company could conduct its normal Request for
16 Proposal process to provide the services. The Company entered into its own negotiated
17 GMS for the Covert Plant effective November 1, 2023.

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 **Conclusion**

2 **Q. Based on your previous responses and on your familiarity with the Company's**
3 **natural gas purchases, do you believe that 2023 natural gas purchases were made in**
4 **a reasonable and prudent manner and that the costs incurred were reasonable and**
5 **prudent?**

6 A. Yes, I do.

7 **OIL**

8 **Oil Procurement Strategy**

9 **Q. Can you describe the Company's oil procurement strategy it employed to provide its**
10 **oil supply for 2023?**

11 A. Yes. The Company's strategy for oil procurement provides for purchasing and securing
12 quantities of oil that enable the Company to achieve established target inventory levels. As
13 part of the original plan to retire Karn Units 3 and 4 by May 31, 2023, the inventory was
14 allowed to drop below target levels with the anticipation of depleting the oil inventory.
15 The current plan, extending the retirement date to on or before May 31, 2031, required oil
16 to be purchased to satisfy established inventory targets that align with the capacity
17 requirements.

18 **Q. In general, how was oil evaluated for purchase?**

19 A. For all oil purchases, the Company solicited competitive bids. All such bids were evaluated
20 on a delivered-cost basis with purchases made from the lowest cost eligible suppliers that
21 met the Company's purchase specifications.

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 **Q. Was any oil purchased in 2023?**

2 A. Yes, consistent with the requirements of MPSC Order Approving the Settlement
3 Agreement for Case No. U-21090 which extended the retirement date for Karn Units 3 and
4 4 to on or before May 31, 2031, the Company purchased 3 million gallons of oil at an
5 average price of \$1.887/gallon. Before 2022, oil hadn't been purchased in over 10 years,
6 requiring additional purchases to be made in 2023 to achieve a minimum target inventory
7 level.

8 **Oil Volumes & Costs**

9 **Q. What were the projected and actual oil burn volumes for electric generation during**
10 **2023?**

11 A. The Company did not project to burn any oil at Karn Units 3 and 4 in 2023. Much of the
12 reason for not projecting any burn lies with the difficulty in accurately predicting the
13 demand for these generally higher-cost units. Unlike the coal and combined-cycle gas
14 units, which are typically lower in cost, the earlier units to be dispatched, and whose
15 production is generally more predictable, the oil and gas peaking units typically have
16 higher variable costs and are among the last units to be dispatched. The utilization of these
17 units depends on several difficult-to-predict factors, including but not limited to unit
18 availability, market power prices, weather and its effects on system electric load, electric
19 transmission constraints, and the more volatile nature of the oil and gas commodity
20 markets. The actual burn volume was 12,271 barrels (515,383 gallons).

ANGELA K. RISSMAN
U-21258 DIRECT TESTIMONY

1 **Q. What were the projected and actual oil burn costs for electric generation during**
2 **2023?**

3 A. The Company did not project to burn any oil at Karn Units 3 and 4 in 2023. Because there
4 was not a plan to burn any oil, the cost was not projected. The average cost for oil burned
5 was \$56.595 per barrel (\$1.347/gallon).

6 **Q. Why is the average cost for oil burned in 2023 lower than the actual purchase price**
7 **in 2023?**

8 A. Because of the lack of burn and sufficient inventory levels in recent years, there hasn't
9 been a need to purchase any oil. Most of the oil that was burned in 2023 was purchased
10 and put into inventory when WTI oil was below \$25.00 per barrel. The average cost for
11 oil burned is reflective of those lower prices of oil. For comparison, the cost of WTI oil
12 was approximately \$77.58 per barrel in 2023.

13 **Q. Based on your previous responses, do you believe that the Company's 2023 oil**
14 **purchases were reasonable and prudent?**

15 A. Yes, I do.

16 **Q. Does this complete your direct testimony?**

17 A. Yes.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Exhibits A-23, A-24, and A-25?

3 Hearing none, those exhibits are
4 admitted.

5 MR. KEIMACH: Thank you, Your Honor.

6 Next we have the direct testimony of
7 Raymond T. Scaife which consists of a cover page
8 and ten pages of questions and answers. The direct
9 testimony was revised. The revised testimony was
10 still a cover page and ten pages of questions and
11 answers for a total of 11 pages. Mr. Scaife
12 additionally sponsored rebuttal testimony.
13 Mr. Scaife's rebuttal testimony consisted of a
14 cover page and six pages of questions and answers
15 for a total of seven pages.

16 Mr. Scaife also sponsored Exhibits
17 A-26, A-27, A-28, A-29, A-30, A-34, and A-35. Two
18 of those exhibits were revised. The revised
19 exhibits were A-26 and A-29.

20 JUDGE WALLACE: Okay. So Revised
21 Exhibit A-26 through A-29, which was also a revised
22 exhibit, A-30 and A-34 and A-35? Is that correct?

23 MR. KEIMACH: Correct, Your Honor. Just
24 the two revised exhibits.

25 JUDGE WALLACE: All right. Is there any

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

objection to binding in the direct and rebuttal
testimony of Mr. Scaife?

Hearing none, the testimony is bound
in.

(Testimony bound in)

- - -

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

REVISED DIRECT TESTIMONY
OF
RAYMOND T. SCAIFE
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Raymond T. Scaife, and my business address is 1945 West Parnall Road,
3 Jackson, Michigan 49201.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 as Manager of Wholesale Settlements of the Electric Supply Operations Contracts &
7 Settlements section of the Electric Supply Department.

8 **Qualifications**

9 **Q. Please describe your educational background and work experience.**

10 A. I received the degree of Bachelor of Business Administration with a Marketing emphasis
11 from Adrian College in 2001. I began my employment with Consumers Energy in
12 December 2001 in the Real-Time Market Operations. I worked in the operations
13 department as Generation Dispatcher and Energy Scheduler from 2001 through 2005. In
14 2005, I participated in the Midcontinent Independent System Operator, Inc. (“MISO”)
15 Market as a MISO Market Energy Coordinator. In 2007, I became a Technical Analyst
16 with responsibility to provide analysis regarding MISO Settlements to the Operations
17 Superintendent. I then coordinated the Company’s Real-Time Operations entry into the
18 MISO Ancillary Services Market in January of 2009. In the fall of 2009, I was hired as the
19 Manager of Wholesale Settlements, which is the position I currently hold. As the Manager
20 of Wholesale Settlements, I am responsible for managing the settlement activities related
21 to MISO Energy and Ancillary Services Market, the MISO Transmission Market, Power
22 Purchase Agreements and the team of analysts employed to support the Company’s
23 Wholesale Settlement process.

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Have you previously provided testimony before the Michigan Public Service**
2 **Commission (“MPSC” or the “Commission”)?**

3 A. Yes. I provided testimony in the following cases:

- 4 • Case No. U-17095-R 2013 Power Supply Cost Recovery (“PSCR”
5 Reconciliation;
- 6 • Case No. U-17317-R 2014 PSCR Reconciliation;
- 7 • Case No. U-17678-R 2015 PSCR Reconciliation;
- 8 • Case No. U-17918-R 2016 PSCR Reconciliation;
- 9 • Case No. U-20068 2017 PSCR Reconciliation;
- 10 • Case No. U-20202 2018 PSCR Reconciliation;
- 11 • Case No. U-20220 2019 PSCR Reconciliation;
- 12 • Case No. U-20526 2020 PSCR Reconciliation;
- 13 • Case No. U-20803 2021 PSCR Reconciliation; and
- 14 • Case No. U-21049 2022 PSCR Reconciliation.

15 **Q. What is the purpose of your direct testimony in this proceeding?**

16 A. My direct testimony will address: (i) Purchased Power Supply Costs incurred by the
17 Company in 2023; (ii) the settlement of market transactions and transmission expenses
18 incurred with MISO; (iii) Settlements with certain suppliers, referred to as Biomass
19 Merchant Plants (“BMPs”); (iv) Purchases and Sales with third parties in 2023; and
20 (v) 2023 Interchange Delivered by Counterparties to MISO.

21 **Q. Are you sponsoring any exhibits with your direct testimony?**

22 A. Yes. I am sponsoring the following exhibits:

- 23 Exhibit A-26 (RTS-1) Revised 2023 – Purchased, Interchanged, and Renewable
24 Power Transactions;

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1	Exhibit A-27 (RTS-2)	2023 – Summary of MISO Market and Tariff
2		Administration Charges/(Credits) Settlement;
3	Exhibit A-28 (RTS-3)	2023 – Energy Sales Revenue Net of Fuel Cost;
4	Exhibit A-29 (RTS-4) Revised	2023 Purchased Power and Cogeneration -
5		Energy and Expense; and
6	Exhibit A-30 (RTS-5)	2023 Interchange Delivered by Counterparties to
7		MISO.

8 **Q. Were these exhibits prepared by you or under your direction or supervision?**

9 A. Yes.

10 **2023 Purchased, Interchange, and Renewable Power Transactions**

11 **Q. Please describe Exhibit A-26 (RTS-1).**

12 A. Exhibit A-26 (RTS-1) provides a summary of the Company’s Purchased, Interchanged,
13 and Renewable Power Transactions booked for 2023.

14 **Q. Please describe Exhibit A-26 (RTS-1), line 1.**

15 A. Exhibit A-26 (RTS-1), line 1, “Purchased Power,” provides volumes and costs for capacity
16 and energy that were purchased by Consumers Energy from cogeneration facilities, small
17 power producers, and independent power producers who had agreements to sell capacity
18 and energy to Consumers Energy on a long-term basis. For purchases from the Company’s
19 Renewable Resource Program suppliers, only the average PSCR cost associated with those
20 purchases is included in line 1.

21 **Q. Please describe Exhibit A-26 (RTS-1), line 2.**

22 A. Exhibit A-26 (RTS-1), line 2, “Purchased Power & Programs – PA 295,” provides volumes
23 and costs for capacity and energy that were purchased under Power Purchase Agreements
24 (“PPAs”) that provided Renewable Energy Credits in accordance with MCL 460.1028,
25 from purchases under the Company’s Experimental Advanced Renewable Program, and

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 subscription credits to participants in the Company's Large Customer Renewable Energy
2 Program. Consumers Energy witness Zachery S. Cole discusses renewable transfer costs
3 and Renewable Energy Plan programs associated with Public Act 295 of 2008 ("PA 295")
4 in more detail in his direct testimony¹.

5 **Q. Please explain line 3, "Interchange Received – Non-MISO,"**

6 A. The entry for "Interchange Received – Non-MISO," shown on Exhibit A-26 (RTS-1)
7 Revised, line 3, equal to \$ (2,507,000) for 2023, represents purchase power credits related
8 to \$ (927,907) for Toshiba-related Ludington Replacement power costs which were
9 excluded from recovery in this proceeding as described in more detail by Company witness
10 Joshua W. Hahn in his workpaper, and \$(2,011,360) Earnest Money Deposits related to
11 PPA terminations offset by \$432,267 of Independent Administrator fees as further
12 described in the direct testimony of Company witness Beth A. Skowronski.

13 **Q. Please Explain line 8, "Interchange Delivered – Non-MISO," of Exhibit A-26 (RTS-1).**

14 A. The entry "Interchange Delivered – Non-MISO," shown on Exhibit A-26 (RTS-1), line 8,
15 provides the volumes and revenues for sales of energy and capacity to the counterparty,
16 other than sales to the energy market operated by MISO, if there were any. There were no
17 expenses in 2023 for the item "Interchange Delivered – Non-MISO".

18 **Q. Please explain "Interchange Received – MISO" and "Interchange Delivered –**
19 **MISO," on Exhibit A-26 (RTS-1), lines 4 and 9, respectively.**

20 A. The entry for "Interchange Received – MISO," shown on Exhibit A-26 (RTS-1), line 4,
21 includes the purchase of energy from the MISO energy market in column (e) and capacity
22 purchases from the MISO Planning Resource Auction ("PRA") described later in my direct

¹ Line 2 of Exhibit A-26 (RTS-1) is the sum of lines 17 and 28 of Exhibit A-1 (ZSC-1).

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 testimony in column (g). The entry for “Interchange Delivered – MISO,” shown on Exhibit
2 A-26 (RTS-1), line 9, includes the sale of energy to the MISO energy market in column (e)
3 and capacity sales to the MISO Planning Resource Auction described later in my direct
4 testimony in column (g). The amount of Interchange Energy Received and Delivered is a
5 result of the operation of the MISO energy market and the Security Constrained Economic
6 Dispatch that is performed by MISO. The net of lines 4 and 9, column (h), as shown on
7 line 16, column (h), of Exhibit A-26 (RTS-1) is discussed in greater detail in my MISO
8 Settlements testimony below.

9 **Q. Please describe the Transmission expenses included in Exhibit A-25 (RTS-1), line 5.**

10 A. The transmission expenses included in Exhibit A-26 (RTS-1), line 5, are charges to
11 transmission customers (like Consumers Energy) based on the MISO tariff approved by
12 the Federal Energy Regulatory Commission (“FERC”).

13 **Q. Please describe “Short-Term Capacity Purchases,” on Exhibit A-25 (RTS-1), line 6.**

14 A. Exhibit A-26 (RTS-1), line 6, “Short-Term Capacity Purchases,” is a line set aside for
15 bilateral purchases made to meet or maintain Consumers Energy’s reserve margin
16 requirements for a given Planning Year. There were 212 Zonal Resource Credits (“ZRC”)
17 purchased to support Derated Units for Plan Year 2023/24 listed as Short-Term Capacity
18 Purchases in 2023 as discussed by Company witness Hahn.

19 **Q. Please describe “Interchange Delivered by Counterparties – MISO,” on Exhibit A-26**
20 **(RTS-1), line 10.**

21 A. Exhibit A-26 (RTS-1), line 10, includes energy sales to MISO executed on behalf of the
22 Company by the Company’s Renewable Energy Counterparties for 2023.

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 **Q. Please describe “Schedule 2 Reactive,” on Exhibit A-26 (RTS-1), line 11.**

2 A. Exhibit A-26 (RTS-1), line 11, includes the revenue received pursuant to MISO’s
3 Schedule 2 for reactive service which the Company provides as a service necessary for the
4 transmission of power. The Schedule 2 charge type was terminated in 2023 by MISO.²

5 **Q. Please describe “PA 295 Company Owned Renewables” on Exhibit A-26 (RTS-1),**
6 **line 13.**

7 A. Exhibit A-26 (RTS-1), line 13, includes the transfer costs associated with provider-owned
8 renewable energy systems. Company witness Zachary S. Cole discusses this item in more
9 detail in his direct testimony.

10 **Purchases and Sales of Zonal Resource Credits³ in MISO’s Annual**
11 **Planning Resource Auctions**

12 **Q. What was the total net expense in 2023 associated with ZRCs and Planning Reserve**
13 **Margin Requirement for the Company’s participation in the MISO PRAs?**

14 A. The difference between line 9 and line 4, column (g), of Exhibit A-26 (RTS-1) is a net
15 expense of \$852,177 paid by the Company in 2023 associated with the purchases and sales
16 of ZRCs and Planning Reserve Margin Requirement including Zonal Deliverability
17 Benefits from MISO PRAs.

² On January 27, 2023, in docket ER23-523, FERC approved the MISO Transmission Owners’ proposal to terminate reactive power charges and compensation under MISO’s Schedule 2 effective December 1, 2022. Such revenues are represented on line 11 of Exhibit A-26 (RTS-1) and expenses are reflected on line 5. Adjustments to the December period of 2022 are handled in the 2023 PSCR Reconciliation.

³ A ZRC is a unit of deliverable Unforced Capacity qualified by MISO, located in a specific Local Resource Zone and is the unit of measure for resources participating in the MISO PRA.

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 **MISO Energy Market**

2 **Q. Please describe Exhibit A-27 (RTS-2).**

3 A. Exhibit A-27 (RTS-2) provides a summary of: (i) MISO Market Charges and Credits that
4 were assessed to the Company from January 1, 2023 through December 31, 2023;
5 (ii) MISO Market Charges Characterized as Transmission Charges; and (iii) an accounting
6 Accrual and Adjustments total.

7 **Q. What is the source of the data from which Exhibit A-27 (RTS-2) is derived?**

8 A. The Company has summarized this data from the daily settlement statements that MISO
9 sends the Company for each operating day.

10 **Q. What does the Adjusted Total Settlement of MISO Market and Tariff Administration
11 Charges/(Credits) represent?**

12 A. This value represents the expenses incurred and credits received by the Company
13 associated with procuring or providing energy, capacity, ancillary services, and financial
14 transmission rights. The amount for 2023 was \$135,605,301, as shown on Exhibit A-26
15 (RTS-1), line 16 "Net MISO Interchange," which ties to Exhibit A-26 (RTS-2), line 11.
16 Net MISO Interchange is the result of the Company offering its generation into the Market
17 and obtaining energy and capacity from the Market to meet its load obligations.

18 **MISO Transmission Expense**

19 **Q. Please describe the MISO transmission settlement process.**

20 A. The MISO transmission settlement process settles transmission customer charges and
21 credits based on use of MISO's transmission system and mandated non-competitive
22 ancillary services on a monthly calendar basis. The transmission expenses include
23 Network Integrated Transmission Service expense, costs of other transmission-related

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 purchases — including various MISO transmission-related Schedules (*i.e.*, Schedules 1, 2,
2 10, 10-FERC-METC, and 26), MISO administrative fees, and the Network upgrade
3 charges from MISO's Transmission Expansion Plan. Charges to transmission customers
4 are calculated based on the MISO tariff approved by FERC. In 2023, the Company
5 expensed \$474,019,019 for Transmission service as shown on Exhibit A-26 (RTS-1),
6 line 5. In 2023, the Company received \$4,397,640 for Schedule 2 Reactive service
7 supplied to MISO as shown on Exhibit A-26 (RTS-1), line 11.

8 **Q. Please describe Exhibit A-28 (RTS-3).**

9 A. Exhibit A-28 (RTS-3) is the separate reconciliation of the amounts forecasted pursuant to
10 MCL 460.6w(3)(b) against actual amounts as part of the State Reliability Mechanism as
11 described in the MPSC's November 21, 2017 Order in Case No. U-18239.

12 **Purchases and Sales with Third Parties in 2023**

13 **Q. Please describe Exhibit A-29 (RTS-4).**

14 A. Exhibit A-29 (RTS-4) summarizes the capacity and energy charges recoverable as PSCR
15 costs in accordance with prior Commission orders paid to each Purchased Power and
16 Cogeneration entity in 2023. Additionally, Exhibit A-29 (RTS-4), line 86, includes the
17 booked expense associated with payments invoiced or expected to be invoiced by the
18 BMPs for certain expenses as explained in my below testimony.

19 **Q. Please describe the Company's transactions with the BMPs.**

20 A. At the beginning of 2023, Consumers Energy had PPAs with six wood waste fueled electric
21 generation facilities, which are generally referred to as the BMPs. The six BMP's
22 performed and were paid in accordance with their respective PPAs. The amount of energy
23 delivered and payments booked are shown on Exhibit A-29 (RTS-4), lines 68 through 71

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 and 77 through 78. Additionally, the BMPs invoiced Consumers Energy for recovery of
2 certain operating costs under MCL 460.6a(9),(10) and (11) in accordance with a settlement
3 agreement approved by the Commission's August 11, 2009 Order in Case No. U-16048,
4 in excess of the variable energy payments they receive under their PPAs with the Company.
5 The Commission approved a new settlement agreement with revised BMP cost recovery
6 procedures in its July 7, 2023 Order in Case No. U-16048, which updated the BMP cost
7 recovery that will be sought for 2023.

8 **Q. What changes were approved by the Commission for BMP cost recovery in 2023?**

9 A. BMP cost recovery includes monthly capped BMP costs based on costs incurred at the time
10 that 2008 PA 286 was implemented and uncapped BMP costs associated with additional
11 expense required based on new regulations after 2008 PA 286 was implemented. The new
12 cost recovery procedures provide for the monthly capped BMP costs to be based on the
13 most recent Consumer Price Index adjustment of 26.305% approved by the Commission's
14 August 11, 2022 Order in Case No. U-20526 for all of 2023, beginning January 1, 2023,
15 thus resulting in a monthly cost recovery payment cap from Consumers to the BMPs of
16 \$1,263,050/month for all of 2023. Additionally, under the uncapped BMP cost recovery
17 procedures, the BMPs are allowed to submit NOx allowance costs incurred after January
18 2023 as part of the monthly BMP invoicing. Both the capped and uncapped BMP costs
19 are subject to the Commission's final order in the Company's PSCR reconciliation
20 proceedings.

RAYMOND T. SCAIFE
U-21258 REVISED DIRECT TESTIMONY

1 **2023 Interchange Delivered by Counterparties to MISO**

2 **Q. Please describe Exhibit A-30 (RTS-5).**

3 A. Exhibit A-30 (RTS-5) details the production delivered to the MISO energy market and
4 revenue received from each of the Company's Renewable Energy Purchase Agreement
5 ("REPA") generators for 2023. The REPAs applicable to these generators are designed to
6 limit the Company's exposure to market participation risks, while providing the economic
7 benefits to the Company's customers. The contracts require the generator owners to be the
8 Market Participant for their generators. The generator owner sells the energy produced
9 into the MISO energy market on behalf of the Company. The Company receives the
10 revenue for these sales at the Day Ahead locational marginal prices ("LMP"). Exhibit A-30
11 (RTS-5) details the revenue received from these suppliers. The totals from lines 11 and 22
12 of Exhibit A-30 (RTS-5), are reported on Exhibit A-26 (RTS-1), line 10, in columns (h)
13 and (b), respectively.

14 **Q. Do you believe that all the expenses and revenues summarized were prudently**
15 **incurred?**

16 A. Yes.

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

18 A. Yes, it does.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257))
for the 12 months ended December 31, 2023.)
_____)

Case No. U-21258

REBUTTAL TESTIMONY
OF
RAYMOND T. SCAIFE
ON BEHALF OF
CONSUMERS ENERGY COMPANY

January 2025

RAYMOND T. SCAIFE
U-21258 REBUTTAL TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Raymond T. Scaife, and my business address is 1945 West Parnall Road,
3 Jackson, Michigan 49201.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 as Manager of Wholesale Settlements of the Electric Supply Operations Contracts &
7 Settlements section of the Electric Supply Department.

8 **Q. Are you the same Raymond T. Scaife who submitted direct testimony in this case?**

9 A. Yes.

10 **Q. What is the purpose of your rebuttal testimony?**

11 A. The purpose of my rebuttal testimony is to rebut the direct testimony of Michigan Attorney
12 General Dana Nessel (“Attorney General”) witness Sebastian Coppola and explain why the
13 Michigan Public Service Commission (“MPSC” or the “Commission”) should reject his
14 recommendation for the disallowance of Variable Energy Payments and expenses
15 associated with the Company’s payments to the Biomass Merchant Plants (“BMPs”). My
16 rebuttal will also address the discovery and the joint filing between the Company and the
17 BMPs as a result of the extensive discovery.

18 **Q. Are you sponsoring exhibits with your rebuttal testimony?**

19 A. Yes, I am sponsoring the following exhibits:

20 Exhibit A-34 (RTS-6) TES Filer Booked Expense Reconciliation 2023;
21 and

22 Exhibit A-35 (RTS-7) Cadillac Booked Expense Reconciliation 2023.

RAYMOND T. SCAIFE
U-21258 REBUTTAL TESTIMONY

1 **REBUTTAL OF ATTORNEY GENERAL WITNESS COPPOLA**

2 **Q. Are you familiar with the testimony and exhibits regarding BMP expenses filed by**
3 **Mr. Coppola?**

4 A. Yes, the testimony and exhibits filed by Mr. Coppola reflect exhibits filed by the BMPs
5 and analysis conducted by Mr. Coppola to align with the differences featured in discovery
6 responses to the Attorney General which are also presented.

7 **Q. Do you agree with the assessment that Mr. Coppola makes on page 19, lines 9-12 to**
8 **disallow the amount of \$1,633,144.**

9 A. No, the Commission should not disallow the amount of \$1,633,144 because it was a valid
10 expense that the Company paid and recorded through the process of billing the Power
11 Purchase Agreements (“PPAs”) between the Company and the BMPs related to Energy
12 and Capacity. Mr. Coppola fails to appreciate that the BMPs represent six separate and
13 independent businesses, each of which may book the PPA payments they receive from
14 Consumers Energy somewhat differently in their accounting records than Consumers
15 Energy does in its accounting records. That difference does not support the conclusion that
16 the Variable Energy Expenses as presented in my exhibit are incorrect. The values shown
17 on Exhibit A-29 (RTS-4) match the invoices actually paid by Consumers Energy to the
18 BMPs, and the invoices match the contract. There were no PPA billing disputes in 2023
19 between the Company and the BMPs.

RAYMOND T. SCAIFE
U-21258 REBUTTAL TESTIMONY

1 **Q. On page 19 of his testimony, Attorney General witness Coppola criticized the**
2 **Company for not providing a “pertinent response” to his request for the Company to**
3 **reconcile the differences between Consumers Energy’s Variable Energy payments**
4 **shown on Exhibit A-29 (RTS-4) and the BMPs exhibits. Does Consumers Energy**
5 **always have the ability to reconcile the differences between the BMPs’ methods of**
6 **booking PPA payments and Consumers Energy’s method?**

7 A. No. Consumers Energy does not have any authority to require the BMPs to book the PPA
8 payments they receive from the Company in particular ways and does not control how the
9 BMPs present the data in exhibits. Sometimes the Company has sufficient information to
10 reconcile the difference, but it may not always have the information needed to do so. For
11 example, in this case, Consumers Energy has enough information about its transactions
12 with Cadillac Renewable Energy, LLC (“Cadillac”) to reconcile the difference between the
13 Variable Energy payments that Consumers Energy paid Cadillac and the figures that appear
14 in their Exhibit BMP-3. See Exhibit A-35 (RTS-7). In Exhibit A-29 (RTS-4), Consumers
15 Energy records the booking of Cadillac Variable Energy payments net of Mitigated Energy
16 that results from the reduced dispatch agreement between the Company and Cadillac.
17 Exhibit A-35 (RTS-7) shows the monthly amount of Mitigated Energy under the contracts
18 (line 13, column (d)) and the Delivered Energy Payments under the contract (line 13,
19 column (c)) separately, which reconciles the difference of \$441,052 between the
20 \$4,175,865 shown in Exhibit BMP-3, line 2, column O and the \$3,734,813 shown in
21 Exhibit A-29 (RTS-4), line 68, column (c).

22 However, in some cases, the Company does not have sufficient information to
23 conclusively determine the source of the differences in the way that the BMPs book the

RAYMOND T. SCAIFE
U-21258 REBUTTAL TESTIMONY

1 Company's PPA payments to them. In this case, for example, there is a significant
2 difference between what the Company paid to T.E.S. Filer City Station Limited Partnership
3 ("Filer City") in 2023 for Variable Energy of \$12,242,029, shown in Exhibit A-29 (RTS-4)
4 and what Exhibit BMP-7, line 2, column O reports as \$10,306,353. The Company believes
5 that the difference may be related to the \$1.6 million in monthly security payment that the
6 Company began to pay into escrow under the terms of a revised contract with Filer City
7 beginning in May 2023. Exhibit A-34 (RTS-6), line 13, column (d) shows those amounts.
8 But, Filer City has not provided Consumers Energy with any detailed information about
9 how it booked the amounts paid under the agreement that would allow the Company to
10 conclusively reconcile the amounts that Consumers Energy paid to the amounts shown in
11 Exhibit BMP-7. However, Exhibit A-34 (RTS-6) demonstrates that the \$12,242,029 was
12 paid to Filer City through monthly billing of the PPA contract in the amounts shown in
13 column (c). Consumers Energy is entitled to recover the amounts that it paid to the BMPs
14 regardless of how they book those amounts.

15 Furthermore, customers are indifferent to the allocation of capped BMP payments
16 when the BMPs' actual costs exceed the cap, so deviations (e.g. Filer City's numbers) in
17 the shortfall calculations have no impact on customers. The purpose of the BMP payment
18 process separate from the PPA is to compensate the BMPs for Other Expenses allowed
19 under MCL 460.6a(8) up to a \$1,263,050 monthly cap adjusted for inflation. As long as
20 the BMPs' costs exceed the cap, which they do for the 2023 Power Supply Cost Recovery
21 ("PSCR") Plan year, it doesn't matter if the BMPs' accounting methodologies attribute less
22 to the PPA payments and more to the statutory recovery (or vice versa). Either way, the
23 total payments to the BMPs will equal the cap amount. The total amount that Consumers

RAYMOND T. SCAIFE
U-21258 REBUTTAL TESTIMONY

1 Energy and its customers pay is the same. Consumers Energy is entitled to recover the
2 amounts that it actually pays to the BMPs under its PPAs and the provisions of the statute.

3 The Attorney General's proposed disallowance would violate that right.

4 **Q. Do you agree with the amount payable to the BMPs Mr. Coppola gives on page 21,
5 line 21?**

6 A. The Company agrees with the BMPs' expenses as shown on Exhibit BMP-2, line 8. After
7 discussions with the BMPs, the Company accepted the BMPs' statement of audited
8 expenses, which were not featured in the Company's payment process to the BMPs. See
9 Exhibit AG-6, pages 8-10. The joint supplemental discovery response included in Exhibit
10 AG-6 states: "The differences in the shortfall amounts in the Company's attachment to
11 Response No. 107 and the shortfall amounts in the BMP Exhibits BMP-1 & BMP-2 is the
12 result of the fact that the Company's amounts are derived from the BMPs' monthly
13 invoices which are not audited amounts whereas the shortfall amounts in BMP Exhibits
14 BMP-1 & BMP-2 are derived from audited records." These audited records feature
15 expenses not shared with the Company until the reconciliation process. However, because
16 the BMPs' actual costs for 2023 significantly exceeded the statutory cap, those differences
17 have no impact on the amount the BMPs are eligible to recover in this case. Both the
18 BMPs' accounting and the Company's accounting agree on that recoverable amount.

19 **Q. Do you agree with recommendation by Mr. Coppola to reconcile any differences prior
20 to filing of exhibits?**

21 A. As a result of our discussion regarding differences in the filings during the course of this
22 case, the Company and the BMPs are working to implement a joint process to limit
23 differences in future PSCR filings. However, since there was no dispute between the

RAYMOND T. SCAIFE
U-21258 REBUTTAL TESTIMONY

1 parties in the billing process, that is still the appropriate basis for the Variable Energy
2 expense. Nevertheless, the Company agrees that a coordination meeting prior to the filing
3 of exhibits and the discovery process could simplify the process for all.

4 **Q. Does this conclude your rebuttal testimony?**

5 A. Yes, it does.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

JUDGE WALLACE: Is there any objection to the admission of Revised Exhibit A-26, A-27, A-28, Revised Exhibit A-29, Exhibit A-30, and Exhibits A-34 and A-35?

Hearing none, those exhibits are admitted.

MR. KEIMACH: Thank you, Your Honor.

Next we have the direct testimony of Beth A. Skowronski which consists of a cover page and nine pages of questions and answers for a total of ten pages. Ms. Skowronski also submitted rebuttal testimony consisting of a cover page and three pages of questions and answers.

Ms. Skowronski also submitted, sponsored, Exhibits A-31 and A-32. That's it.

JUDGE WALLACE: All right. Is there any objection to binding in the direct and rebuttal testimony of Ms. Skowronski?

Hearing none, the testimony is bound in.

(Testimony bound in)

- - -

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
BETH A. SKOWRONSKI
ON BEHALF OF
CONSUMERS ENERGY COMPANY

March 2024

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Beth A. Skowronski, and my business address is 1945 West Parnall Road,
3 Jackson, Michigan 49201.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 as the Manager of Supply Contracts in the Contracts and Settlements Department.

7 **QUALIFICATIONS**

8 **Q. Please describe your educational background and work experience.**

9 A. I received a Bachelor of Business Administration degree from Siena Heights University in
10 2013. I also hold a State of Michigan Real Estate Salesperson’s license. I started my career
11 at Consumers Energy in 2006 in Customer Service in various roles with increasing
12 responsibilities in Revenue Recovery, Real Estate, and Distribution Operations. In 2015,
13 I accepted a position in the Electric Grid Integration Contract and Settlements Department,
14 where my direct responsibilities included administering Power Purchase Agreements
15 (“PPAs”) and issuing solicitations for energy and capacity. I started in my current role at
16 Consumers Energy as the Manager of Supply Contracts in the Electric Supply Operations
17 Contract and Settlements Department in 2023.

18 **Q. What are your responsibilities as Manager of Supply Contracts?**

19 A. My responsibilities include implementing the Company’s Clean Energy Plan including:
20 (1) the development of annual competitive solicitations for the procurement of wholesale
21 electric generation; (2) negotiations and development of PPAs; and (3) implementation and
22 compliance with the Public Utility Regulatory Policies Act of 1978 (“PURPA”). I am also

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

1 responsible for managing the procurement of supply for the Company's Voluntary Green
2 Pricing ("VGP") Programs.

3 **Q. Have you previously provided testimony before the Michigan Public Service
4 Commission ("MPSC" or the "Commission")?**

5 A. Yes. I provided testimony in the following cases:

- 6 • MPSC Case No. U-20496 (direct), the Company's request for approval of
7 Amendment No. 3 of the National Energy of Lincoln PPA;
- 8 • MPSC Case No. U-20165 (direct), the Company's multiple requests for approval
9 of new solar PPAs and Build Transfer Agreements ("BTAs") obtained through
10 competitive solicitations;
- 11 • MPSC Case No. U-20165 (direct), the Company's requests for approval to reset the
12 Company's PURPA avoided cost rates and for approval of new solar PPAs obtained
13 through a competitive solicitation;
- 14 • MPSC Case No. U-20604 (direct), the Company's request for approval of new
15 PPAs based on the Company's avoided costs;
- 16 • MPSC Case No. U-20604 (direct), the Company's request for approval of
17 amendments to PPAs;
- 18 • MPSC Case No. U-20833 (direct), the Company's request for approval of new
19 PPAs based on the Company's PURPA full avoided cost rates; and
- 20 • MPSC Case No. U-18425 (direct), the Company's request for approval of new
21 PPAs based on the Company's PURPA full avoided cost rates.

22 **PURPOSE OF DIRECT TESTIMONY**

23 **Q. What is the purpose of your direct testimony in this proceeding?**

24 A. My direct testimony will address: (i) the Independent Administrator expense associated
25 with the Company's annual Integrated Resource Plan ("IRP") competitive solicitations;
26 (ii) PPAs executed, terminated, or otherwise modified in 2023; (iii) short-term capacity
27 purchase expense; and (iv) the Financial Compensation Mechanism ("FCM") forecast.

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

1 **Q. Are you sponsoring any exhibits?**

2 A. Yes. I am sponsoring the following exhibit:

3 Exhibit A-31 (BAS-1) Purchased Power Contract Rates and MPSC
4 Approval Orders; and

5 Exhibit A-32 (BAS -2) Financial Compensation Mechanism Forecast.

6 **Q. Were these exhibits created by you or under your supervision?**

7 A. Yes.

8 **INDEPENDENT ADMINISTRATOR**

9 **Q. Are you familiar with the Company's competitive solicitations in support of its IRP?**

10 A. Yes. I manage the team which is responsible for the Company's competitive procurement
11 of additional supply-side generation resources including the solar assets in the Proposed
12 Course of Action ("PCA") approved in the Company's IRP settlement agreements in Case
13 Nos. U-20165 and U-21090. My team is also responsible for managing the service
14 agreement and interaction with the Independent Administrator that facilitates the
15 solicitation process.

16 **Q. Please explain the expense associated with the Independent Administrator.**

17 A. The details for administering the competitive solicitations are included in the IRP
18 settlement agreements in Case Nos. U-20165 and U-21090. Paragraph 8(b) of the IRP
19 settlement agreement in Case No. U-21090 requires the use of an independent third party
20 to administer competitive bids related to the PCA approved in the IRP. The Company used
21 an Independent Administrator to conduct the solicitations, complete the proposal
22 evaluations, and provide a blind ranking of projects to the Company for selection. The
23 Company also used an Independent Administrator to administer the One-Time solicitation,
24 as detailed in the Commission's June 23, 2022 Order approving the parties' settlement

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

1 agreement in Case No. U-21090. The Company has included the costs associated with the
2 service agreements with the Independent Administrators in this Power Supply Cost
3 Recovery (“PSCR”) Reconciliation on Exhibit A-26 (RTS-1), line 3, sponsored by
4 Company witness Raymond T. Scaife. Recovery of this Independent Administrator
5 expense through the PSCR was approved by the Commission’s December 17, 2020 Order
6 in Case No. U-20697.

7 **PPAs**

8 **Q. Have you prepared a summary of the purchased power contract rates and the MPSC**
9 **approval Orders for facilities that were in operation or for which the Company**
10 **booked expenses during 2023?**

11 A. Yes. Exhibit A-31 (BAS-1) summarizes the capability, energy, and capacity rates for each
12 of the Company’s purchased power contracts along with the MPSC orders which approved
13 the capacity and energy rates for each facility.

14 **Q. Did any PPAs terminate in 2023?**

15 A. Yes.

- 16 • The Energy Purchase Agreement (“EPA”) with Grand Valley State University was
17 terminated on March 22, 2023;
- 18 • The Experimental Advanced Renewable Program (“EARP”) agreement with
19 Green Meadow Farms, Inc was terminated on April 13, 2023;
- 20 • The PPA with Heathlands Solar, LLC was terminated on June 30, 2023;
- 21 • The PPA with Arthur Solar Farm, LLC, were terminated on July 21, 2023;
- 22 • The PPA with Golden Solar Farm, LLC was terminated on July 21, 2023;
- 23 • The PPA with Robert Swift Solar Farm, LLC was terminated on July 21, 2023;
- 24 • The EARP agreement with Brook View Dairy, LLC was terminated on July 31,
25 2023;

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

- 1 • The EARP agreement with Scenic View Dairy, LLC was terminated on July 31,
2 2023;
- 3 • The PPA with Great Lakes Tissue Company for the Cheboygan Hydro Plant was
4 terminated on November 28, 2023; and
- 5 • The PPA with Crystal Flash Renewable Energy, LLC dba Bay Windpower I,
6 Mackinaw City was terminated on November 30, 2023.

7 **Q. Did the Company receive any Earnest Money Deposits or Early Termination Security**
8 **withholdings as a result of terminated PPAs?**

9 A. Yes. Exhibit A-26 (RTS-1), line 3, sponsored by Company witness Raymond T. Scaife
10 includes \$2,011,360 recovered from Earnest Money Deposits associated with the
11 termination of the PPA's with Heathlands Solar, LLC, Tart Solar, LLC, Arthur Solar Farm,
12 LLC, Golden Solar Farm, LLC, and Robert Swift Solar Farm, LLC and Early Termination
13 Security withholdings associated with termination of the EARP agreements with Brook
14 View Dairy, LLC and Scenic View Dairy, LLC.

15 **Q. Did the Company execute any new PPAs in 2023?**

16 A. Yes.

- 17 • A new EPA dated July 15, 2022 was executed with Thomas Erickson on
18 February 2, 2023;
- 19 • A new EPA dated December 17, 2022 was executed with Raymond Isakson on
20 February 2, 2023;
- 21 • A new PPA dated September 7, 2022 was executed with Superior Sales, Inc. on
22 April 21, 2023. The PPA was approved by the Commission's June 22, 2023 Order
23 in Case No. U-20604;
- 24 • A new EPA dated March 1, 2023 was executed with Autocam Medical on May 2,
25 2023;
- 26 • A new EPA dated February 24, 2023 was executed with Gernaat Dairy for output
27 at Mulder Road on May 16, 2023;
- 28 • A new EPA dated February 24, 2023 was executed with Gernaat Dairy for output
29 at Meyering Road on May 16, 2023;

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

- 1 • A new EPA dated February 24, 2023 was executed with Brian Ryzebol Dairy, LLC
2 on May 16, 2023;
- 3 • A new PPA dated June 1, 2023 was executed with STS Hydropower, LLC for the
4 output of Ada Hydro Plant on May 25, 2023. The PPA was approved by the
5 Commission's October 24, 2023 Order in Case No. U-18425;
- 6 • A new EPA dated April 25, 2023 was executed with Alan Woelfel on June 1, 2023;
- 7 • A new EPA dated August 8, 2023 was executed with Prairie View Dairy, LLC on
8 September 5, 2023;
- 9 • A new EPA dated May 1, 2023 was executed with Cascade Engineering, Inc on
10 September 14, 2023;
- 11 • A new EPA dated August 1, 2023 was executed with Brook View Dairy on
12 November 7, 2023;
- 13 • A new EPA dated August 1, 2023 was executed with Scenic View Dairy on
14 November 7, 2023;
- 15 • A new REPA dated November 10, 2023 was executed with Freshwater Solar, LLC.
16 on November 17, 2023. The REPA was filed for Commission approval on
17 January 12, 2024 in Case No. U-21090;
- 18 • A new EPA dated April 12, 2023 was executed with Joe Kittel for output at Rusticz
19 Solar on December 4, 2023; and
- 20 • A new PPA dated December 19, 2023 was executed with Tibbits Energy Storage,
21 LLC on December 15, 2023. The PPA was filed for Commission approval on
22 January 12, 2024 in Case No. U-21090.

23 **Q. Did the Company execute any PPA amendments in 2023?**

24 A. Yes.

- 25 • Amendment 3 dated February 28, 2023, to the April 30, 1987 PPA, was executed
26 with T.E.S. Filer City Station Limited Partnership. The amendment was approved
27 by the Commission's July 7, 2023 Order in Case No. U-21407;
- 28 • Amendment 7 dated May 11, 2023, to the February 23, 1987 PPA, was executed
29 with Cadillac Renewable Energy, LLC. The amendment was filed for Commission
30 approval on June 28, 2023 in Case No. U-21459; and
- 31 • Amendment 2 dated September 29, 2023, to the October 15, 2021 PPA, was
32 executed with Jackson County Solar, LLC. The amendment was approved by the
33 Commission's December 21, 2023 Order in Case No. U-20165.

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

1 **Short-term Capacity Purchase**

2 **Q. Did Consumers Energy incur any expense in 2023 for Zonal Resource Credits**
3 **(“ZRCs”) purchased through a reverse capacity auction or something similar to meet**
4 **its Planning Reserve Margin Requirement for Planning Year 2022/2023 or**
5 **2023/2024?**

6 A. The Company did not incur any expense in 2023 for purchase of ZRCs for Planning Year
7 2022/2023. The Company has included the costs associated with the purchase of 212 ZRCs
8 for Planning Year 2023/2024 as shown on Exhibit A-26 (RTS-1), line 6, sponsored by
9 Company witness Scaife. Company witness Joshua W. Hahn further describes these
10 transactions in his testimony.

11 **Q. Has Consumers Energy entered into any other contracts for which the Company has**
12 **booked energy, capacity, or expense in 2023 for which it will seek approval but have**
13 **not yet been approved by the Commission?**

14 A. No.

15 **Financial Compensation Mechanism**

16 **Q. Please describe Exhibit A-32 (BAS-2).**

17 A. Exhibit A-32 (BAS-2) shows the annual FCM forecast associated with PPA payments from
18 2024 through 2026.

19 **Q. How is the FCM calculated?**

20 A. The FCM is equal to the product of PPA payments multiplied by the Company’s weighted
21 average cost of capital (“WACC”) at the time of PPA execution for the entire term of the
22 contract. The FCM is also capped in accordance with the settlement agreements in Case
23 Nos. U-20165 and U-21090.

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

1 **Q. How is the FCM forecast calculated?**

2 A. The FCM forecast includes existing and forecasted PPAs that have been executed since
3 January 1, 2019. FCM for each PPA is calculated as the lesser of: (i) the annual PPA cost
4 (Variable Cost and Fixed Cost less Administrative Cost) multiplied by WACC; and (ii) the
5 annual FCM cap (MWh multiplied by FCM Cap in \$/MWh) multiplied by WACC. For
6 forecasted PPAs, the most recently approved WACC is used and an FCM Cap is assumed
7 based on expected PPA execution dates.

8 **Q. How does the FCM forecast support the FCM surcharge calculation?**

9 A. As shown in Exhibit A-2 (LMC-1), the annual FCM forecast supports the calculation to
10 determine the amount that needs to be collected through the new FCM surcharge.
11 Company witness Laura M. Connolly describes the calculation for the FCM surcharge that
12 will be implemented in January 2026 in detail.

13 **Conclusion**

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

15 A. My direct testimony has addressed Independent Administrator costs incurred in connection
16 with the Company's annual IRP competitive solicitation process and the One-Time
17 solicitation as detailed in the IRP settlement agreement in Case No. U-21090. My direct
18 testimony has also identified the parties with whom the Company has long-term supply
19 contracts and the amount of power received from each party. For those contracts for which
20 Commission approval is required, I have identified the case in which approval was
21 received. My direct testimony has also addressed costs associated with short term capacity
22 purchases and describes the FCM.

BETH A. SKOWRONSKI
U-21258 DIRECT TESTIMONY

1 | **Q. Does this complete your direct testimony?**

2 | A. Yes, it does.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257))
for the 12 months ended December 31, 2023.)
_____)

Case No. U-21258

REBUTTAL TESTIMONY
OF
BETH A. SKOWRONSKI
ON BEHALF OF
CONSUMERS ENERGY COMPANY

January 2025

BETH A. SKOWRONSKI
U-21258 REBUTTAL TESTIMONY

1 **Q. Please state your name and business address.**

2 A. My name is Beth A. Skowronski, and my business address is 1945 West Parnall Road,
3 Jackson, MI 49201.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Consumers Energy Company (“Consumers Energy” or the “Company”)
6 as the Manager of Supply Contracts in the Contracts and Settlements Department.

7 **Q. Are you the same Beth A. Skowronski who previously presented direct testimony in**
8 **this case?**

9 A. Yes.

10 **PURPOSE OF REBUTTAL TESTIMONY**

11 **Q. What is the purpose of your rebuttal testimony?**

12 A. The purpose of my rebuttal testimony is to provide a rebuttal response to the Michigan
13 Public Service Commission (“MPSC” or the “Commission”) Staff (“Staff”) witness
14 Robert F. Nichols II’s direct testimony in Case No. U-21258 pertaining to the Power
15 Purchase Agreements (“PPAs”) with Otsego Paper Inc. (“Otsego”), Autocam Medical and
16 Prairie View Dairy.

17 **Q. Have you prepared any exhibits in conjunction with your rebuttal testimony?**

18 A. No.

BETH A. SKOWRONSKI
U-21258 REBUTTAL TESTIMONY

1 **REBUTTAL OF STAFF WITNESS NICHOLS**

2 **Q. Please explain in detail why the Otsego, Autocam Medical and Prairie View Dairy**
3 **PPAs are included in this case and are expressly eligible for the Financial**
4 **Compensation Mechanism (“FCM”).**

5 A. The PPAs are included in this case because they are PPAs that incurred costs in 2023. The
6 Commission has approved the Company’s cost recovery of the Otsego PPA in each annual
7 Power Supply Cost Recovery (“PSCR”) reconciliation case since the first year in which
8 deliveries began in the Company’s 2019 PSCR reconciliation case in Case No. U-20220.
9 The Otsego PPA was included in the Company’s 2023 PSCR Plan in Case No. U-21257
10 which was approved by the Commission’s August 30, 2023 Order. The PPAs are energy
11 only agreements which allows the Company to purchase energy from the Resource at the
12 Midcontinent Independent System Operator, Inc.’s (“MISO”) real-time locational marginal
13 prices less an administration fee per Section C11.1 Self Generation in the Company’s Rate
14 Book for Electric Service and the terms of the PPA. The PPAs are registered with the
15 Federal Energy Regulatory Commission (“FERC”) as a Qualifying cogeneration facility
16 under the Public Utility Regulatory Policies Act of 1978 (“PURPA”).

17 The PPAs are eligible for the FCM construct approved in the Company’s 2018
18 Integrated Resource Plan (“IRP”), Case No. U-20165, in the Commission’s Order dated
19 June 7, 2019. The settlement agreement approved in that Order stated “The parties agree
20 that the Company shall receive and recover in general electric rates an FCM on all new
21 PPAs approved by the Commission on or after January 1, 2019, including PURPA
22 contracts.” The Otsego PPA meets all these requirements to be eligible for the FCM since:
23 (i) it was executed on July 1, 2019; (ii) it is with a PURPA Qualifying Facility; (iii) it was

BETH A. SKOWRONSKI
U-21258 REBUTTAL TESTIMONY

1 entered into in accordance with the Company's Commission-approved Rate Book for
2 Electric Service; and (iv) its costs were approved by the Commission in the Company's
3 2023 PSCR Plan case.

4 **Q. Does this conclude your rebuttal testimony?**

5 A. Yes.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Exhibits A-31 and A-32?

3 Hearing none, those exhibits are
4 admitted.

5 MR. KEIMACH: Thank you, Your Honor.
6 The last for the Company, we have the hearing room
7 exhibits which are Exhibits A-36 and A-37.

8 JUDGE WALLACE: Okay. Is there any
9 objection to the admission of Exhibits A-36 or A-37?

10 All right. Hearing none, those
11 exhibits are admitted.

12 MR. KEIMACH: Thank you, Your Honor.

13 JUDGE WALLACE: Thank you. Let's see.
14 Next we'll go on to you, Mr. Waters.

15 MR. WATERS: Thank you, Your Honor.

16 Pursuant to an agreement of the
17 parties, I move that the following testimony be
18 bound into the record without cross-examination,
19 and that Exhibits BMP-1 through BMP-24 inclusive be
20 admitted into evidence.

21 The testimony includes the direct
22 testimony of Ryan Putvin consisting of 18 pages of
23 questions and answers; the direct testimony of
24 Thomas A. Clift consisting of 28 pages of questions
25 and answers; the direct testimony of Edward A.

1 Going, Sr., consisting of 23 pages of questions and
2 answers; the direct testimony of Robert Joe Tondu
3 consisting of 41 pages of questions and answers;
4 and the direct testimony of Don Adams consisting of
5 18 pages of questions and answers.

6 I have provided copies of the
7 foregoing testimony and exhibits to the court
8 reporter.

9 JUDGE WALLACE: All right. Thank you,
10 Mr. Waters.

11 Is there any objection to binding in
12 the direct testimony of Mr. Putvin, Clift, Going,
13 Tondu, or Adams?

14 Hearing none, the testimony is bound
15 in.

16 (Testimony bound in)

17 - - -

18
19
20
21
22
23
24
25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for approval to implement a power cost)
recovery plan for the 12-months ending)
December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
RYAN PUTVIN
ON BEHALF OF
CADILLAC RENEWABLE ENERGY, LLC

INTRODUCTION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ryan Putvin and my business address is 1525 Miltner St., Cadillac, MI 49601.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed by Atlantic Power Corporation as the Plant Manager of the Cadillac Renewable Energy, LLC generating plant. (also “Cadillac”)

Q. PLEASE DESCRIBE ATLANTIC POWER CORPORATION?

A. Atlantic Power Corporation owns and operates power plants throughout the U.S. and Canada, including the Cadillac plant and other biomass plants and electric generating assets. Atlantic Power Corporation has a demonstrated record of plant improvement, heat rate efficiency, reliability, availability and safety.

Q. ON WHOSE BEHALF ARE YOU SUBMITTING YOUR TESTIMONY IN THIS PROCEEDING?

A. Cadillac Renewable Energy, LLC.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION?

A. No.

1 **Q. PLEASE BRIEFLY DESCRIBE THE CADILLAC RENEWABLE ENERGY**
2 **PLANT.**

3 A. Cadillac Renewable Energy owns and operates a merchant plant in Cadillac, Michigan
4 which is a Qualifying Facility under PURPA. It consists of electric generating equipment
5 and associated facilities with a capacity of 38 MW.

6

7 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

8 A. I graduated from Kearsley high school in Flint, Michigan in 2001.

9

10 **Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE AND JOB**
11 **RESPONSIBILITIES.**

12 A. I worked for Biewer Sawmill in McBain/Lake City from November 2006 until September
13 2014 when I began working at Cadillac Renewable Energy. I have significant experience
14 in heavy equipment operations, operations management, operations and maintenance
15 management, budgeting, planning, and emissions reporting to both Michigan EGLE and
16 the U.S. EPA.

17 As Plant Manager for the Cadillac plant, I am ultimately responsible for all business,
18 operations and maintenance, and fuel procurement activities at the plant and am familiar
19 with all of its fuel purchasing practices. My responsibilities include ensuring that the
20 facility has an adequate supply of fuel to operate the boilers reliably and efficiently.

1 **Q. ARE YOU AWARE OF CADILLAC'S 2023 FUEL PROCUREMENT**
2 **ACTIVITIES?**

3 A. Yes, I have personal knowledge of Cadillac's 2023 fuel procurement activities and, as
4 explained below, believe that its activities and costs were reasonable and prudent.

5
6 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

7 A. Yes. I am sponsoring Exhibits BMP-3, BMP-17, BMP-23 & BMP-24 and co-sponsoring
8 Exhibits BMP-1, BMP-2.

9
10 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**
11 **SUPERVISION?**

12 A. Yes as to the portions of Exhibits BMP-1 and BMP-2 relating to Cadillac, Exhibits BMP-
13 3 and the list of maintenance costs of \$25,000 or greater in BMP-17. I have also reviewed
14 and agree with the remainder of BMP-1 and BMP-2. The accountants' letter in BMP-17
15 was prepared at my request by our accountants in accordance with the settlement agreement
16 in MPSC Case No. U-17918-R.

17

18

PURPOSE OF TESTIMONY

19 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

20 A. The purpose of my testimony is to describe Cadillac Renewable Energy's actual fuel and
21 variable operation and maintenance costs for the period from January 1, 2023 through
22 December 31, 2023 and to demonstrate that those costs were reasonably and prudently
23 incurred. I will also testify as to the amount that Consumers Energy Company paid Cadillac

1 for fuel and variable operation and maintenance costs incurred during that time period. My
2 testimony provides factual support for Cadillac's request to recover costs under Public Act
3 286 of 2008, which permits recovery of costs that exceed the amount that a merchant plant
4 is paid under a contract with an eligible utility.

5
6 **ELIGIBILITY FOR COST RECOVERY**

7 **Q. IS THERE A POWER PURCHASE AGREEMENT ("PPA") BETWEEN**
8 **CADILLAC RENEWABLE ENERGY, LLC AND CONSUMERS ENERGY**
9 **COMPANY?**

10 A. Yes. A complete copy of the agreement, as amended, has been previously provided to the
11 MPSC. My understanding is that it was provided to the parties in both Consumers Energy's
12 2009 and 2010 PSCR Reconciliation cases, MPSC Case Nos. U-15675-R and U-16045-R.

13
14 **Q. HAVE THERE BEEN ANY CHANGES TO THE PPA SINCE IT WAS ENTERED**
15 **INTO THE RECORD OF THOSE PROCEEDINGS?**

16 A. No.

17
18 **Q. WAS CADILLAC RENEWABLE ENERGY, LLC'S PPA ENTERED ON OR**
19 **BEFORE JANUARY 1, 2008?**

20 A. Yes.

21
22 **Q. DOES THE CONTRACT HAVE AN INITIAL TERM OF 20 YEARS OR MORE?**

23 A. Yes.

1 **Q. DOES THE PPA PROVIDE FOR CADILLAC RENEWABLE ENERGY TO SELL**
2 **ELECTRICITY TO AN ELECTRIC UTILITY WHOSE RATES ARE**
3 **REGULATED BY THE COMMISSION WITH 1,000,000 OR MORE RETAIL**
4 **CUSTOMERS IN THIS STATE?**

5 A. Yes, Consumers Energy Company.
6

7 **Q. AT ANY TIME PRIOR TO JANUARY 1, 2008, DID CADILLAC RENEWABLE**
8 **ENERGY GENERATE ELECTRICITY IN WHOLE OR IN PART FROM WOOD**
9 **OR SOLID WOOD WASTES AND SELL THAT ELECTRICITY TO**
10 **CONSUMERS ENERGY COMPANY?**

11 A. Yes.
12

13 **Q. DOES CADILLAC RENEWABLE ENERGY STILL GENERATE ELECTRICITY**
14 **IN WHOLE OR IN PART FROM WOOD OR SOLID WOOD WASTES AND SELL**
15 **THAT ELECTRICITY TO CONSUMERS ENERGY COMPANY?**

16 A. Yes.
17

18 **Q. WITH RESPECT TO ENERGY DELIVERED BETWEEN JANUARY 1, 2023 AND**
19 **DECEMBER 31, 2023, DID CONSUMERS ENERGY COMPANY MAKE**
20 **PAYMENTS TO CADILLAC RENEWABLE ENERGY UNDER THE TERMS OF**
21 **THE PPA?**

22 A. Yes.

1 **Q. DID PORTIONS OF CONSUMERS ENERGY'S PAYMENTS TO CADILLAC**
2 **INCLUDE PAYMENTS FOR FUEL AND VARIABLE OPERATION AND**
3 **MAINTENANCE ("O & M") COSTS?**

4 A. Yes.

5
6 **Q. DID THE AMOUNT OF CADILLAC RENEWABLE ENERGY'S ACTUAL FUEL**
7 **AND VARIABLE O & M COSTS EXCEED THE AMOUNT THAT CONSUMERS**
8 **ENERGY PAID FOR THOSE COSTS UNDER ITS PPA?**

9 A. Yes. Please see Exhibits BMP-1, BMP-2 and BMP-3.

10

11 **Q. IS CADILLAC RENEWABLE ENERGY, LLC A LANDFILL GAS PLANT, A**
12 **HYDRO PLANT, OR A MUNICIPAL SOLID WASTE PLANT?**

13 A. No.

14

15 **Q. IS CADILLAC RENEWABLE ENERGY, LLC ENGAGED IN LITIGATION**
16 **AGAINST AN ELECTRIC UTILITY SEEKING HIGHER PAYMENTS FOR**
17 **POWER DELIVERED PURSUANT TO A CONTRACT?**

18 A. No.

COST DATA

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. WHAT AMOUNT HAS CADILLAC RENEWABLE ENERGY IDENTIFIED ON EXHIBIT BMP-3 AS ITS ACTUAL FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED FOR SALES OF ELECTRIC GENERATION TO CONSUMERS ENERGY COMPANY DURING 2023?

A. Cadillac Renewable Energy has identified \$10,987,157 in actual fuel and variable operation and maintenance costs for sales to Consumers Energy Company in 2023.

Q. DOES THIS AMOUNT INCLUDE ALL OF THE PLANT'S FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED FOR SALES TO CONSUMERS ENERGY COMPANY IN 2023?

A. No. For simplicity, Cadillac has decided to seek recovery of only certain variable operation and maintenance costs during 2023. As discussed in more detail below, we are seeking recovery for only specific variable operation and maintenance cost groups. Cadillac incurs variable operation and maintenance costs beyond the groups listed.

Q. PLEASE STATE THE AMOUNT THAT CONSUMERS ENERGY PAID CADILLAC PURSUANT TO THE PPA BETWEEN CADILLAC AND CONSUMERS FOR FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED DURING 2023.

A. Under the terms of our PPA, Consumers Energy paid our merchant plant a total of \$4,175,866 for actual fuel and variable operation and maintenance costs incurred for 2023.

1 **Q. WAS THERE A SHORTFALL BETWEEN THE FUEL AND VARIABLE O & M**
2 **COSTS THAT CADILLAC INCURRED FOR SALES TO CONSUMERS IN 2023**
3 **AND THE PAYMENTS THAT CADILLAC RECEIVED FROM CONSUMERS**
4 **FOR THOSE COSTS UNDER ITS PPA?**

5 A. Yes, the total shortfall is \$6,811,291.

6
7 **Q. DO YOU HAVE DOCUMENTATION TO SUPPORT THE COST AND PAYMENT**
8 **FIGURES THAT YOU HAVE PROVIDED IN RESPONSE TO THE PRIOR FOUR**
9 **QUESTIONS?**

10 A. Yes, the cost figures and Consumers Energy's payments to our merchant plant for actual
11 fuel and variable operation and maintenance costs are detailed on Exhibit BMP-3.

12
13 **Q. WHAT AMOUNT OF CAPPED COSTS IS CADILLAC RENEWABLE ENERGY,**
14 **LLC SEEKING TO RECOVER IN THIS PROCEEDING?**

15 A. As set forth in Exhibit BMP-1, Cadillac Renewable Energy is seeking to recover
16 \$3,758,416 of the shortfall in fuel and variable O & M costs. This amount could change in
17 the unlikely event that an adjustment is made to the fuel and variable operation and
18 maintenance expense which any other Biomass Merchant Plant is seeking to recover in this
19 proceeding with respect to a month in which the collective payments to the Biomass
20 Merchant Plants exceed the statutory cap on cost recovery. If the Commission were to
21 make such an adjustment, the capped amount would be reallocated among all of the
22 Biomass Merchant Plants. The result of this reallocation process would be that the amount
23 that Cadillac Renewable Energy is seeking to recover in this proceeding would change to

1 accurately reflect its proportionate share of the capped amount. Cadillac also seeks to
2 recover \$567,500 in uncapped CSAPR NOx allowance costs.

3
4 **Q. THE MPSC'S AUGUST 11, 2009 ORDER IN CASE NO. U-16048 ALLOWS THE**
5 **BMPS TO SUBMIT MONTHLY INVOICES TO CONSUMERS FOR THE**
6 **AMOUNTS RECOVERABLE UNDER PA 286. THE SAME ORDER REQUIRES**
7 **CONSUMERS TO MAKE INTERIM MONTHLY PAYMENTS TO THE BMPs TO**
8 **COVER 80% OF THE INVOICED AMOUNTS. HAS CONSUMERS MADE**
9 **PARTIAL PAYMENTS TO CADILLAC IN 2023?**

10 A. Yes. As reflected in Exhibits BMP-1, BMP-2 and BMP-3, Consumers Energy has paid
11 Cadillac \$2,660,055 of the \$3,758,416 in capped expenses that Cadillac seeks to recover
12 in this proceeding, leaving a balance due to Cadillac of \$1,098,361 for capped fuel and
13 variable O & M costs.

14
15 **Q. ARE YOU SEEKING RECOVERY OF ANY ACTUAL FUEL AND VARIABLE**
16 **OPERATION AND MAINTENANCE COSTS THAT WERE INCURRED DUE TO**
17 **CHANGES IN FEDERAL OR STATE ENVIRONMENTAL LAWS OR**
18 **REGULATIONS THAT WERE IMPLEMENTED AFTER OCTOBER 6, 2008?**

19 A. Yes. Cadillac seeks to recover \$567,500 of uncapped NOx allowance costs.

20
21 **Q. WHAT IS THE TOTAL AMOUNT OF CAPPED AND UNCAPPED COSTS THAT**
22 **CONSUMERS STILL OWES CADILLAC?**

23 A. \$1,665,861.

1 **Q. ARE CADILLAC RENEWABLE ENERGY, LLC'S FUEL AND VARIABLE**
2 **OPERATION AND MAINTENANCE COST RECORDS AUDITED?**

3 A. Yes. Our plant's 2023 records were audited by KPMG, LLP. No material misstatements
4 were identified in our financial records. The audit included a review of fuel and variable
5 operation and maintenance costs, and revenues.

6

7 **Q. THE SETTLEMENT AGREEMENT IN CONSUMERS' 2016 PSCR**
8 **RECONCILIATION REQUIRED YOU TO: (i) PREPARE A LIST OF ALL**
9 **EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING COST**
10 **RECOVERY; (ii) IDENTIFY WHICH, IF ANY, OF THE EXPENSES ARE**
11 **RELATED TO ONE ANOTHER AND (iii) HAVE AN ACCOUNTANT CERTIFY**
12 **THAT ANY EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING**
13 **COST RECOVERY ARE PROPERLY CHARACTERIZED AS CURRENT**
14 **EXPENSES AND NOT AS CAPITAL EXPENDITURES. HAVE YOU DONE SO?**

15 A. Yes. I have prepared that list and it is attached as Exhibit BMP-17. That list also identifies
16 which of the expenses are related. Additionally, KPMG, LLP has audited our books and
17 confirmed the company's characterization of the expenses of \$25,000 or greater and issued
18 the attached certification. Exhibit BMP-17.

1 **FUEL AND VARIABLE OPERATION & MAINTENANCE COSTS**

2 **Q. WHAT FUELS DID CADILLAC USE TO GENERATE ELECTRICITY DURING**
3 **2023.**

4 A. The plant used waste wood consisting of chips, bark, sawdust and mill shavings from
5 sawmill and forest operations.

6
7 **Q. WHAT WERE CADILLAC'S OBJECTIVES IN PROCURING FUEL?**

8 A. Cadillac needed to both ensure a reliable supply of quality fuel and do so at the lowest
9 possible price.

10
11 **Q. WHAT AMOUNT OF EACH OF THOSE FUELS WERE USED DURING 2023.**

12 A. From January 1, 2023 through December 31, 2023, the plant used 247,645 tons of waste
13 wood.

14
15 **Q. HOW DID CADILLAC PURCHASE ITS FUEL IN 2023?**

16 A. In 2023, Cadillac purchased all of its waste wood fuel on the open market. Cadillac had 42
17 fuel suppliers from whom it purchases fuel every day on the spot market except Sunday.

18
19 **Q. PLEASE EXPLAIN WHY YOU HAVE CHOSEN TO PURCHASE ALL OF YOUR**
20 **FUEL ON THE SPOT MARKET.**

21 A. There are two schools of thought regarding the relative advantages and disadvantages of
22 buying on the spot market versus signing long-term contracts. Both approaches are
23 reasonable.

1 **Q. WHAT WERE THE EFFECTS OF PURCHASING FUEL IN THE SPOT MARKET**
2 **AS YOU HAVE DESCRIBED?**

3 A. Cadillac was able to meet its fuel needs and assure its continued performance all within the
4 context of an overall effort to minimize costs as much as reasonable and practicable.

5
6 **Q. DID CADILLAC MAKE REASONABLE EFFORTS TO MINIMIZE ITS FUEL**
7 **AND VARIABLE OPERATION AND MAINTENANCE COSTS?**

8 A. Yes. Given my experience buying fuel, my knowledge of the market price of fuel and also
9 because Cadillac purchased fuel from 42 suppliers, I can confirm that Cadillac's 2023
10 minimized its 2023 fuel purchase costs as much as possible.

11
12 **Q. WHAT, IF ANYTHING, INCENTIVIZES CADILLAC TO MINIMIZE ITS FUEL**
13 **COSTS**

14 A. Cadillac does not recover all of its fuel and O&M costs. Like all of the BMPs, Cadillac's
15 actual fuel and variable operation and maintenance costs exceed the payments that it
16 receives for those costs even with the additional payments under Public Act 286 of 2008.
17 This is clearly seen in Exhibit BMP-1. The more Cadillac spends on fuel and variable O&M
18 costs, the more money it loses. Thus, Cadillac has a significant financial incentive to keep
19 its fuel and operating costs as low as possible.

20
21 **Q. TURNING TO THE TOPIC OF OPERATION AND MAINTENANCE COSTS,**
22 **PLEASE DESCRIBE THE VARIABLE OPERATION AND MAINTENANCE**
23 **COSTS THAT YOU ARE SEEKING TO RECOVER IN THIS PROCEEDING.**

1 A. We are seeking to recover the following variable operation and maintenance cost groups:
2 1) Variable Utility and Services, which include water and wastewater disposal costs; 2)
3 Variable Plant Maintenance, includes costs for maintaining all plant equipment that wears
4 in proportion to generation amounts such as the boiler, electrical, fuel and ash systems,
5 steam turbine and generator; 3) Leases and Rentals that vary with plant operations
6 including, costs for equipment such as bulldozers, scaffolding and pumps; 4) Other
7 Variable Operations Expenses, consisting of water treatment chemicals, lubricants, gases,
8 supplies, vehicle maintenance and emissions control costs.

9

10 **Q. DOES YOUR PLANT INCUR OTHER VARIABLE OPERATION AND**
11 **MAINTENANCE COSTS?**

12 A. Yes. For simplicity, however, Cadillac Renewable Energy has chosen to seek cost recovery
13 at this time for only those items identified above.

14

15 **Q. WHAT EFFORTS DOES CADILLAC MAKE TO MINIMIZE ITS OPERATION**
16 **AND MAINTENANCE COSTS?**

17 A. We make all practical efforts to keep O&M costs down by receiving multiple quotes on
18 large purchases and continuously look for lower costs.

1 **NO_x ALLOWANCE COSTS**

2 **Q. YOU PREVIOUSLY INDICATED THAT CADILLAC RENEWABLE ENERGY IS**
3 **SEEKING TO RECOVER NO_x ALLOWANCE COSTS. PLEASE DESCRIBE**
4 **THOSE COSTS.**

5 A. The U.S. EPA's Cross State Air Pollution Rule ("CSAPR") requires Cadillac Renewable
6 Energy to hold *annual* and *seasonal* NO_x allowances.

7 Cadillac's NO_x allowance expenses are identified on Exhibit BMP-3. Cadillac is
8 seeking to recover those NO_x allowance costs pursuant to (i) MCL.460.6a(10) which
9 provides that "the \$1,000,000.00 limit specified in this subsection, as adjusted, does not
10 apply to actual fuel and variable operation and maintenance costs that are incurred due to
11 changes in federal or state environmental laws or regulations that are implemented after
12 October 6, 2008."

13
14 **Q. WERE THE U.S. EPA'S CROSS STATE AIR POLLUTION RULE ("CSAPR")**
15 **REQUIREMENTS IMPLEMENTED AFTER OCTOBER 6, 2008?**

16 A. Yes. The U.S. EPA's Cross State Air Pollution Rule, 40 CFR 97 Subparts AAAAAA to
17 FFFFFF ("CSAPR") were promulgated on August 8, 2011. (76 FR 48208) See, Exhibit
18 BMP-13. Cadillac's request for \$567,500 for seasonal NO_x allowances in CSAPR NO_x
19 allowances is consistent with the Commission's approval of uncapped cost recovery of
20 NO_x allowances in prior cost recovery cases.

1 **Q. WHAT ARE NO_x ALLOWANCES?**

2 A. They are authorizations to emit a limited amount of air pollutants per year. The need for
3 allowances arises in direct proportion to the generator's level of operation and each
4 allowance represents the right to emit one ton of pollutants. The EPA allocates a certain
5 number of allowances to each generator and, if any additional allowances are needed to
6 cover actual emissions, the generator must purchase those allowances in the open market.
7 TES Filer City witness Joe Tondu's testimony describes CSAPR and its requirements in
8 more detail.

9

10 **Q. WHAT ARE THE BEGINNING AND ENDING DATES OF THE CSAPR ANNUAL**
11 **NO_x ALLOWANCE PERIOD?**

12 A. January 1st through December 31st of each calendar year.

13

14 **Q. WHAT ARE THE BEGINNING AND ENDING DATES OF THE CSAPR**
15 **SEASONAL NO_x ALLOWANCE PERIOD?**

16 A. May 1st through September 30th of each calendar year.

17

18 **Q. DID CADILLAC ANY ANNUAL NO_x ALLOWANCES COSTS?**

19 A. No. The EPA allocated Cadillac Renewable Energy sufficient annual NO_x allowances to
20 cover its annual NO_x allowance requirement.

1 **Q. DID CADILLAC RENEWABLE ENERGY INCURR ANY SEASONAL NO_x**
2 **ALLOWANCES COSTS?**

3 A. Yes, as described below.

4

5 **Q. WHAT WERE CADILLAC RENEWABLE ENERGY'S TOTAL CSAPR NO_x**
6 **SEASONAL ALLOWANCE REQUIREMENTS IN 2023?**

7 A. Cadillac was required to hold 84 seasonal allowances for 2022 Ozone Season between (i)
8 the number of allowances allocated to Cadillac by the EPA and (ii) Cadillac's purchase of
9 additional CSAPR NO_x seasonal allowances in the market. That requirement was then
10 increased as a result of the EPA converting group 2 credits to group 3 credits at a ratio of
11 8:1 which required an additional purchase.

12

13 **Q. WHAT WAS THE DEADLINE FOR PURCHASING ALLOWANCES TO COVER**
14 **CADILLAC RENEWABLE ENERGY'S ALLOWANCE REQUIREMENTS IN**
15 **2023?**

16 A. Cadillac was required to hold its 2022 seasonal NO_x allowances (i.e., the amount that
17 exceeded the EPA allocation) by June 1, 2023.

18

19 **Q. PLEASE DESCRIBE CADILLAC'S NO_x ALLOWANCE PURCHASES TO**
20 **SATISFY THE ITS 2022 OBLIGATIONS.**

21 A. Cadillac held 2 allowances at the beginning of 2023. The EPA allocated 47 group three
22 allowances to Cadillac, which meant that Cadillac needed to purchase 35 additional
23 allowances to satisfy its 2022 requirements. Cadillac purchased those 35 NO_x allowances

1 on March 14, 2023 at a cost of \$507,500. That satisfied its obligation to hold 84 allowances.
2 In order to cover the U.S. EPA's 8:1 group 2 to group 3 conversion reduction, Cadillac had
3 to purchase 30 additional allowances, which it did on October 25, 2023 at a cost of \$60,000,
4 thereby fully satisfying its obligation to hold 2022 NOx allowances.

5
6 **Q. DID CADILLAC RENEWABLE ENERGY MAKE REASONABLE EFFORTS TO**
7 **MINIMIZE ITS CSAPR ALLOWANCE COSTS?**

8 A. Yes, to the extent practicable, we made every reasonable effort to control these costs.
9

10 **Q. AT THE TIME CADILLAC RENEWABLE ENERGY PURCHASED THE CSAPR**
11 **ALLOWANCES, WERE THOSE PRICES THE BEST PRICES THAT WERE**
12 **REASONABLY AVAILABLE TO CADILLAC RENEWABLE ENERGY?**

13 A. Yes.
14

15 **Q. IN CONNECTION WITH YOUR CSAPR ALLOWANCE PROCUREMENT**
16 **DECISIONS, DID YOU EXERCISE YOUR BEST JUDGMENT?**

17 A. Yes.
18

19 **CONCLUSION**

20 **Q. IN YOUR OPINION, WERE CADILLAC RENEWABLE ENERGY, LLC'S**
21 **PURCHASING PRACTICES REASONABLE AND PRUDENT?**

22 A. Yes.

1 **Q. IN YOUR OPINION, WERE CADILLAC RENEWABLE ENERGY, LLC'S**
2 **ACTUAL FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS**
3 **FOR THE PERIOD FROM JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**
4 **REASONABLY AND PRUDENTLY INCURRED?**

5 A. Yes, based upon the level and type of expenses, Cadillac's actual fuel and variable O & M
6 expenses were absolutely reasonably and prudently incurred.

7
8 **Q. DO YOU THINK THAT ANY OF CADILLAC RENEWABLE ENERGY, LLC'S**
9 **ACTUAL FUEL OR VARIABLE OPERATION AND MAINTENANCE COSTS**
10 **WERE EXTRAVAGANT, UNNECESSARY, INEFFICIENT OR IMPRUDENT?**

11 A. No.

12

13 **Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

14 A. Yes.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for approval to implement a power cost)
recovery plan for the 12-months ending)
December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
THOMAS A. CLIFT
ON BEHALF OF
GENESEE POWER STATION LIMITED PARTNERSHIP
AND
THE BIOMASS MERCHANT PLANTS

INTRODUCTION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Thomas A. Clift and my business address is Genesee Power Station, G5310
N. Dort Hwy, Flint, MI 48505

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed as the Plant Manager of the Genesee Power Station (“GPS”).

Q. PLEASE BRIEFLY DESCRIBE THE GENESEE POWER STATION.

A. The Genesee Power Station is a merchant plant consisting of electric generating equipment
and associated facilities with a capacity of 40 MW. The plant is located in Flint, Michigan
and is not owned or operated by an electric utility. The Genesee Power Station is owned
by Genesee Power Station Limited Partnership.

Q. PLEASE DESCRIBE YOUR ESUCATIONAL BACKGROUND.

A. I graduated from JW Sexton High School in Lansing, Michigan in 1985. I served in the
United States Air Force from 1986 to 1990 as a Crew Chief/Jet Mechanic. I was Honorably
Discharged in 1992. While in the Air Force, I attended the Technical School for Aircraft
Maintenance. I attended Davenport College for business and math classes in 1992 and have
taken a number of continuing education classes since then.

1 **Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE.**

2 A. From 1992 to 1998, I was a Maintenance Mechanic at Ingham Regional Medical Center in
3 Lansing, Michigan and the Supervisor of Maintenance and Engineering from 1998 to 2000.
4 From 2000 to 2003, I was the Control Room Operator “A” at the Lansing Board of Water
5 & Light’s Eckert Power Station in Lansing, Michigan. I was the Station Shift Supervisor
6 at that same facility from 2003 to 2008, the Operations Supervisor from April 2008 to June
7 2009, and the Operations Supervisor & Plant Manager from June 2009 to October 2010.
8 From November 2010 to March 2016, I was a Production Supervisor 2 at Consumers
9 Energy’s JH Campbell 1 & 2 Plant. From April 2016 to September 2018, I was the Senior
10 Operations Manager at the CMS Enterprises Craven County Wood Energy plant in New
11 Bern, North Carolina, the Senior Maintenance Manager from September 2018 to January
12 2020, and the Plant Manager from February 2020 to June 2023. I became the Senior Plant
13 Manager of Genesee Power Station on June 8, 2023.

14

15 **Q. PLEASE DESCRIBE YOUR JOB RESPONSIBILITIES.**

16 A. I manage all business, operations and maintenance activities at GPS’s wood-fired power
17 plant.

18

19 **Q. PLEASE ELABORATE ON YOUR RESPONSIBILITIES WITH RESPECT TO**
20 **FUEL PROCUREMENT.**

21 A. I am responsible for administering the long term fuel supply contract between Genesee
22 Power Station Limited Partnership and Mid-Michigan Recycling, L.C. (“MMR”). MMR
23 procures all of the solid fuels burned at GPS.

1 **Q. ARE YOU FAMILIAR WITH GENESEE’S FUEL PROCUREMENT PRACTICES**
2 **IN 2023?**

3 A. Yes.

4

5 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MICHIGAN PUBLIC**
6 **SERVICE COMMISSION?**

7 A. Yes.

8

9 **Q. ON WHOSE BEHALF ARE YOU SUBMITTING YOUR TESTIMONY IN THIS**
10 **PROCEEDING?**

11 A. The first part of my testimony is on behalf of the Genesee Power Station. The remainder
12 of my testimony regarding the CPI adjustment is on behalf of all of the Biomass Merchant
13 Plants (“BMPs”).

14

15 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

16 A. Yes. I am sponsoring Exhibits BMP-4, BMP-10 and BMP-18, and am co-sponsoring
17 Exhibits BMP-1 and BMP-2.

18

19 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**
20 **SUPERVISION?**

21 A. Yes as to the portions of BMP-1 and BMP-2 relating to Genesee, Exhibit BMP-4 and the
22 list of maintenance costs of \$25,000 or greater in BMP-18. I have also reviewed and agree
23 with the remainder of BMP-1 and BMP-2. Exhibit BMP-10 is a publicly available

1 document prepared by the U.S. Department of Labor, Bureau of Labor Statistics. The
2 accountants' letter in BMP-18 was prepared at my request in accordance with the
3 settlement agreement in MPSC Case No. U-17918-R.

4 5 **PURPOSE OF TESTIMONY**

6 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

7 A. The purpose of my testimony is to describe GPS's actual fuel and variable operation and
8 maintenance costs for the period from January 1, 2023 to December 31, 2023, and to
9 demonstrate that those costs were reasonably and prudently incurred. I will also testify as
10 to the amount that Consumers Energy Company paid to GPS for fuel and variable operation
11 and maintenance costs incurred during that time period. My testimony provides factual
12 support for GPS's request to recover costs under Public Act 286 of 2008, which permits
13 recovery of costs that exceed the amount a merchant plant is paid for those costs under a
14 contract with an eligible utility. In addition, my testimony will support the Biomass
15 Merchant Plant's request for a Consumer Price Index adjustment permitted under Public
16 Act 286 of 2008.

17 18 **ELIGIBILITY FOR COST RECOVERY**

19 **Q. IS THERE A POWER PURCHASE AGREEMENT ("PPA") BETWEEN GPS AND** 20 **CONSUMERS ENERGY COMPANY?**

21 A. Yes. My understanding is that a complete copy of the agreement, as amended, was provided
22 to the MPSC and the parties in both Consumers Energy's 2009 and 2010 PSCR
23 Reconciliation cases, MPSC Case Nos. U-15675-R and U-16045-R.

1 **Q. HAVE THERE BEEN ANY CHANGES TO THE PPA SINCE IT WAS ENTERED**
2 **INTO THE RECORD OF THOSE PROCEEDINGS?**

3 A. No.

4

5 **Q. WAS GPS'S PPA ENTERED ON OR BEFORE JANUARY 1, 2008?**

6 A. Yes.

7

8 **Q. DOES THE CONTRACT HAVE AN INITIAL TERM OF 20 YEARS OR MORE?**

9 A. Yes.

10

11 **Q. DOES THE PPA PROVIDE FOR GPS TO SELL ELECTRICITY TO AN**
12 **ELECTRIC UTILITY WHOSE RATES ARE REGULATED BY THE**
13 **COMMISSION WITH 1,000,000 OR MORE RETAIL CUSTOMERS IN THIS**
14 **STATE?**

15 A. Yes, the PPA is with Consumers Energy Company.

16

17 **Q. AT ANY TIME PRIOR TO JANUARY 1, 2008, DID GPS GENERATE**
18 **ELECTRICITY IN WHOLE OR IN PART FROM WOOD OR SOLID WOOD**
19 **WASTES AND SELL THAT ELECTRICITY TO CONSUMERS ENERGY**
20 **COMPANY?**

21 A. Yes.

1 Q. DOES GPS STILL GENERATE ELECTRICITY IN WHOLE OR IN PART FROM
2 WOOD OR SOLID WOOD WASTES AND SELL THAT ELECTRICITY TO
3 CONSUMERS ENERGY COMPANY?

4 A. Yes.

5
6 Q. WITH RESPECT TO ENERGY DELIVERED BETWEEN JANUARY 1, 2023 AND
7 DECEMBER 31, 2023, DID CONSUMERS ENERGY COMPANY MAKE
8 PAYMENTS TO GPS UNDER THE TERMS OF THE PPA?

9 A. Yes.

10

11 Q. DID PORTIONS OF THE PAYMENTS FROM CONSUMERS ENERGY TO GPS
12 INCLUDE PAYMENTS FOR FUEL AND VARIABLE OPERATION AND
13 MAINTENANCE (“O & M”) COSTS?

14 A. Yes.

15

16 Q. DID THE AMOUNT OF GPS’S ACTUAL FUEL AND VARIABLE O & M COSTS
17 EXCEED THE AMOUNT THAT CONSUMERS ENERGY PAID TO GPS UNDER
18 THE PPA FOR THOSE COSTS?

19 A. Yes. Please see Exhibits BMP-1, BMP-2 and BMP-4.

20

21 Q. IS GPS A LANDFILL GAS PLANT, A HYDRO PLANT, OR A MUNICIPAL
22 SOLID WASTE PLANT?

23 A. No.

1 **Q. IS GPS ENGAGED IN LITIGATION AGAINST AN ELECTRIC UTILITY**
2 **SEEKING HIGHER PAYMENTS FOR POWER DELIVERED PURSUANT TO A**
3 **CONTRACT?**

4 A. No.

5

6

COST DATA

7 **Q. WHAT AMOUNT HAS GPS IDENTIFIED ON EXHIBIT BMP-4 AS ITS ACTUAL**
8 **FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED**
9 **FOR SALES OF ELECTRIC GENERATION TO CONSUMERS ENERGY**
10 **COMPANY DURING 2023?**

11 A. GPS has identified \$7,563,262 in actual fuel and variable operation and maintenance costs
12 for sales to Consumers Energy Company in 2023. This amount does not include \$115,463
13 of uncapped CSAPR NOx allowance costs.

14

15 **Q. DOES THIS AMOUNT INCLUDE ALL OF THE PLANT'S FUEL AND**
16 **VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED FOR**
17 **SALES TO CONSUMERS ENERGY COMPANY IN 2023?**

18 A. No. For simplicity, however, Genesee has decided to seek recovery of only certain variable
19 operation and maintenance costs during 2023. As discussed in more detail below, Genesee
20 is only seeking recovery for the categories of variable operation and maintenance costs
21 listed below. GPS incurs variable operation and maintenance costs beyond the categories
22 listed below.

1 **Q. PLEASE STATE THE AMOUNT THAT CONSUMERS ENERGY PAID GPS FOR**
2 **FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED**
3 **DURING 2023.**

4 A. Under the terms of our PPA, Consumers Energy paid our merchant plant a total of
5 \$3,742,370 for actual fuel and variable operation and maintenance costs incurred for 2023.
6

7 **Q. WAS THERE A SHORTFALL BETWEEN THE FUEL AND VARIABLE O & M**
8 **COSTS THAT GPS INCURRED FOR SALES TO CONSUMERS IN 2023 AND**
9 **THE AMOUNTS THAT CONSUMERS PAID GPS FOR THOSE COSTS?**

10 A. Yes, the total shortfall is \$3,820,891.
11

12 **Q. DO YOU HAVE DOCUMENTATION TO SUPPORT THE COST AND PAYMENT**
13 **FIGURES THAT YOU HAVE PROVIDED IN RESPONSE TO THE PRIOR FOUR**
14 **QUESTIONS?**

15 A. Yes. The actual fuel and variable operation and maintenance costs, and the payments to
16 GPS for actual fuel and variable operation and maintenance costs, are detailed on Exhibit
17 BMP-4.
18

19 **Q. WHAT AMOUNT OF CAPPED COSTS IS GPS SEEKING TO RECOVER IN THIS**
20 **PROCEEDING?**

21 A. As set forth in BMP-1, GPS is seeking to recover \$2,080,523 of the shortfall in fuel and
22 variable O & M costs. This amount could change in the unlikely event that an adjustment
23 is made to the fuel and variable operation and maintenance expense which any other BMP

1 is seeking to recover in this proceeding with respect to a month in which the collective
2 payments to the BMPs exceed the statutory cap on cost recovery. While we do not believe
3 that any adjustment to any other BMPs' costs would be appropriate or required, it is
4 theoretically possible that an adjustment could be made. In that event, the capped amount
5 would be reallocated among all of the BMPs, taking the adjustment into account. The result
6 of this reallocation process would be that the amount that GPS is seeking to recover in this
7 proceeding would change in order to accurately reflect its proportionate share of the capped
8 amount.

9
10 **Q. THE MPSC'S AUGUST 11, 2009 ORDER IN CASE NO. U-16048 ALLOWS THE**
11 **BMPS TO SUBMIT MONTHLY INVOICES TO CONSUMERS FOR THE**
12 **AMOUNTS RECOVERABLE UNDER PA 286. THE SAME ORDER REQUIRES**
13 **CONSUMERS TO MAKE INTERIM MONTHLY PAYMENTS TO THE BMPs TO**
14 **COVER 80% OF THE INVOICED AMOUNTS. HAS CONSUMERS MADE**
15 **PARTIAL PAYMENTS TO GPS IN 2023?**

16 A. Yes, as reflected in Exhibits BMP-1, BMP-2 and BMP-4, Consumers Energy has paid GPS
17 \$1,462,261 of the \$2,080,523 that GPS seeks to recover in this proceeding, leaving a
18 balance due to GPS of \$618,262 for capped fuel and variable O & M expenses.

19
20 **Q. IS GPS SEEKING TO RECOVER OF ANY ACTUAL FUEL AND VARIABLE**
21 **OPERATION AND MAINTENANCE COSTS THAT WERE INCURRED DUE TO**
22 **CHANGES IN FEDERAL OR STATE ENVIRONMENTAL LAWS OR**
23 **REGULATIONS THAT WERE IMPLEMENTED AFTER OCTOBER 6, 2008?**

1 A. Yes, as explained below, GPS is seeking to recover \$115,463 in NOx allowance costs that
2 were incurred due to changes in federal environmental laws and regulations implemented
3 after October 6, 2008.

4

5 **Q. WHAT IS THE TOTAL AMOUNT OF CAPPED AND UNCAPPED COSTS THAT**
6 **CONSUMERS STILL OWES GENESEE?**

7 A. \$733,724.

8

9

PROCUREMENT PROCEDURES

10 **Q. PLEASE DESCRIBE THE FUEL OR FUELS THAT GPS USED TO GENERATE**
11 **ELECTRICITY DURING 2019.**

12 A. GPS burned a blend of several waste wood materials as its primary fuel, and a much smaller
13 amount of Tire Derived Fuel (“TDF”) and natural gas for start-ups.

14

15 **Q. PLEASE STATE THE SOURCE OF THE FUEL AND THE VOLUMES THAT GPS**
16 **USED DURING 2023.**

17 A. From January 1, 2023 through December 31, 2023, GPS burned 153,383.07 tons of wood
18 waste which was procured by Mid-Michigan Recycling, L.C. (“MMR”) from multiple
19 sources and used at the Genesee Power Station. The sources of the wood waste included
20 wood from wood recovery yards, municipalities, utility companies, land clearing
21 companies, tree trimming companies, private residences, industrial companies, and
22 construction companies. From January 1, 2023 through December 31, 2023, GPS also
23 burned 4,286.56 tons of TDF.

1 **Q. WHAT TYPES OF WASTE WOOD FUEL DID GPS CONSUME?**

2 A. Wood waste fuel sources included the following types of material:

- 3 • Slash and forest residue
- 4 • Tree-trimming material from utility line clearance operations
- 5 • Wood waste from land-clearing operations
- 6 • Branches and brush
- 7 • Lumber (cut offs) from construction activities
- 8 • Waste pallet wood material
- 9 • Sawdust
- 10 • Waste plywood
- 11 • Waste pressed board
- 12 • Waste oriented strand board
- 13 • Wood waste from secondary manufacturing

14

15 **Q. PLEASE EXPLAIN THE RELATIONSHIP BETWEEN GPS AND MMR AND**
16 **SUMMARIZE THE PRINCIPAL TERMS OF GPS'S FUEL SUPPLY**
17 **AGREEMENT WITH MMR.**

18 A. GPS has an exclusive wood waste delivery services agreement with MMR. The fuel supply
19 agreement between MMR and GPS contains the following principal provisions:

20 Term: The original agreement expired on December 31, 2021 but was replaced by
21 a new agreement for 8 years, ending December 31, 2029, with substantially the
22 same terms as the original agreement, subject to earlier termination in certain
23 limited circumstances of non-performance by either party.

1 Quantity of Wood: The agreement is an exclusive supply agreement for MMR to
2 supply 100% of GPS's wood waste requirements for its biomass power plant
3 located in Flint, Michigan. There are supply and scheduling procedures to provide
4 some flexibility to both parties.

5 Specification of Wood Waste: All wood waste supplied under the agreement must
6 conform to specifications related to moisture-content, size and quality with respect
7 to the percentage of non-combustibles.

8 Pricing Arrangements: MMR charges a service fee for each ton of wood waste fuel
9 delivered to GPS that allows for cost recovery of all reasonable expenses incurred
10 by MMR associated with the identification, collection, loading, processing, sorting,
11 storage, handling, transportation and unloading of wood waste. Such service fee is
12 subject to adjustment based upon a cost recovery and return formula where, in
13 general, higher service fees result in MMR earning lower returns and lower service
14 fees result in MMR earning higher returns.

15
16 **Q. IN YOUR OPINION, WAS GPS'S DECISION TO ENTER INTO THE EXCLUSIVE**
17 **SUPPLY AGREEMENT WITH MMR REASONABLE AND PRUDENT BASED**
18 **ON THE FACTS AND CIRCUMSTANCES KNOWN OR REASONABLY**
19 **FORESEEABLE AT THE TIME THE DECISION WAS MADE?**

20 A. Yes. Purchasing fuel via long-term contracts, or via the spot market, can both be reasonable
21 procurement practices. The decision to utilize a long-term fuel contract or rely upon the
22 spot market to procure fuel involves the balancing of a variety of risks. Long-term contracts
23 mitigate the risk of fuel supply shortages and can be used to mitigate the risk of price

1 fluctuations. Long-term contracts, however, may lock a buyer into prices that are higher or
2 lower than what the spot market would otherwise provide at any given moment. Utilizing
3 the spot market ensures that the buyer will receive the lowest available price for fuel on a
4 short-term basis that day, however, the buyer may experience dramatic price fluctuations
5 and possible fuel shortages. The decision to utilize long-term contracts or the spot market
6 necessarily involves the balancing of a variety of complex factors including fuel price level,
7 fuel supply reliability, and fuel price volatility. GPS's decision to enter into a long-term
8 fuel supply agreement with MMR was reasonable.

9
10 **Q. IS THERE A SPOT MARKET FOR BIOMASS FUEL?**

11 A. Not in the same way as there is for natural gas, or other fuel commodities. There are not
12 any nationally published indices for waste wood prices, nor is there a commodities
13 exchange that a buyer can utilize to obtain fuel from a fuel supplier. When a Biomass
14 Merchant Plant ("BMP") seeks to procure biomass fuel on 'the spot market,' the BMP will
15 contact area biomass fuel suppliers directly to identify the availability and price for fuel at
16 that time.

17
18 **Q. ARE THERE SEASONAL VARIATIONS IN YOUR FUEL COSTS?**

19 A. Generally, yes. Normally, the cost of wood fuel decreases during the summertime when
20 the availability of wood increases. Similarly, the cost of wood fuel can go up during the
21 winter due to adverse weather conditions and decreased availability of wood wastes.

1 **Q. ARE THERE REGIONAL DIFFERENCES IN FUEL COSTS?**

2 A. Yes. The proximity to wood-based infrastructure industries like sawmills and timber
3 operations in the state's northern forests have a significant impact on costs. In those
4 northern regions, the costs of wood fuel are generally lower than the costs associated with
5 acquiring wood fuel in the urban areas of the southern regions in the state where fewer
6 forests exist. The BMPs are located throughout the state.

7

8 **Q. DOES THE DISTANCE BETWEEN THE FUEL SOURCE AND A BIOMASS-**
9 **FUELED GENERATION PLANT HAVE AN IMPACT ON THE FINAL FUEL**
10 **PRICE?**

11 A. Yes, trucking costs are an important component of fuel costs. Wood fuel becomes more
12 expensive if purchased from a more distant location.

13

14 **Q. DO GPS's FUEL COSTS DIFFER FROM OTHER BMPs?**

15 A. Yes. GPS must arrange for a diverse supply of multiple types of waste wood from
16 numerous different sources within an urban area. The lack of plentiful fuel supplies of
17 waste wood near the GPS generating plant increases the cost of wood fuel for GPS.

18

19 **Q. WHAT MECHANISMS ENSURE THAT THE BMPs' COSTS, INCLUDING GPS's**
20 **COSTS, ARE REASONABLY AND PRUDENTLY INCURRED?**

21 A. A major factor ensuring that the BMPs' costs are reasonably and prudently incurred is that
22 the BMPs are not guaranteed cost recovery. As Exhibit BMP-1 shows, even with the
23 additional \$1,000,000 per month capped payment under Public Act 286 of 2008, the BMPs'

1 actual fuel and variable operation and maintenance costs exceeded the payments that the
2 BMPs received for those costs pursuant to their contracts with Consumers during all twelve
3 months of 2023. In fact, the BMPs incurred \$13,903,913 in costs over and above the
4 \$17,043,243 that they are seeking to recover in this proceeding, which \$13,903,913 is
5 altogether unrecoverable. Thus, the more the BMPs spend on fuel and variable O&M costs,
6 the more money they lose on fuel and variable O&M costs. Additionally, the BMPs cannot
7 simply raise their prices to cover their actual costs. The reality of financial loss and the
8 desire to achieve a return on investment are significant incentives which ensure that the
9 BMPs work to keep their fuel and operating costs low.

10
11 **Q. WHAT WERE THE EFFECTS DURING 2023 OF GPS HAVING ENTERED INTO**
12 **THE FUEL SUPPLY AGREEMENT WITH MMR?**

13 A. The effects of entering into this agreement were that GPS was able to secure a supply of
14 wood waste fuel that was of adequate quality to meet GPS's generating needs, reliable
15 enough to assure GPS's continued performance as required by the terms of the PPA and
16 sufficiently diversified to ensure the stability of supply, all within the context of an overall
17 effort to minimize costs as much as reasonable and practicable.

18
19 **VARIABLE OPERATION & MAINTENANCE COSTS**

20 **Q. PLEASE DESCRIBE THE VARIABLE OPERATION AND MAINTENANCE**
21 **COSTS THAT YOU ARE SEEKING TO RECOVER IN THIS PROCEEDING.**

22 A. Genesee is seeking to recover the following variable operation and maintenance costs: 1)
23 water supply and treatment costs; 2) sewer and wastewater disposal costs; 3) ash handling

1 costs; 4) fuel handling costs; 5) emission control costs; 6) water treatment costs; and 7)
2 variable maintenance costs.

3
4 **Q. DOES YOUR PLANT INCUR OTHER VARIABLE OPERATION AND**
5 **MAINTENANCE COSTS?**

6 A. Yes. For simplicity, however, Genesee has chosen to seek cost recovery at this time for
7 only those items identified above.

8
9 **Q. DID YOU MAKE REASONABLE EFFORTS TO MINIMIZE THE VARIABLE**
10 **OPERATION AND MAINTENANCE COSTS?**

11 A. Yes, to the extent practicable, we made every reasonable effort to control these costs by
12 competitively bidding purchases where possible, and by always looking for lower cost
13 materials, which meet our minimum specifications for the intended use.

14
15 **NO_x ALLOWANCE COSTS**

16 **Q. YOU PREVIOUSLY INDICATED THAT GPS IS SEEKING TO RECOVER NO_x**
17 **ALLOWANCE COSTS. PLEASE DESCRIBE THOSE COSTS.**

18 A. The U.S. EPA's Cross State Air Pollution Rule ("CSAPR") requires GPS to hold *annual*
19 and *seasonal* NO_x allowances.

20 GPS's NO_x allowance expenses are identified on Exhibit BMP-4. GPS is seeking
21 to recover those NO_x allowance costs pursuant to MCL.460.6a(10) which provides that
22 "the \$1,000,000.00 limit specified in this subsection, as adjusted, does not apply to actual
23 fuel and variable operation and maintenance costs that are incurred due to changes in

1 federal or state environmental laws or regulations that are implemented after October 6,
2 2008.”

3
4 **Q. WERE THE U.S. EPA’S CROSS STATE AIR POLLUTION RULE (“CSAPR”)**
5 **REQUIREMENTS IMPLEMENTED AFTER OCTOBER 6 2008?**

6 A. Yes. The U.S. EPA’s Cross State Air Pollution Rule, 40 CFR 97 Subparts AAAAAA to
7 FFFFFF (“CSAPR”) were promulgated on August 8, 2011. (76 FR 48208) See, Exhibit
8 BMP-13. GPS’s request for \$115,463 for seasonal NOx allowances in CSAPR NOx
9 allowances is consistent with the Commission’s approval of uncapped cost recovery of
10 NOx allowances incurred due to CSAPR in prior annual cost recovery cases.

11
12 **Q. WHAT ARE ALLOWANCES?**

13 A. They are authorizations to emit a limited amount of air pollutants per year. The need for
14 allowances arises in direct proportion to the generator’s level of operation and each
15 allowance represents the right to emit one ton of pollutants. The EPA allocates a certain
16 number of allowances to each generator and, if any additional allowances are needed to
17 cover actual emissions, the generator must purchase those allowances in the open market.
18 TES Filer City witness Joe Tondu’s testimony describes CSAPR and its requirements in
19 more detail.

1 **Q. WHAT ARE THE BEGINNING AND ENDING DATES OF THE CSAPR *ANNUAL***
2 ***NO_x ALLOWANCE PERIOD?***

3 A. January 1st through December 31st of each calendar year, starting in 2015 and each calendar
4 year thereafter.

5
6 **Q. DID GPS INCURR ANY *ANNUAL NO_x ALLOWANCE COSTS?***

7 A. No. The EPA allocated GPS sufficient *annual* NO_x allowances to cover its annual NO_x
8 allowance requirement.

9
10 **Q. WHAT ARE THE BEGINNING AND ENDING DATES OF THE CSAPR**
11 ***SEASONAL NO_x ALLOWANCE PERIOD?***

12 A. May 1st through September 30th of each calendar year.

13
14 **Q. DID GPS INCURR TO *SEASONAL NO_x ALLOWANCE COSTS?***

15 A. Yes. GPS incurred \$115,463 for *seasonal* NO_x allowances in 2023 to comply with the
16 Cross State Air Pollution Rule. Those expenditures were to satisfy both GPS's 2022 and
17 2023 NO_x allowance requirements. The U. S. EPA deadline for GPS to hold its 2022
18 seasonal NO_x allowances was June 1, 2023.

19
20 **Q. WHAT WERE GENESEE POWER STATION'S CSAPR NO_x SEASONAL**
21 ***ALLOWANCE REQUIREMENTS FOR 2023?***

22 A. Genesee Power Station was required to hold 93 seasonal allowances for the 2022 Ozone
23 Season and 70 seasonal allowances for the 2023 Ozone Season. The total number of

1 allowances that GPS held to satisfy those requirements included (i) the number of
2 allowances remaining in Genesee's account from previous years, (ii) the number of
3 allowances which the U. S. EPA allocated to Genesee Power Station, and (iii) GPS's
4 market purchases of additional CSAPR NO_x seasonal allowances.

5
6 **Q. HOW MANY SEASONAL NO_x ALLOWANCES DID GENESEE POWER**
7 **STATION HOLD AT THE BEGINNING OF 2023, HOW MANY SEASONAL NO_x**
8 **ALLOWANCES DID THE EPA ALLOCATE TO GENESEE POWER STATION**
9 **FOR 2023, AND HOW MANY SEASONAL ALLOWANCES DID GENESEE**
10 **POWER STATION PURCHASE FOR THE 2022 AND 2023 OZONE SEASONS?**

11 A. Genesee Power Station held 65 allowances in its account balance at the beginning of 2023.
12 On September 5, 2023, the U.S. EPA allocated 39 allowances to Genesee for its 2023
13 requirement and 43 allowances for its 2024 requirements. Genesee had previously
14 purchased 31 allowances in December of 2022 to meet its 2022 requirements and has asked
15 to recover those costs in the 2022 proceeding. Genesee purchased 39 allowances in
16 October, 2023 to meet the remainder of its compliance requirements. After taking into
17 account its 2022 and 2023 compliance requirements, Genesee held 56 allowances in its
18 account at the end of 2023 to be used to satisfy its 2024 requirements.

19
20 **Q. WHY WAS IT PRUDENT FOR TES TO HAVE PREVIOUSLY PURCHASED**
21 **MORE ALLOWANCES THAN IT ACTUALLY NEEDED?**

22 A. Because there are penalties for not holding sufficient allowances to cover actual emissions.
23 For the CSAPR NO_x annual program, 40 CFR 97.424(d) provides that if an emission

1 source does not hold sufficient allowances to cover actual emissions, the EPA will then
2 deduct two allowances per each ton of excess emissions as a penalty.

3 Further, allowances prices fluctuate year-to-year. Thus, additional allowances beyond the
4 direct need for NOx annual compliance were purchased to minimize allowance purchase
5 costs in future years because any unused allowances remain the facility's compliance
6 account and can be used for future compliance.

7
8 **Q. DID GPS MAKE REASONABLE EFFORTS TO MINIMIZE ITS CSAPR
9 ALLOWANCE COSTS?**

10 A. Yes, to the extent practicable, we made every reasonable effort to control these costs.
11 Genesee used both CMS ERM Co's expertise, which did not charge for its service, and an
12 independent broker to acquire its NOx allowances.

13
14 **Q. AT THE TIME GPS PURCHASED THE CSAPR ALLOWANCES, WERE THOSE
15 PRICES THE BEST PRICES THAT WERE REASONABLY AVAILABLE TO
16 GPS?**

17 A. Yes. Our broker was instructed to acquire the CSAPR NOx allowances at the lowest
18 possible price.

19
20 **Q. IN CONNECTION WITH YOUR CSAPR ALLOWANCE PROCUREMENT
21 DECISIONS, DID GENESEE EXERCISE ITS BEST JUDGMENT?**

22 A. Yes.

1 **Q. IN YOUR OPINION, WERE GPS'S DECISIONS TO PURCHASE CSAPR**
2 **ALLOWANCES AFTER RECEIVING INPUT FROM CMS ERM CO. AND ITS**
3 **INDEPENDENT BROKER REASONABLE AND PRUDENT BASED ON THE**
4 **FACTS AND CIRCUMSTANCES KNOWN OR REASONABLY FORESEEABLE**
5 **AT THE TIME WHEN THE DECISIONS WERE MADE?**

6 A. Yes. Receiving input from a CMS ERM Co staff member experienced in purchasing
7 allowances and using an independent broker allowed GPS to purchase the allowances at
8 the lowest possible cost as best it could determine.

9

10 **CONCLUSIONS REGARDING COST RECOVERY**

11 **Q. IN YOUR OPINION, WERE GPS'S ACTUAL FUEL AND VARIABLE**
12 **OPERATION AND MAINTENANCE COSTS FOR THE PERIOD FROM**
13 **JANUARY 1, 2023 THROUGH DECEMBER 31, 2023 REASONABLY AND**
14 **PRUDENTLY INCURRED?**

15 A. Yes.

16

17 **Q. IN YOUR OPINION, DO YOU THINK THAT ANY OF GPS'S ACTUAL FUEL OR**
18 **VARIABLE OPERATION AND MAINTENANCE COSTS WERE**
19 **EXTRAVAGANT, UNNECESSARY, INEFFICIENT OR IMPRUDENT?**

20 A. Absolutely not.

1 **Q. ARE GPS's FUEL AND VARIABLE OPERATION AND MAINTENANCE COST**
2 **RECORDS AUDITED?**

3 A. Yes. Our plant's 2023 records were audited by Plante Moran. The audit report indicates
4 that GPS' financial statements present fairly, in all material respects, the financial position
5 of GPS.

6

7 **Q. THE SETTLEMENT AGREEMENT IN CONSUMERS' 2016 PSCR**
8 **RECONCILIATION REQUIRED YOU TO: (i) PREPARE A LIST OF ALL**
9 **EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING COST**
10 **RECOVERY; (ii) IDENTIFY WHICH, IF ANY, OF THE EXPENSES ARE**
11 **RELATED TO ONE ANOTHER AND (iii) HAVE AN ACCOUNTANT CERTIFY**
12 **THAT ANY EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING**
13 **COST RECOVERY ARE PROPERLY CHARACTERIZED AS CURRENT**
14 **EXPENSES AND NOT AS CAPITAL EXPENDITURES. HAVE YOU DONE SO?**

15 A. Yes. I have prepared that list and it is attached as Exhibit BMP-18. That list also identifies
16 which of the expenses are related. Additionally, Plante Moran has audited our books and
17 confirmed the company's characterization of the expenses of \$25,000 or greater and issued
18 the attached certification.

1 **Q. PLEASE EXPLAIN EXHIBIT BMP-1.**

2 A. Lines 1-7 of Exhibit BMP-1 show the shortfall between 1) the reasonably and prudently
3 incurred actual fuel and variable operation and maintenance costs incurred by each
4 Biomass Merchant Plant and 2) the amounts that Consumers Energy paid the BMPs for
5 those costs for each month from January 1, 2023 through December 31, 2023. The monthly
6 shortfall amounts are derived from Exhibits BMP-3 through BMP-9. Line 8 is the
7 summation of lines 1 through 7.

8 Line 9 of Exhibit BMP-1 identifies the unadjusted capped amount of Consumers
9 Energy Company's payments to the Biomass Merchant Plants, as established by Public Act
10 286 of 2008.

11 Line 10 shows the percentage of the Biomass Merchant Plants' aggregate actual
12 fuel and variable operation and maintenance costs that is recoverable under the unadjusted
13 statutory cap.

14 Lines 11 through 17 show the capped payments due to each Biomass Merchant
15 Plant by month. The amounts reflected are equal to each Biomass Merchant Plant's
16 monthly shortfall multiplied times its recoverable percentage. Line 18 is the summation of
17 lines 11 through 17. Line 18 shows the total amounts of the capped payments that are due
18 to the Biomass Merchant Plants for calendar year 2023, before application of the statutory
19 CPI adjustment.

20 Lines 19 through 26 are calculated in the same manner as lines 1 through 18, except,
21 as explained below, they reflect the application of a Consumer Price Index adjustment for
22 each month of 2023.

1 **Q. ARE THE BIOMASS MERCHANT PLANTS REQUESTING THAT THE**
2 **COMMISSION ADJUST THE MONTHLY LIMIT?**

3 A. Yes. The Biomass Merchant Plants request that the Commission adjust the \$1,000,000
4 monthly limit at a rate equal to the percentage increase in the annual average United States
5 Consumer Price Index for All Urban Consumers between 2009 and 2023.

6
7 **Q. WHAT WAS THE 2009 CONSUMER PRICE INDEX FOR ALL URBAN**
8 **CONSUMERS, AS DEFINED AND REPORTED BY THE UNITED STATES**
9 **DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS?**

10 A. The Consumer Price Index for 2009 was 214.537. See, Exhibit BMP-10.

11
12 **Q. WHAT WAS THE 2023 CONSUMER PRICE INDEX FOR ALL URBAN**
13 **CONSUMERS, AS DEFINED AND REPORTED BY THE UNITED STATES**
14 **DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS?**

15 A. The Consumer Price Index for 2023 was 304.702. Exhibit BMP-10.

16
17 **Q. WHAT WAS THE PERCENTAGE INCREASE IN THE CONSUMER PRICE**
18 **INDEX FROM 2009 THROUGH 2023?**

19 A. The percentage increase from 2009 through 2023 was 42.027% ($304.702 - 214.537 =$
20 90.165 and $90.165 / 214.537 = 0.42027$).

1 **Q. WHAT SHOULD THE MONTHLY LIMIT BE FOR 2023 FOR AMOUNTS**
2 **RECOVERABLE FOR FUEL AND VARIABLE OPERATION AND**
3 **MAINTENANCE COSTS BY THE BIOMASS MERCHANT PLANTS?**

4 A. The monthly limit should be set at \$1,420,270 per month.

5
6 **Q. DID YOU FOLLOW THE SAME METHODOLOGY IN THIS CASE THAT WAS**
7 **USED IN PREVIOUS RECONCILIATION CASES?**

8 A. Yes, the BMPs used the change in the CPI from the base year to the year being reconciled.
9 Specifically, I used the change in the CPI from 2009 to 2023 because 2009 is the base year
10 and 2023 is the year being reconciled. This adjustment accounts for all of the inflation that
11 has occurred since 2008.

12
13 **Q. IS YOUR PROPOSED ADJUSTMENT CONSISTENT WITH PUBLIC ACT 286 OF**
14 **2008?**

15 A. Yes. Act 286 incorporates a CPI inflation adjustment. In part, Act 286 states that “As used
16 in this subsection [8], ‘United States consumer price index’ means the United States
17 consumer price index for all urban consumers as defined and reported by the United States
18 department of labor, bureau of labor statistics.”

AMOUNTS REQUESTED BY BMPs

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Q. WHAT IS THE TOTAL AMOUNT OF FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS SUBJECT TO THE MONTHLY LIMIT THAT THE BMPs ARE REQUESTING FOR THE PERIOD JANUARY 1, 2023 THROUGH DECEMBER 31, 2023?

A. In total, the Biomass Merchant Plants request that the Commission approve recovery of \$17,043,240 in capped payments from Consumers Energy Company for the time period January 1, 2023 through December 31, 2023 as reflected on lines 26 and 27 of Exhibit BMP-1 and on line 8, column E, of Exhibit BMP-2.

Q. PLEASE EXPLAIN EXHIBIT BMP-2.

A. Exhibit BMP-2 is the reconciliation of Consumers Energy Company's actual payments to each BMP for fuel and variable operation and maintenance costs incurred from January 1, 2023 through December 31, 2023. Exhibit BMP-2 shows the total recoverable shortfall for each Biomass Merchant Plant, and the capped payment due to each Biomass Merchant Plant for 2023 both before and after the application of the CPI adjustment. The exhibit then shows the total amount of PA 286 payments that Consumers Energy has paid each Biomass Merchant Plant based on estimated costs incurred from January 1, 2023 through December 31, 2023. Consumers Energy Company's total Act 286 payments to the Biomass Merchant Plants equaled \$12,125,284 in 2023. The total payments reflect approximately 80% of the BMPs' submitted shortfall, up to the unadjusted statutory cap, consistent with the remittance procedures approved by the Commission in MPSC Case No. U-16048. The exhibit then reflects the recoverable amount for environmental costs incurred due to

1 changes in state or federal laws implemented after October 6, 2008, the effective date of
2 PA 286 of 2008. Those environmental costs are not subject to the statutory cap. The exhibit
3 then shows the remaining amount that is due to each Biomass Merchant Plant. The total
4 remaining amount due to each BMP is equal to the capped payment due to the BMP (with
5 the CPI adjustment) minus Consumers Energy's actual PA 286 payments to the BMP
6 during 2023, plus amounts not subject to the cap.

7

8 **Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

9 A. Yes, it does.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for approval to implement a power cost)
recovery plan for the 12-months ending)
December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
EDWARD A. GOING, SR.
ON BEHALF OF
GRAYLING GENERATING STATION LIMITED PARTNERSHIP

INTRODUCTION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Edward A. Going, Sr. address is 4400 West Four Mile Rd. Grayling, MI 49738.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am the Plant General Manager for Grayling Generating Station.

Q. PLEASE BRIEFLY DESCRIBE THE GRAYLING GENERATING STATION.

A. The Grayling Generating Station is a merchant plant consisting of electric generating equipment and associated facilities with a capacity of 38 MW. The plant is located in Grayling Township, Michigan and is not owned or operated by an electric utility. The Grayling Generating Station is owned by the Grayling Generating Station Limited Partnership (“GGS”).

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I graduated from Bismarck State College with an AAS in Power Plant Technology. I graduated from Upper Iowa University in 2008 with a double major in Business Management and Human Resources.

I served in the United States Navy from June 1976 through January 1985 as a Boiler Technician / Petty Officer First Class (E-6) and received two Navy Achievement Medals during my time in the Navy.

1 From January 1985 through November 1986, I work for Hartford Hospital as a
2 Steam Plant Operator Mechanic.

3 From November 1986 through February 1991, I worked for Pratt & Whitney
4 Aircraft as a Watch Engineer First Class / Mechanic.

5 From February 1991 through June 1999, I worked for Fort Drum Cogeneration
6 Partners, Fort Drum Army Base, Fort Drum, New York as a Grade 1 Power Plant Operator
7 / Mechanic at a 55MW generating facility fueled by coal and wood.

8 From June 1999 through June 2002, I worked for Central Hudson Resources as a
9 Shift Supervisor at a 100 MW dual fuel combined cycle power plant.

10 From June 2002 through June 2003, I worked for Penpower as a Field Services
11 Engineer.

12 From August 2003 through December 2009, I worked for AEP Lawrenceburg as a
13 Combined Cycle Plant Supervisor at a 1100 MW combined cycle natural gas fired
14 generating plant.

15 From December 2009 to December 2011, I worked for NAES Dogwood Energy as
16 an Operations Coordinator in a 625 MW natural-gas fired combined-cycle generating plant.

17 From December 2011 through September 2017, I worked for Tenaska Kiamichi
18 Generating station as an Operations Manager at a 1225 MW natural gas fired combined
19 cycle generating plant.

20 I began working at Grayling Generating Station in April 2018 as the Plant General
21 Manager.

1 **Q. PLEASE DESCRIBE YOUR JOB RESPONSIBILITIES.**

2 A. I am responsible for the overall management of the day-to-day activities of the Grayling
3 Generating Station.

4

5 **Q. WITHIN YOUR ORGANIZATION, ARE YOU RESPONSIBLE FOR FUEL
6 PROCUREMENT?**

7 A. Yes. AJD Forest Products (“AJD”) procures the fuel for GGS and reports to me regarding
8 its fuel procurement activities.

9

10 **Q. APPROXIMATELY HOW MANY YEARS HAVE YOU HAD RESPONSIBILITY
11 FOR FUEL PROCUREMENT?**

12 A. Since I began working at Grayling Generating Station in April 2018.

13

14 **Q. PLEASE ELABORATE ON YOUR RESPONSIBILITIES WITH RESPECT TO
15 FUEL PROCUREMENT.**

16 A. As Plant General Manager, I oversee the administration of the fuel supply agreement with
17 AJD Forest Products. This includes ensuring we have the right amount and type of waste
18 wood material to efficiently operate the boiler at GGS.

19

20 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MICHIGAN PUBLIC
21 SERVICE COMMISSION?**

22 A. Yes.

1 **Q. ON WHOSE BEHALF ARE YOU SUBMITTING YOUR TESTIMONY IN THIS**
2 **PROCEEDING?**

3 A. I am submitting testimony on behalf of Grayling Generating Station Limited Partnership.
4

5 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

6 A. Yes. I am sponsoring Exhibits BMP-5 and BMP-19, and co-sponsoring Exhibits BMP-1
7 and BMP-2.
8

9 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**
10 **SUPERVISION?**

11 A. Yes, as to the portions of Exhibits BMP-1 and BMP-2 relating to Grayling, Exhibit BMP-
12 5 and the list of maintenance costs of \$25,000 or greater in BMP-19. I have also reviewed
13 and agree with the remainder of BMP-1 and BMP-2. The accountants' letter in BMP-19
14 was prepared at my request by our accountants in accordance with the settlement agreement
15 in MPSC Case No. U-17918-R.
16

17 **PURPOSE OF TESTIMONY**

18 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

19 A. The purpose of my testimony is to describe GGS's actual fuel and variable operation and
20 maintenance costs for the period from January 1, 2023 to December 31, 2023, and to
21 demonstrate that those costs were reasonably and prudently incurred. I will also testify as
22 to the amount that Consumers Energy Company paid to GGS for fuel and variable
23 operation and maintenance costs incurred during that time period. My testimony provides

1 factual support for GGS's request for recovery of costs under the terms of Public Act 286
2 of 2008, which permits recovery of costs that exceed the amount that a merchant plant is
3 paid under contract with an eligible utility for those costs.

4
5 **ELIGIBILITY FOR COST RECOVERY**

6 **Q. IS THERE A POWER PURCHASE AGREEMENT ("PPA") BETWEEN GGS AND**
7 **CONSUMERS ENERGY COMPANY?**

8 A. Yes. A complete copy of the agreement, as amended, has been previously provided to the
9 MPSC. My understanding is that it was provided to the parties in both Consumers Energy's
10 2009 and 2010 PSCR Reconciliation cases, MPSC Case Nos. U-15675-R and U-16045-R.

11
12 **Q. HAVE THERE BEEN ANY CHANGES TO THE PPA SINCE IT WAS ENTERED**
13 **INTO THE RECORD OF THOSE PROCEEDINGS?**

14 A. No.

15
16 **Q. WAS GGS's PPA ENTERED ON OR BEFORE JANUARY 1, 2008?**

17 A. Yes.

18
19 **Q. DOES THE CONTRACT HAVE AN INITIAL TERM OF 20 YEARS OR MORE?**

20 A. Yes.

1 **Q. DOES THE PPA PROVIDE FOR GGS TO SELL ELECTRICITY TO AN**
2 **ELECTRIC UTILITY WHOSE RATES ARE REGULATED BY THE**
3 **COMMISSION WITH 1,000,000 OR MORE RETAIL CUSTOMERS IN THIS**
4 **STATE?**

5 A. Yes, our PPA is with Consumers Energy Company.

6
7 **Q. AT ANY TIME PRIOR TO JANUARY 1, 2008, DID GGS GENERATE**
8 **ELECTRICITY IN WHOLE OR IN PART FROM WOOD OR SOLID WOOD**
9 **WASTES AND SELL THAT ELECTRICITY TO CONSUMERS ENERGY**
10 **COMPANY?**

11 A. Yes.

12

13 **Q. DOES GGS STILL GENERATE ELECTRICITY IN WHOLE OR IN PART FROM**
14 **WOOD OR SOLID WOOD WASTES AND SELL THAT ELECTRICITY TO**
15 **CONSUMERS ENERGY COMPANY?**

16 A. Yes.

17

18 **Q. WITH RESPECT TO ENERGY DELIVERED BETWEEN JANUARY 1, 2023 AND**
19 **DECEMBER 31, 2023, DID CONSUMERS ENERGY COMPANY MAKE**
20 **PAYMENTS TO GGS UNDER THE TERMS OF THE PPA?**

21 A. Yes.

1 **Q. DID PORTIONS OF THE PAYMENTS FROM CONSUMERS ENERGY TO GGS**
2 **INCLUDE PAYMENTS FOR FUEL AND VARIABLE OPERATION AND**
3 **MAINTENANCE (“O & M”) COSTS?**

4 A. Yes.

5
6 **Q. DID THE AMOUNT OF GGS’S ACTUAL FUEL AND VARIABLE O & M COSTS**
7 **EXCEED THE AMOUNT THAT CONSUMERS ENERGY PAID TO GGS UNDER**
8 **THE PPA FOR THOSE COSTS?**

9 A. Yes. Please see Exhibits BMP-1, BMP-2 and BMP-5.

10

11 **Q. IS GGS A LANDFILL GAS PLANT, A HYDRO PLANT, OR A MUNICIPAL**
12 **SOLID WASTE PLANT?**

13 A. No.

14

15 **Q. IS GGS ENGAGED IN LITIGATION AGAINST AN ELECTRIC UTILITY**
16 **SEEKING HIGHER PAYMENTS FOR POWER DELIVERED PURSUANT TO A**
17 **CONTRACT?**

18 A. No.

COST DATA

1
2 **Q. WHAT AMOUNT HAS GGS IDENTIFIED ON EXHIBIT BMP-5 AS ITS ACTUAL**
3 **FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED**
4 **FOR SALES OF ELECTRIC GENERATION TO CONSUMERS ENERGY**
5 **COMPANY DURING 2023?**

6 A. GGS has identified \$9,342,175 in actual fuel and variable operation and maintenance costs
7 for sales to Consumers Energy Company in 2023. This amount does not include \$330,000
8 of uncapped CSAPR NOx allowance costs which GGS also seeks to recover.

9
10 **Q. DOES THIS AMOUNT INCLUDE ALL OF THE PLANT'S FUEL AND**
11 **VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED FOR**
12 **SALES TO CONSUMERS ENERGY COMPANY IN 2023?**

13 A. No. For simplicity, however, Grayling Generating Station has decided to only seek
14 recovery of certain variable operation and maintenance costs during 2023. As discussed in
15 more detail below, we are seeking recovery for only the categories of variable operation
16 and maintenance costs listed below. Grayling Generating Station incurs variable operation
17 and maintenance costs beyond the categories listed below.

18
19 **Q. PLEASE STATE THE AMOUNT THAT CONSUMERS ENERGY PAID TO GGS**
20 **PURSUANT TO THE PPA BETWEEN GGS AND CONSUMERS FOR FUEL AND**
21 **VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED DURING**
22 **2023.**

1 A. Under the terms of our PPA, Consumers Energy paid our merchant plant a total of
2 \$4,398,928 for actual fuel and variable operation and maintenance costs incurred for 2023.

3

4 **Q. IS THERE A SHORTFALL BETWEEN THE FUEL AND VARIABLE O & M**
5 **COSTS THAT GGS INCURRED FOR SALES TO CONSUMERS IN 2023 AND**
6 **THE PAYMENTS THAT GGS RECEIVED FROM CONSUMERS FOR THOSE**
7 **COSTS UNDER ITS PPA?**

8 A. Yes, the total shortfall is \$4,943,247.

9

10 **Q. DO YOU HAVE DOCUMENTATION TO SUPPORT THE COST AND PAYMENT**
11 **FIGURES THAT YOU HAVE PROVIDED IN RESPONSE TO THE PRIOR FOUR**
12 **QUESTIONS?**

13 A. Yes. The actual fuel and variable operation and maintenance costs, and the payments to
14 our merchant plant for actual fuel and variable operating and maintenance costs, are
15 detailed on Exhibit BMP-5.

16

17 **Q. WHAT AMOUNT OF CAPPED COSTS IS GGS SEEKING TO RECOVER IN**
18 **THIS PROCEEDING?**

19 A. As set forth in Exhibit BMP-1, GGS is seeking to recover \$2,668,997 of the shortfall in
20 fuel and variable O & M costs. This amount could change in the unlikely event that an
21 adjustment is made to the fuel and variable operation and maintenance expense which any
22 other BMP is seeking to recover in this proceeding with respect to a month in which the
23 collective payments to the BMPs exceed the statutory cap on cost recovery. While we do

1 not believe that any adjustment to any other BMPs' costs would be appropriate or required,
2 it is theoretically possible that an adjustment could be made. In that event, the capped
3 amount would be reallocated among all of the BMPs, taking into account the adjustment.
4 The result of this reallocation process would be that the amount that GGS is seeking to
5 recover in this proceeding would change in order to accurately reflect its proportionate
6 share of the capped amount.

7
8 **Q. THE MPSC'S AUGUST 11, 2009 ORDER IN CASE NO. U-16048 ALLOWS THE**
9 **BMPS TO SUBMIT MONTHLY INVOICES TO CONSUMERS FOR THE**
10 **AMOUNTS RECOVERABLE UNDER PA 286. THE SAME ORDER REQUIRES**
11 **CONSUMERS TO MAKE INTERIM MONTHLY PAYMENTS TO THE BMPs TO**
12 **COVER 80% OF THE INVOICED AMOUNTS. DID CONSUMERS MAKE**
13 **PARTIAL PAYMENTS TO GGS IN 2023?**

14 A. Yes, as reflected in Exhibits BMP-1, BMP-2 and BMP-5, Consumers Energy has paid GGS
15 \$1,899,448 of the \$2,668,997 that GGS seeks to recover in this proceeding, leaving a
16 balance due to GGS of \$769,549 for its capped costs.

17
18 **Q. IS GGS SEEKING RECOVERY OF ANY ACTUAL FUEL AND VARIABLE**
19 **OPERATION AND MAINTENANCE COSTS THAT WERE INCURRED DUE TO**
20 **CHANGES IN FEDERAL OR STATE ENVIRONMENTAL LAWS OR**
21 **REGULATIONS THAT WERE IMPLEMENTED AFTER OCTOBER 6, 2008?**

1 A. Yes, as explained below, GGS is seeking to recover \$330,000 in NOx allowance costs that
2 were incurred due to changes in federal environmental laws and regulations implemented
3 after October 6, 2008.

4

5 **Q. WHAT IS THE TOTAL AMOUNT OF CAPPED AND UNCAPPED COSTS THAT**
6 **CONSUMERS STILL OWES GRAYLING?**

7 A. \$1,099,549.

8

9

PROCUREMENT PROCEDURES

10 **Q. PLEASE DESCRIBE THE FUEL OR FUELS THAT GGS USED TO GENERATE**
11 **ELECTRICITY DURING 2023.**

12 A. GGS used waste wood (consisting of bark, chips, sawdust and mill shavings), and tire
13 derived fuel (tire chips or “TDF”).

14

15 **Q. WITH RESPECT TO EACH OF THE FUELS THAT YOU HAVE LISTED,**
16 **PLEASE SPECIFY THE VOLUMES OF EACH TYPE OF FUEL THAT WERE**
17 **USED DURING 2023.**

18 A. GGS burned 212,129.58 tons of waste wood and 3,012,32 tons of Tire Derived Fuel
19 (“TDF”) from January 1, 2023 through December 31, 2023.

1 **Q. DOES GGS HAVE FUEL SUPPLY PURCHASE AGREEMENTS WITH ANY**
2 **FUEL SUPPLIERS?**

3 A. Yes. GGS has a long-term fuel supply agreement with AJD Forest Products. A letter of
4 intent was executed with AJD around 1987. A definitive wood fuel supply agreement was
5 executed in October 1990. AJD signed an amended long-term fuel supply agreement with
6 GGS on January 1, 1995. AJD has continued to be the exclusive supplier of wood fuel to
7 the project since that time. GGS does not have a fuel supply agreement for TDF. GGS
8 purchases TDF on the spot market.

9
10 **Q. PLEASE EXPLAIN WHY GGS USES BOTH A FUEL SUPPLY AGREEMENT AS**
11 **WELL AS SPOT MARKET PURCHASES.**

12 A. Purchasing fuel via long-term contracts, or via the spot market, can both be reasonable
13 procurement practices. The decision to utilize a long-term fuel contract or rely upon the
14 spot market to procure fuel involves the balancing of a variety of risks. Long-term contracts
15 mitigate the risk of fuel supply shortages and can be used to mitigate the risk of price
16 fluctuations. Long-term contracts, however, may lock a buyer into prices that are higher or
17 lower than what the spot market would otherwise provide at any given moment. Utilizing
18 the spot market ensures that the buyer will receive the lowest available price for fuel on a
19 short-term basis that day, however, the buyer may experience dramatic price fluctuations
20 and possible fuel shortages. The decision to utilize long-term contracts or the spot market
21 necessarily involves the balancing of a variety of complex factors including, fuel price
22 level, fuel supply reliability, and fuel price volatility. Given the fuel supply options

1 available to GGS, the most cost-effective way to obtain a reliable supply of fuel was to
2 purchase our wood through a long-term contract and our supply of TDF on the spot market.

3
4 **Q. PLEASE SUMMARIZE THE PRINCIPAL TERMS OF GGS's FUEL SUPPLY**
5 **AGREEMENT WITH AJD.**

6 A. The agreement requires the supplier to provide various types of waste wood at the “lowest
7 Rates possible” plus a small service fee. Based on price and moisture content, the supplier
8 can qualify for a bonus.

9
10 **Q. WHY DID GGS DECIDE TO CONTRACT WITH ONLY ONE WOOD SUPPLIER**
11 **INSTEAD OF MULTIPLE SUPPLIERS?**

12 A. In order for the plant to be financed, the lenders required a wood supplier with experience
13 in the supply of waste wood. AJD met that requirement. By contracting with AJD, GGS is
14 in effect contracting with multiple suppliers since AJD buys on GGS's behalf from many
15 different suppliers. Our contract with AJD has incentives to keep the costs low.

16
17 **Q. WHAT WERE THE EFFECTS DURING 2023 OF HAVING ENTERED INTO THE**
18 **FUEL SUPPLY AGREEMENT?**

19 A. The effects of entering into this agreement were that GGS was able to secure a supply of
20 wood fuel that was adequate to meet our generating needs, and reliable enough to assure
21 our continued performance, all within the context of an overall effort to minimize costs as
22 much as reasonable and practicable.

1 **Q. WHAT WERE THE EFFECTS IN 2023 OF PURCHASING GGS's SUPPLY OF**
2 **TDF ON THE SPOT MARKET?**

3 A. Supplementing our wood fuel with TDF enables us to diversify our fuel supply and take
4 advantage of opportunities to secure TDF at favorable prices. This provides a high BTU
5 fuel to supplement the wood fuel when the wood is wet.

6
7 **Q. WHEN YOU WERE PROCURING THE FUEL THAT WAS CONSUMED**
8 **DURING 2023, WAS ONE OF YOUR JOB DUTIES TO MINIMIZE THE COST OF**
9 **FUEL PURCHASED BY GGS?**

10 A. Yes. Cost was a very important consideration. Another important consideration was the
11 reliability of the fuel supply. GGS and AJD regularly evaluate new sources of wood fuel
12 based on delivered price, moisture content (which affects plant efficiency), reliability of
13 the supplier, and ability to meet fuel specifications and permit requirements. We also
14 periodically evaluated non-wood sources of fuel, which led to the facility burning a small
15 percentage of tire-derived fuel. Fuel purchasing decisions are made based on minimizing
16 net fuel costs, while securing a reliable supply of fuel and meeting permit restrictions.

17
18 **Q. PLEASE DESCRIBE THE STEPS THAT YOU UNDERTOOK TO ACHIEVE**
19 **THESE OBJECTIVES.**

20 A. GGS routinely consults with AJD about fuel quantity, quality, and prices.

1 **Q WAS PURCHASING FUEL PURSUANT TO YOUR FUEL SUPPLY**
2 **AGREEMENT WITH AJD THE BEST FUEL SUPPLY OPTION REASONABLY**
3 **AVAILABLE TO GGS IN 2023?**

4 A. Yes.

5
6 **Q. IN CONNECTION WITH YOUR FUEL PROCUREMENT DECISIONS, DID YOU**
7 **EXERCISE YOUR BEST JUDGMENT?**

8 A. Yes.

9
10 **Q. IN YOUR OPINION, WAS GGS's DECISION TO ENTER INTO THE FUEL**
11 **SUPPLY AGREEMENT WITH AJD REASONABLE AND PRUDENT BASED ON**
12 **THE FACTS AND CIRCUMSTANCES KNOWN OR REASONABLY**
13 **FORESEEABLE AT THE TIME?**

14 A. Yes.

15
16 **Q. PLEASE EXPLAIN.**

17 A. AJD is the best option for fuel supply to GGS for several reasons: (1) competitively priced
18 fuel, (2) immediate proximity to the GGS site, (3) experience in supplying waste wood to
19 power plants, especially Dow Corning's previous wood-fired cogeneration facility in
20 Midland, (4) sizable internal generation of waste wood from their sawmill and logging
21 operations provides a reliable source of fuel, (5) for the wood fuel business, AJD is a sizable
22 company with decent financial strength providing stability and (6) great relationships and
23 connections in the Michigan lumbering industry.

1 **Q. IN YOUR OPINION, WAS GGS'S DECISION TO ACQUIRE TDF ON THE SPOT**
2 **MARKET REASONABLE AND PRUDENT?**

3 A. Yes. Supplementing our supply of wood fuel with TDF enabled us to diversify our fuel
4 supply and purchasing TDF on the spot market ensures that we pay the lowest possible
5 price at that moment in time.

6

7 **VARIABLE OPERATION & MAINTENANCE COSTS**

8 **Q. PLEASE DESCRIBE THE VARIABLE OPERATION AND MAINTENANCE**
9 **COSTS THAT YOU ARE SEEKING TO RECOVER IN THIS PROCEEDING.**

10 A. We are seeking to recover the following variable operation and maintenance costs: 1) water
11 supply and treatment costs; 2) sewer and wastewater disposal costs; 3) ash handling costs;
12 4) fuel handling costs; 5) emission control costs; 6) water treatment costs; and 7)
13 maintenance costs.

14

15 **Q. DOES YOUR PLANT INCUR OTHER VARIABLE OPERATION AND**
16 **MAINTENANCE COSTS?**

17 A. Yes. For simplicity, however, Grayling Generating Station has chosen to seek cost recovery
18 during 2023 for only those items identified above.

19

20 **Q. DID YOU MAKE REASONABLE EFFORTS TO MINIMIZE THE VARIABLE**
21 **OPERATION AND MAINTENANCE COSTS?**

22 A. Yes, to the extent practicable, we made every reasonable effort to control these costs.

1 **Q. PLEASE EXPLAIN THE MEASURES THAT GGS UNDERTOOK TO CONTROL**
2 **ITS VARIABLE OPERATION AND MAINTENANCE COSTS.**

3 A. Our plant has purchasing policies that require us to competitively bid any large purchases.
4 GGS is always looking for lower cost materials.

5
6 **Q. THE SETTLEMENT AGREEMENT IN CONSUMERS' 2016 PSCR**
7 **RECONCILIATION REQUIRED YOU TO: (i) PREPARE A LIST OF ALL**
8 **EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING COST**
9 **RECOVERY; (ii) IDENTIFY WHICH, IF ANY, OF THE EXPENSES ARE**
10 **RELATED TO ONE ANOTHER AND (iii) HAVE AN ACCOUNTANT CERTIFY**
11 **THAT ANY EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING**
12 **COST RECOVERY ARE PROPERLY CHARACTERIZED AS CURRENT**
13 **EXPENSES AND NOT AS CAPITAL EXPENDITURES. HAVE YOU DONE SO?**

14 A. Yes. I have prepared that list and it is attached as Exhibit BMP-19. That list also identifies
15 which of the expenses are related. Additionally, Plant Moran has audited our books and
16 confirmed the company's characterization of the expenses of \$25,000 or greater and issued
17 the attached certification. Exhibit BMP-19.

18

19 **NO_x ALLOWANCE COSTS**

20 **Q. YOU PREVIOUSLY INDICATED THAT GGS IS SEEKING TO RECOVER NO_x**
21 **ALLOWANCE COSTS. PLEASE DESCRIBE THOSE COSTS.**

22 A. The U.S. EPA's Cross State Air Pollution Rule ("CSAPR") requires GGS to hold *annual*
23 *and seasonal* NO_x allowances.

1 GGS's NOx allowance expenses are identified on Exhibit BMP-5. GGS is seeking
2 to recover those NOx allowance costs pursuant to (i) MCL.460.6a(10) which provides that
3 "the \$1,000,000.00 limit specified in this subsection, as adjusted, does not apply to actual
4 fuel and variable operation and maintenance costs that are incurred due to changes in
5 federal or state environmental laws or regulations that are implemented after October 6,
6 2008."

7
8 **Q. WERE THE U.S. EPA'S CROSS STATE AIR POLLUTION RULE ("CSAPR")**
9 **REQUIREMENTS IMPLEMENTED AFTER OCTOBER 6 2008?**

10 A. Yes. The U.S. EPA's Cross State Air Pollution Rule, 40 CFR 97 Subparts AAAAAA to
11 FFFFFF ("CSAPR") were promulgated on August 8, 2011. (76 FR 48208) See, Exhibit
12 BMP-13. GPS's request for \$330,000 for seasonal NOx allowances in CSAPR NOx
13 allowances is consistent with the Commission's approval of uncapped cost recovery of
14 NOx allowances incurred due to CSAPR in prior annual cost recovery cases.

15
16 **Q. WHAT ARE ALLOWANCES?**

17 A. They are authorizations to emit a limited amount of air pollutants per year. The need for
18 allowances arises in direct proportion to the generator's level of operation and each
19 allowance represents the right to emit one ton of pollutants. The EPA allocates a certain
20 number of allowances to each generator and, if any additional allowances are needed to
21 cover actual emissions, the generator must purchase those allowances in the open market.
22 TES Filer City witness Joe Tondu's testimony describes CSAPR and its requirements in
23 more detail.

1 **Q. WHAT ARE THE BEGINNING AND ENDING DATES OF THE CSAPR *ANNUAL***
2 ***NO_x* ALLOWANCE PERIOD?**

3 A. January 1st through December 31st of each calendar year, starting in 2015 and each calendar
4 year thereafter.

5
6 **Q. DID GSS INCURR ANY *ANNUAL* NO_x ALLOWANCE COSTS?**

7 A. No. The EPA allocated GGS sufficient *annual* NO_x allowances to cover its annual NO_x
8 allowance requirement.

9
10 **Q. WHAT ARE THE BEGINNING AND ENDING DATES OF THE CSAPR**
11 ***SEASONAL* NO_x ALLOWANCE PERIOD?**

12 A. May 1st through September 30th of each calendar year.

13
14 **Q. DID GPS INCURR TO *SEASONAL* NO_x ALLOWANCE COSTS?**

15 A. Yes. In 2023, Grayling incurred \$330,000 for *seasonal* NO_x allowances to comply with its
16 the Cross State Air Pollution Rule. These expenditures were to satisfy GGS's 2022 and
17 2023 NO_x allowance requirements. The U. S. EPA deadline for GGS to hold its 2022
18 seasonal NO_x allowances was 2022 seasonal NO_x allowance was June 1, 2023.

19
20 **Q. WHAT WERE GRAYLING GENERATING STATION'S CSAPR NO_x SEASONAL**
21 **ALLOWANCE REQUIREMENTS FOR 2023?**

22 A. Grayling Generating Station was required to hold 99 seasonal allowances for the 2022
23 Ozone Season and 61 seasonal allowances for the 2023 Ozone Season. The total number

1 of allowances that Grayling held to satisfy those requirements included (i) the number of
2 allowances remaining in Grayling's account from previous years, (ii) the number of
3 allowances which the U. S. EPA allocated to Grayling, and (iii) Grayling's market
4 purchases of additional CSAPR NOx seasonal allowances.

5
6 **Q. HOW MANY SEASONAL NO_x ALLOWANCES DID GRAYLING GENERATING**
7 **STATION HOLD AT THE BEGINNING OF 2023, HOW MANY SEASONAL NO_x**
8 **ALLOWANCES DID THE EPA ALLOCATE TO GRAYLING FOR 2023, AND**
9 **HOW MANY SEASONAL ALLOWANCES DID GRAYLING PURCHASE FOR**
10 **THE 2022 AND 2023 OZONE SEASONS?**

11 A. Grayling Generating Station held 103 allowances in its account balance at the beginning
12 of 2023. On September 5, 2023, the U.S. EPA allocated 64 allowances to Grayling for its
13 2023 requirement and 71 allowances for its 2024 requirements. Grayling had previously
14 purchased 21 allowances in December of 2022 to meet its 2022 requirements and has asked
15 to recover those costs in the 2022 proceeding. Grayling purchased 22 allowances on
16 January 27, 2023 to meet the remainder of its compliance requirements. After taking into
17 account its 2022 and 2023 compliance requirements, Grayling held 68 allowances in its
18 account at the end of 2023 to be used to satisfy its 2024 requirements.

19
20 **Q. WHY WAS IT PRUDENT FOR GRAYLING TO HAVE PURCHASED MORE**
21 **ALLOWANCES THAN IT ACTUALLY NEEDED?**

22 A. Yes. Because there are penalties for not holding sufficient allowances to cover actual
23 emissions. For the CSAPR NOx annual program, 40 CFR 97.424(d) provides that if an

1 emission source does not hold sufficient allowances to cover actual emissions, the EPA
2 will then deduct two allowances per each ton of excess emissions as a penalty.

3 Further, allowances prices fluctuate year-to-year. Thus, additional allowances
4 beyond the direct need for NOx annual compliance were purchased to minimize allowance
5 purchase costs in future years because any unused allowances remain the facility's
6 compliance account and can be used for future compliance.

7
8 **Q. DID GGS MAKE REASONABLE EFFORTS TO MINIMIZE ITS CSAPR
9 ALLOWANCE COSTS?**

10 A. Yes, to the extent practicable, we made every reasonable effort to control these costs. We
11 used both CMS ERM Co's expertise, which did not charge for its service, and an
12 independent broker in acquiring our CSAPR NOx allowances.

13
14 **Q. AT THE TIME GGS PURCHASED THE CSAPR ALLOWANCES, WERE THOSE
15 PRICES THE BEST PRICES THAT WERE REASONABLY AVAILABLE TO
16 GGS?**

17 A. Yes. I instructed our broker to acquire the CSAPR NOx allowances at the lowest possible
18 price.

19
20 **Q. IN CONNECTION WITH YOUR CSAPR ALLOWANCE PROCUREMENT
21 DECISIONS, DID YOU EXERCISE YOUR BEST JUDGMENT?**

22 A. Yes.

1 **Q. IN YOUR OPINION, WERE GGS'S DECISIONS TO PURCHASE CSAPR**
2 **ALLOWANCES AFTER RECEIVING INPUT FROM CMS ERM CO. AND YOUR**
3 **INDEPENDENT BROKER REASONABLE AND PRUDENT BASED ON THE**
4 **FACTS AND CIRCUMSTANCES KNOWN OR REASONABLY FORESEEABLE**
5 **AT THE TIME WHEN THE DECISIONS WERE MADE?**

6 A. Yes. Receiving input from a CMS ERM Co staff member experienced in purchasing
7 allowances and using an independent broker allowed us to purchase the allowances at the
8 lowest possible cost as best we could determine.

9

10

CONCLUSION

11 **Q. IN YOUR OPINION, WERE GGS'S PURCHASING PRACTICES REASONABLE**
12 **AND PRUDENT?**

13 A. Yes, definitely.

14

15 **Q. IN YOUR OPINION, WERE GGS'S ACTUAL FUEL AND VARIABLE**
16 **OPERATION AND MAINTENANCE COSTS FOR THE PERIOD FROM**
17 **JANUARY 1, 2023 THROUGH DECEMBER 31, 2023 REASONABLY AND**
18 **PRUDENTLY INCURRED?**

19 A. Yes.

1 **Q. IN YOUR OPINION WERE ANY OF GGS's ACTUAL FUEL OR VARIABLE**
2 **OPERATION AND MAINTENANCE COSTS EXTRAVAGANT, UNNECESSARY,**
3 **INEFFICIENT OR IMPRUDENT?**

4 A. Absolutely not.

5

6 **Q. ARE GGS's RECORDS WITH RESPECT TO FUEL AND VARIABLE**
7 **OPERATION AND MAINTENANCE COSTS AUDITED?**

8 A. Yes. Our plant's 2023 records were audited by Plante & Moran, PLLC. The audit included
9 a review of fuel and variable operation and maintenance costs, and revenues.

10

11 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

12 A. Yes, it does.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for approval to implement a power cost)
recovery plan for the 12-months ending)
December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY
OF
ROBERT JOE TONDU
ON BEHALF OF
TES FILER CITY STATION LIMITED PARTNERSHIP

I. **INTRODUCTION**

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Robert Joe Tondy. My business address is Tondy Corporation, 1250 Wood Branch Park Dr, Ste 390, Houston, TX 77079.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am the sole owner and president of Tondy Corporation formally known as Tondy Energy Systems, Inc. Tondy Corporation is engaged in the business of investing in cogeneration and alternative energy development. Tondy Corporation was the original developer of the T.E.S. Filer City Station project and, through affiliates, is an owner and one of the two general partners of the T.E.S. Filer City Station Limited Partnership. (“TES”)

Q. WOULD YOU PLEASE STATE YOUR EDUCATIONAL BACKGROUND?

A. I am a native of Manistee County, Michigan. I graduated from Grand Valley State College in Allendale, Michigan in 1973 with a B.S. Degree in Geology. I received a Master’s Degree in Geology from the University of Texas at Austin in 1976 and have also completed numerous short courses in various business-related subjects.

Q. WHAT IS YOUR BUSINESS EXPERIENCE?

A. In 1975, I joined Getty Oil Company as a staff geologist working in their development section. I left Getty Oil Company in 1978 and became an independent geologist. Since 1979, I have been engaged in oil and gas exploration and development and energy-related activities including cogeneration and alternative energy development.

1 **Q. PLEASE BRIEFLY DESCRIBE THE PLANT.**

2 A. TES Filer City Station is a merchant plant consisting of electric generating equipment and
3 associated facilities with a nameplate capacity rating of 72.54 MW. The plant is located in
4 Filer City, Michigan, and is not owned or operated by an electric utility.

5 The TES Filer City Station plant consists of electric generating equipment
6 comprised of two identical stoker boilers, one VAX turbine, one generator and associated
7 facilities. TES is a cogeneration plant which produces both electricity and steam, with the
8 electricity being delivered to Consumers Energy Company pursuant to a power purchase
9 agreement dated July 31, 1986, as amended on April 30, 1987 and February 28, 2020 and
10 approved by the Commission, and the steam being delivered to the nearby Packaging
11 Corporation of America (“PCA”) plant. The TES generating plant is exceptionally well
12 maintained and operated and has a capacity factor of approximately 93% over more than
13 20 years.

14 TES is and has always been fueled primarily by coal and wood but began burning
15 natural gas, in a material way beginning on June 28, 2018. TES also burned tire derived
16 fuel (“TDF”) in 2023. As explained later, TES began burning natural gas in addition to its
17 historical mix of solid fuels in 2018 to comply with U.S. EPA regulations.

18 None of the other BMPs are cogeneration facilities. Rather, they are all small power
19 producers under PURPA which are not obligated to produce a second form of useful energy
20 in addition to electricity. Because the TES plant is a cogeneration plant and because it burns
21 coal, the design of its Filer City plant differs significantly from the design of all of the other
22 BMPs’ small power production plants. Also, because none of the other BMPs burn coal,

1 they are not subject to the U.S. EPA's Mercury and Air Toxics Standards ("MATS") or its
2 requirements.

3
4 **Q. ARE YOU FAMILIAR WITH, AND ULTIMATELY RESPONSIBLE FOR, FUEL**
5 **PROCUREMENT?**

6 A. Yes. As the representative of one of the two General Partners of TES, I have final approval,
7 in conjunction with the other General Partner, of all fuel procurement for the TES Filer
8 City Station power plant. With the representative of the other general partner, I approve
9 the TES budgets and all fuel contracts.

10
11 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MICHIGAN PUBLIC**
12 **SERVICE COMMISSION?**

13 A. Yes, I testified in both MPSC Case No. U-8562 and MPSC Case No. U-13917. I also
14 testified in Consumers Energy's 2009 PSCR reconciliation proceeding, MPSC Case No.
15 U-15675-R; Consumers Energy's 2010 PSCR reconciliation proceeding, MPSC Case No.
16 U-16045-R; Consumers Energy's 2011 PSCR reconciliation proceeding, MPSC Case No.
17 U-16432-R; Consumers Energy's 2012 PSCR reconciliation proceeding, MPSC Case No.
18 U-16890-R; Consumers Energy's 2013 PSCR reconciliation proceeding, MPSC Case No.
19 U-17095-R; Consumers Energy's 2014 PSCR reconciliation proceeding, MPSC Case No.
20 U-17317-R; Consumers Energy's 2015 PSCR reconciliation proceeding, MPSC Case No.
21 U-17678-R; Consumers Energy's 2016 PSCR reconciliation proceeding, MPSC Case No.
22 U-17918-R; Consumers Energy's 2017 PSCR reconciliation proceeding, MPSC Case No.
23 U-20068-R; Consumers Energy's 2018 PSCR reconciliation proceeding, MPSC Case No.

1 U-20202; Consumers Energy's 2019 PSCR reconciliation proceeding, MPSC Case No. U-
2 20220; Consumers Energy's 2020 PSCR reconciliation proceeding, MPSC Case No. U-
3 20526; Consumers Energy's 2021 PSCR reconciliation proceeding, MPSC Case No. U-
4 21803 and Consumers Energy's 2022 PSCR reconciliation proceeding, MPSC Case No.
5 U-21049.

6
7 **Q. ON WHOSE BEHALF ARE YOU SUBMITTING YOUR TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A. My testimony is on behalf of TES, although my discussion regarding the recovery of NOx
10 allowance costs is equally applicable to Cadillac, Genesee and Grayling.

11
12 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

13 A. Yes. I am sponsoring Exhibits BMP-7, BMP-11, BMP-12, BMP-13, BMP-14, BMP-15,
14 BMP-16, BMP-22. I am also co-sponsoring Exhibits BMP-1, BMP-2.

15
16 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**
17 **SUPERVISION?**

18 A. Yes as to the portions of Exhibits BMP-1 and BMP-2 relating to TES Filer City and BMP-
19 7. Exhibits BMP-11, BMP-12, BMP-13, BMP-14, BMP-15 and BMP-16 are public
20 documents, prepared by the United States government. I have also reviewed and agree with
21 the remainder of BMP-1 and BMP-2. Exhibit BMP-22 was prepared at my request by our
22 accountants in accordance with the settlement agreement in MPSC Case No. U-17918-R.

1 **Q. WERE THERE ANY CHANGES TO THE PPA THAT WERE EFFECTIVE IN**
2 **2023?**

3 A. Yes. In its July 7, 2023 Order in Case No. U-21407, the Commission approved Amendment
4 No. 3 dated February 28, 2023 which “provides for the Filer City plant to be converted
5 from must-run, baseload generation facility to an economically dispatchable facility under
6 the PPA.” Order, p.1. That amendment did not affect TES Filer City’s eligibility for cost
7 recovery under Act 286 of 2008.

8
9 **Q. DOES THE CONTRACT HAVE AN INITIAL TERM OF 20 YEARS OR MORE?**

10 A. Yes.

11
12 **Q. DOES THE PPA PROVIDE FOR TES TO SELL ELECTRICITY TO AN**
13 **ELECTRIC UTILITY WHOSE RATES ARE REGULATED BY THE**
14 **COMMISSION WITH 1,000,000 OR MORE RETAIL CUSTOMERS IN THIS**
15 **STATE?**

16 A. Yes, our PPA is with Consumers Energy Company.

17
18 **Q. AT ANY TIME PRIOR TO JANUARY 1, 2008, DID TES GENERATE**
19 **ELECTRICITY IN WHOLE OR IN PART FROM WOOD OR SOLID WOOD**
20 **WASTES AND SELL THAT ELECTRICITY TO CONSUMERS ENERGY**
21 **COMPANY?**

22 A. Yes.

1 Q. DOES TES STILL GENERATE ELECTRICITY IN WHOLE OR IN PART FROM
2 WOOD OR SOLID WOOD WASTES AND SELL THAT ELECTRICITY TO
3 CONSUMERS ENERGY COMPANY?

4 A. Yes.

5
6 Q. WITH RESPECT TO ENERGY DELIVERED BETWEEN JANUARY 1, 2023 AND
7 DECEMBER 31, 2023, DID CONSUMERS ENERGY COMPANY MAKE
8 PAYMENTS TO TES UNDER THE TERMS OF THE PPA?

9 A. Yes.

10

11 Q. DID PORTIONS OF THE PAYMENTS FROM CONSUMERS ENERGY TO TES
12 INCLUDE PAYMENT FOR FUEL AND VARIABLE OPERATION AND
13 MAINTENANCE (“O & M”) COSTS?

14 A. Yes.

15

16 Q. DID THE AMOUNT OF TES’S ACTUAL FUEL AND VARIABLE O & M COSTS
17 EXCEED THE AMOUNT THAT CONSUMERS ENERGY PAID TO TES UNDER
18 THE PPA FOR THOSE COSTS?

19 A. Yes. Please see Exhibits BMP-1, BMP-2 and BMP-7.

20

21 Q. IS TES A LANDFILL GAS PLANT, A HYDRO PLANT, OR A MUNICIPAL SOLID
22 WASTE PLANT?

23 A. No.

1 **Q. IS TES ENGAGED IN LITIGATION AGAINST AN ELECTRIC UTILITY**
2 **SEEKING HIGHER PAYMENTS FOR POWER DELIVERED PURSUANT TO A**
3 **CONTRACT?**

4 A. No.

5

6

IV. COST DATA

7 **Q. WHAT WERE TES'S ACTUAL FUEL AND VARIABLE OPERATION AND**
8 **MAINTENANCE COSTS INCURRED FOR SALES OF ELECTRIC**
9 **GENERATION TO CONSUMERS ENERGY COMPANY DURING 2023?**

10 A. As set forth in Exhibit BMP-7, TES has identified \$20,386,855 in actual fuel and variable
11 operation and maintenance costs for sales to Consumers Energy Company in 2023. This
12 amount does not include the \$196,875 of uncapped CSAPR NOx allowance costs or
13 \$1,176,416 of MATS natural gas fuel and testing costs described below, but it does include
14 the remaining natural gas fuel costs for which TES is not seeking uncapped recovery, also
15 described below.

16

17 **Q. DOES THIS AMOUNT INCLUDE ALL OF THE PLANT'S FUEL AND**
18 **VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED FOR**
19 **SALES TO CONSUMERS ENERGY COMPANY IN 2023?**

20 A. No. For simplicity, TES has decided to seek recovery of only certain variable operation
21 and maintenance costs during 2023. As discussed in more detail below, we are only seeking
22 recovery for the categories of variable operation and maintenance costs listed below. TES

1 nevertheless incurs variable operation and maintenance costs beyond the categories listed
2 below.

3

4 **Q. PLEASE IDENTIFY THE AMOUNT THAT CONSUMERS ENERGY PAID TO**
5 **TES PURSUANT TO THE PPA BETWEEN TES AND CONSUMERS FOR FUEL**
6 **AND VARIABLE OPERATION AND MAINTENANCE COSTS INCURRED**
7 **DURING 2023.**

8 A. Under the terms of our PPA, Consumers Energy paid TES a total of \$10,306,453 for actual
9 fuel and variable operation and maintenance costs incurred for 2023.

10

11 **Q. WAS THERE A SHORTFALL BETWEEN THE FUEL AND VARIABLE O & M**
12 **COSTS THAT TES INCURRED FOR SALES TO CONSUMERS IN 2023 AND THE**
13 **PAYMENTS THAT TES RECEIVED FROM CONSUMERS FOR THOSE COSTS**
14 **UNDER ITS PPA?**

15 A. Yes, the total shortfall is \$10,080,402.

16

17 **Q. DO YOU HAVE DOCUMENTATION TO SUPPORT THE COST AND PAYMENT**
18 **FIGURES THAT YOU HAVE PROVIDED IN RESPONSE TO THE PRIOR FOUR**
19 **QUESTIONS?**

20 A. Yes. The actual fuel and variable operation and maintenance costs, and the payments to
21 TES for actual fuel and variable operation and maintenance costs, are detailed on Exhibit
22 BMP-7.

1 **Q. WHAT AMOUNT IS TES SEEKING TO RECOVER IN THIS PROCEEDING FOR**
2 **CAPPED FUEL AND VARIABLE OPERATIONS AND MAINTENANCE COSTS?**

3 A. As set forth on line 23 of Exhibit BMP-1, TES is seeking to recover capped payments of
4 \$5,549,160. This amount could change in the unlikely event that an adjustment is made to
5 the fuel and variable operation and maintenance expense which any other Biomass
6 Merchant Plant is seeking to recover in this proceeding with respect to a month in which
7 the collective payments to the Biomass Merchant Plants exceed the statutory cap on cost
8 recovery. In the event that the Commission were to make such an adjustment, the capped
9 amount would be reallocated among all of the Biomass Merchant Plants. The result of this
10 reallocation process would be that the amount that TES is seeking to recover in this
11 proceeding would change in order to accurately reflect its proportionate share of the capped
12 amount.

13

14 **Q. THE MPSC'S AUGUST 11, 2009 ORDER IN CASE NO. U-16048 ALLOWS THE**
15 **BMPs TO SUBMIT MONTHLY INVOICES TO CONSUMERS FOR THE**
16 **AMOUNTS RECOVERABLE UNDER PA 286. THE SAME ORDER REQUIRES**
17 **CONSUMERS TO MAKE INTERIM MONTHLY PAYMENTS TO THE BMPs TO**
18 **COVER 80% OF THE INVOICED AMOUNTS. DID CONSUMERS MAKE**
19 **PARTIAL PAYMENTS TO TES IN 2023?**

20 A. Yes, as reflected in Exhibits BMP-1, BMP-2 and BMP-7, Consumers Energy has paid TES
21 \$3,972,738 of the \$5,549,160 capped fuel and variable O & M costs that TES seeks to
22 recover in this proceeding, leaving a balance due to TES for capped fuel and variable O &
23 M costs of \$1,576,422.

1 **Q. IS TES ALSO SEEKING RECOVERY OF ANY UNCAPPED ACTUAL FUEL AND**
2 **VARIABLE OPERATION AND MAINTENANCE COSTS THAT WERE**
3 **INCURRED DUE TO CHANGES IN FEDERAL OR STATE ENVIRONMENTAL**
4 **LAWS OR REGULATIONS THAT WERE IMPLEMENTED AFTER OCTOBER**
5 **6, 2008?**

6 A. Yes. TES is seeking to recover \$1,128,570 in fuel costs and \$47,864 in compliance testing
7 costs incurred due to the U.S. EPA's 2012 enactment of the Mercury and Air Toxics
8 Standards, 40 CFR Part 63, Subpart UUUUU, as described later in my testimony.

9 Pursuant to MCL.460.6a(10), TES is also seeking to recover \$196,875 in NOx
10 allowance costs incurred due to U.S. EPA's enactment the 2011 Cross State Air Pollution
11 Rule, 40 CFR 97 Subparts AAAAAA to FFFFFF ("CSAPR")

12 Both the CSAPR allowance costs and MATS compliance costs are identified on
13 Exhibits BMP-7. TES is seeking to recover those costs pursuant to MCL.460.6a(10) which
14 provides that "the \$1,000,000.00 limit specified in this subsection, as adjusted, does not
15 apply to actual fuel and variable operation and maintenance costs that are incurred due to
16 changes in federal or state environmental laws or regulations that are implemented after
17 October 6, 2008."

18 Thus, as reflected in Exhibit BMP-2, the remaining balance of both capped and
19 uncapped fuel and variable O & M costs that TES claims is \$2,949,713.

1 contract or rely upon the spot market to procure fuel involves the balancing of a variety of
2 risks. Single or multi-year contracts mitigate the risk of fuel supply shortages and can be
3 used to mitigate the risk of price fluctuations. Single or multi-year contracts, however, may
4 lock a buyer into prices that are higher or lower than what the spot market would otherwise
5 provide at any given moment. Utilizing the spot market ensures that the buyer will receive
6 the lowest available price for fuel on a short-term basis that day but the buyer may
7 experience dramatic price fluctuations and possible fuel shortages. The decision to utilize
8 single or multi-year contracts or the spot market necessarily involves the balancing of a
9 variety of complex factors, including fuel price level, fuel supply reliability, and fuel price
10 volatility. Given the fuel supply options available to TES, the most cost-effective way to
11 obtain a reliable supply of fuel was to purchase our coal through two single year contracts,
12 wood through a multi-year contract, natural gas through ERM as discussed below, and our
13 supply of TDF on the spot market.

14
15 **Q. PLEASE DESCRIBE THE PROCESS THAT WAS USED TO ENTER INTO TES'S**
16 **COAL AND FUEL SUPPLY AGREEMENTS.**

17 A. A competitive bid process was used for the purchase of TES's coal fuels. Multiple factors
18 were considered in the process including commodity price, sulfur content, ash content,
19 transloading and blending costs and, ultimately, cost per MMBTU delivered to TES.

1 **Q. PLEASE SUMMARIZE THE PRINCIPAL TERMS OF YOUR COAL AND FUEL**
2 **SUPPLY AGREEMENTS.**

3 A. The principal terms of each contract are similar in that each contains contractual volume
4 commitments, conditions concerning delivery timing, fuel quality parameters including
5 rejection limits, fixed pricing for each year of the contract, plus termination dates for each
6 contract.

7
8 **Q. WHEN YOU ENTERED INTO THESE SUPPLY AGREEMENTS, DID YOU**
9 **CONSIDER OTHER AVAILABLE ALTERNATIVE SUPPLIERS?**

10 A. Yes.

11
12 **Q. PLEASE EXPLAIN WHAT ALTERNATIVES YOU CONSIDERED AND WHY**
13 **YOU CHOSE TO REJECT THEM.**

14 A. In addition to the successful bidders for the majority of our fuel supply, various alternative
15 suppliers were asked to bid on the TES fuel supply. Bidders are rejected when the delivered
16 cost of fuel is higher than other available alternatives or when the quality of proposed fuel
17 does not meet TES's fuel supply needs.

18
19 **Q. WHAT WERE THE EFFECTS OF ENTERING INTO THE FUEL SUPPLY**
20 **AGREEMENTS THAT YOU HAVE DESCRIBED?**

21 A. The effects of entering into these agreements were that TES was able to secure a supply of
22 fuel that was adequate to meet its generating needs, reliable enough to assure its continued
23 operation, and to the extent practicable, sufficiently diversified to ensure the stability of its

1 fuel supply, all within the context of an overall effort to minimize costs as much as
2 practicable.

3

4 **Q. DURING THE PERIOD FROM JANUARY 1, 2023 THROUGH DECEMBER 31,**
5 **2023, WAS ONE OF YOUR OVERSIGHT RESPONSIBILITIES TO ENSURE THE**
6 **COST OF FUEL PURCHASED BY TES WAS MINIMIZED?**

7 A. Yes. Cost was a very important consideration. Additional important considerations were
8 the reliability of the fuel supply, the costs of trans-loading and blending, as well as ash
9 disposal and sulfur scrubbing cost considerations.

10

11 **Q. PLEASE DESCRIBE THE STEPS THAT HAVE BEEN TAKEN AT THE TES**
12 **PLANT TO ACHIEVE THESE OBJECTIVES.**

13 A. Among other things, TES plant management and staff continue to evaluate all aspects of a
14 comprehensive fuel cost program including the transportation costs as well as various fuel
15 surcharges, sulfur content and ash content, allowing TES to consider all of the various fuels
16 offered by the various suppliers, all to optimize the overall delivered cost of the final fuel
17 blend used by the plant.

18

19 **Q. ARE THERE SEASONAL VARIATIONS IN YOUR FUEL COSTS?**

20 A. Generally, yes.

21

22 **Q. ARE THERE REGIONAL DIFFERENCES IN FUEL COSTS?**

23 A. Yes.

1 **Q. DOES THE DISTANCE BETWEEN THE FUEL SOURCE AND YOUR PLANT**
2 **HAVE AN IMPACT ON THE FINAL FUEL PRICE?**

3 A. Yes, shipping costs are an important component of fuel cost, so generally speaking, fuel
4 becomes more expensive if purchased from a more distant location.

5
6 **Q. AT THE TIME YOU ENTERED INTO THE FUEL SUPPLY AGREEMENTS**
7 **WITH YOUR VARIOUS FUEL SUPPLIERS, WERE THOSE PRICES THE BEST**
8 **PRICES THAT WERE REASONABLY AVAILABLE TO YOU?**

9 A. Yes.

10

11 **Q DID PURCHASING FUEL PURSUANT TO THE FUEL SUPPLY AGREEMENTS**
12 **PROVIDE THE BEST PRICES REASONABLY AVAILABLE TO TES FILER**
13 **CITY STATION IN 2023?**

14 A. Yes.

15

16 **Q. IN CONNECTION WITH YOUR FUEL PROCUREMENT DECISIONS, DID YOU**
17 **EXERCISE YOUR BEST JUDGMENT?**

18 A. Yes.

19

20 **Q. IN YOUR OPINION, WERE TES'S DECISIONS TO ENTER INTO THESE FUEL**
21 **SUPPLY AGREEMENTS REASONABLE AND PRUDENT BASED ON THE**
22 **FACTS AND CIRCUMSTANCES KNOWN OR REASONABLY FORESEEABLE**
23 **AT THE TIMES WHEN THE DECISIONS WERE MADE?**

1 A. Yes.

2

3 **Q. PLEASE EXPLAIN.**

4 A. The process that TES uses to procure its fuel results in the optimum overall cost for fuel
5 from operational and commercial perspectives.

6

7

VI. O&M COSTS

8 **Q. PLEASE DESCRIBE THE VARIABLE OPERATION AND MAINTENANCE**
9 **COSTS THAT YOU ARE SEEKING TO RECOVER IN THIS PROCEEDING.**

10 A. We are seeking to recover the following variable operation and maintenance costs: 1)
11 water supply and treatment costs; 2) sewer and wastewater disposal costs; 3) ash handling
12 costs; 4) fuel handling costs; 5) emission control costs; 6) water treatment costs; and 7)
13 maintenance costs. As previously noted, TES actually incurs additional variable operation
14 and maintenance costs beyond the categories listed above, but those additional costs are
15 not listed on Exhibit BMP-7.

16

17 **Q. DID YOU MAKE REASONABLE EFFORTS TO MINIMIZE THE VARIABLE**
18 **OPERATION AND MAINTENANCE COSTS?**

19 A. Yes, to the extent practicable, we made every reasonable effort to control these costs.

1 **Q. PLEASE EXPLAIN THE MEASURES THAT TES UNDERTOOK TO CONTROL**
2 **ITS VARIABLE OPERATION AND MAINTENANCE COSTS.**

3 A. Generally, our cost-control measures include employee incentives, competitive bidding,
4 proactive and preventative maintenance programs, and innovative initiatives to minimize
5 costs. By way of example:

6 1) TES gives its operations staff financial incentives to minimize costs overall and to
7 use the most economical fuel blends available to produce electricity;

8 2) TES's purchasing policy requires most major purchases to be competitively bid;
9 and

10 3) TES uses a computerized maintenance tracking program that identifies proactive
11 and preventative maintenance that can be performed on plant systems and equipment.
12 Maintaining plant equipment through planned maintenance is always less expensive than
13 repairing equipment when it unexpectedly breaks or fails.

14

15 **Q. THE SETTLEMENT AGREEMENT IN CONSUMERS' 2016 PSCR**
16 **RECONCILIATION REQUIRED YOU TO: (i) PREPARE A LIST OF ALL**
17 **EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING COST**
18 **RECOVERY; (ii) IDENTIFY WHICH, IF ANY, OF THE EXPENSES ARE**
19 **RELATED TO ONE ANOTHER AND (iii) HAVE AN ACCOUNTANT CERTIFY**
20 **THAT ANY EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING**
21 **COST RECOVERY ARE PROPERLY CHARACTERIZED AS CURRENT**
22 **EXPENSES AND NOT AS CAPITAL EXPENDITURES. HAVE YOU DONE SO?**

1 A. Yes, that list is attached as Exhibit BMP-22. That list also identifies which, if any, of the
2 expenses are related. Additionally, Hungerford, Aldrin, Nichols & Carter, PC audited our
3 books, confirmed the company's characterization of the expenses of \$25,000 or greater and
4 issued the attached certification.

5
6 **VII. TES'S REQUEST FOR UNCAPPED COST RECOVERY**
7 **PURSUANT TO MCL 460.6a(10)**

8
9 **A. MCL 460.6a(10) STATUTORY PROVISIONS**

10
11 **Q. IS TES REQUESTING UNCAPPED RECOVERY OF A PORTION OF ITS**
12 **NATURAL GAS COSTS, AIR EMISSION ALLOWANCE COSTS AND AIR**
13 **EMISSIONS TESTING COSTS?**

14 A. Yes. TES is requesting uncapped cost recovery of costs incurred due to two environmental
15 laws and regulations enacted after October 6, 2008 which may, therefore, be recovered
16 outside of the \$1,000,000 cap pursuant to MCL 460.6a(10).¹

17 TES's first uncapped cost recovery request is for the portion of its natural gas fuel
18 costs and air emissions testing costs that its incurred due to the U.S. EPA's Mercury and
19 Air Toxics Standards enacted on February 16, 2012. TES seeks uncapped recovery of
20 \$1,128,570 of MATS compliance fuel costs and \$47,846 of MATS compliance testing
21 costs.

22 TES's second uncapped cost recovery request is for the air emission allowance
23 costs it incurred due to the U.S. EPA's Cross State Air Pollution Rule (CSAPR") enacted
24 on August 8, 2011. TES seeks uncapped recovery of \$196,875 in CSAPR NOx allowance
25 costs.

¹ Exhibits BMP- 2 & 7.

1 MCL 460.6a(9) allows the BMPs to recover the difference between (i) their actual
 2 fuel and variable operation & maintenance costs and (ii) the amounts they are paid under
 3 their contracts for those costs, up to a \$1,000,000 monthly cap, as adjusted for CPI in the
 4 manner set forth in MCL 460.6a(10).

5 MCL 460.6a(10) also provides an exception to the \$1,000,000 cap for costs
 6 incurred as the result of newly enacted federal or state environmental statutes or regulations
 7 as follows:

8 “The \$1,000,000.00 limit specified in this subsection, as adjusted,
 9 shall not apply with respect to actual fuel and variable operation and
 10 maintenance costs that are incurred due to changes in federal or state
 11 environmental laws or regulations that are implemented after
 12 October 6, 2008.”

13 The January 7, 2009 Senate Fiscal Agency Bill Analysis of 2008 PA 286 clearly
 14 explains the intent of the foregoing exception for newly enacted federal or state
 15 environmental statutes or regulations:

16 “The \$1.0 million limit, as adjusted, does not apply with respect to
 17 actual fuel and variable operation and maintenance costs that are
 18 incurred due to changes in Federal or State environmental laws or
 19 regulations that are implemented after the bill’s effective date.”
 20

21 **Q. WHAT CAUSED TES TO BURN NATURAL GAS AS ONE OF ITS FUELS IN**
 22 **2023?**

23 A. The Mercury and Air Toxics Standard (MATS) rule promulgated by the US EPA on
 24 February 16, 2012 imposed several requirements on TES because TES burns coal as one
 25 of its fuels. Pursuant to 40 CFR §63.9981, MATS only applies to coal-fired and oil-fired
 26 electric utility steam generating units. Thus, no BMP other than TES is subject to MATS
 27 or had to comply with any MATS requirement.

1 The U.S. EPA’s Mercury and Air Toxics Standards (MATS) were promulgated on
 2 February 16, 2012 as 40 CFR Part 63, Subpart UUUUU. For existing units, the compliance
 3 date was April 16, 2015. 40 CFR 63.9984. TES Filer City Station sought and was granted
 4 a one-year compliance extension pursuant to Section 112 of the Clean Air Act, which
 5 extended Filer City’s compliance deadline to April 16, 2016.

6 The U.S. EPA’s Cross State Air Pollution Rule, 40 CFR 97 Subparts AAAAAA to
 7 FFFFF (“CSAPR”) were promulgated on August 8, 2011. (76 FR 48208) See, Exhibit
 8 BMP-13. CSAPR required TES to acquire and hold \$196,875 of NOx allowances in 2023.

9 TES’s request to recover both its MATS fuel and compliance testing costs and its
 10 CSAPR NOx allowance costs is consistent with the Commission’s approval of its requests
 11 for uncapped cost recovery of those costs in prior annual cost recovery cases.

12
 13 **B. MATS COMPLIANCE COSTS**

14 **Q. IS FILER CITY REQUESTING REIMBURSEMENT OF UNCAPPED MERCURY**
 15 **AND AIR TOXICS STANDARDS (“MATS”) COMPLIANCE COSTS?**

16 A. Yes, TES is requesting uncapped cost recovery of \$1,128,570 in natural gas fuel costs and
 17 \$47,846 in emissions compliance testing costs in 2023 due to the Mercury and Air Toxics
 18 Standards rules. TES is seeking cost recovery of those amounts pursuant to
 19 MCL.460.6a(10).

20
 21 **Q. WERE THE MATS RULES PROMULGATED AFTER THE OCTOBER 6, 2008**
 22 **ENACTMENT DATE OF MICHIGAN ACT 286?**

23 A. Yes, as described above.

1 **Q. WHAT DO THE MATS RULES REQUIRE?**

2 A. The MATS rules required TES to (i) start up and shut down on a clean fuel such as natural
3 gas, 40 CFR Appendix Table 3 and 40 CFR 63.63.10042, which differed significantly from
4 TES's historic practice of starting up on solid fuels and oils; (ii) operate the burners
5 consistent with the manufacturer's specifications, 40 CFR 63.10021(e)(6); (iii) operate the
6 burners "in a manner consistent with safety", 40 CFR 10000(b); (iv) operate the burners
7 "in a manner consistent with good pollution control practices", 40 CFR 10000(b); (v)
8 optimize combustion to minimize the generation of CO and NOx, 40 CFR 63.10021(e)(6);
9 (vi) "CO optimization includes burners, overfire air controls . . . and adjusting combustion
10 zone temperature profiles," 40 CFR 63.10021(e)(6); (vii) demonstrate continuous
11 compliance with each emissions limit, operating limit, and work practice standard, 40 CFR
12 63.10021 and (viii) conduct emissions testing 40 CFR Appendix Table 5.

13
14 **Q. WHAT DID FILER CITY DO TO COMPLY WITH THE NEW MATS RULES?**

15 A. TES complied with the MATS requirement that it start up and shut down on clean fuels by
16 installing four natural gas burners, two burners in each of its two boilers, at a cost of \$2.7
17 million. This amount was capitalized and not included in any cost recovery request,
18 whether in 2023 or before. The burners were installed in the only locations in the plant
19 where they could be installed given its 1980's design. As originally designed, the plant
20 included much smaller natural gas burners that were used solely to warm the boiler prior
21 to start up in order to prevent thermal shock. These original much smaller burners were
22 insufficient to start the plant and were removed and replaced with much larger burners that

1 were sufficiently sized to start the plant as required by MATS. These new MATS burners
2 were installed in the same locations in the boilers as specified in the plant's original design.

3
4 **Q. PLEASE DESCRIBE THE MANUFACTURER'S OPERATIONAL**
5 **SPECIFICATIONS FOR THE NATURAL GAS BURNERS.**

6 A. The manufacturers' specifications for the new MATS burners, which were manufactured
7 by Coen, included a maximum allowable operating temperature of 1000° F, with
8 temperatures above 1000° F damaging the \$2.7 million burners.

9
10 **Q. DID THE INSTALLATION OF THE BURNERS TO COMPLY WITH THE MATS**
11 **RULES AFFECT THE OPERATION OF THE PLANT?**

12 A. Yes. The burners were flush to the inside wall of the boiler where the temperature was
13 2100° F to 2700° F. In order to keep the burners below their 1000° F temperature limit, TES
14 needed to continuously operate massive fans to force ambient temperature cooling air past
15 the burners. Introducing that continuous stream of cooling air into the boiler significantly
16 impacted the temperature profile within the boiler and the combustion of the fuels being
17 burned.

18
19 **Q. PLEASE EXPLAIN THE IMPACT OF AMBIENT TEMPERATURE COOLING**
20 **AIR ON THE PLANT.**

21 A. Introducing that continuous stream of cooling air into the boiler significantly impacted the
22 temperature profile within the boiler and consequently the combustion of the fuels being
23 burned in the boiler.

1 First, the cooling air caused a 16-fold increase in the build-up of un-combusted fuel,
2 i.e., slagging or “clinkers.” The clinkers would eventually fall (“wall drops”) creating a
3 significant safety concern to the plant employees and damaging the plant’s fuel grate
4 below.

5 Second, the impact of the cooling air on fuel combustion led to increased CO
6 emissions and resulted in two exceedances of the plant’s emissions limits which were
7 reported to the State of Michigan and a greatly enhanced risk that TES would fall out of
8 compliance with its U.S. EPA Title V Renewable Operating permit, *infra*.

9 TES’s plant manager, Todd Guenthardt, fully described the problems created by
10 the cooling air in his testimony in prior MPSC proceedings.

11
12 **Q. WHAT DID FILER CITY DO TO ACCOMMODATE THE OPERATIONAL**
13 **REQUIREMENTS OF THE MATS BURNERS?**

14 A. TES initially tried to operate the plant using different mixes of the plant’s historical fuels
15 which were coal, wood and TDF and typical combustion parameters. The plant also made
16 numerous operational changes in an effort to correct the problems created by the cooling
17 air without burning natural gas.

18
19 **Q. WAS FILER CITY ABLE TO CORRECT THE IMPACT OF THE COOLING AIR**
20 **BY ALTERING ITS HISTORICAL FUEL MIX AND?**

21 A. No. We were unable to correct the slagging and CO problems using different mixes of the
22 plant’s historical fuel mix.

1 **Q. WHAT DID FILER CITY DO NEXT?**

2 A. The primary cause of the CO emissions and clinker problems that forced TES to burn
3 natural gas was as follows: (i) coal, wood and TDF, which are solid fuels, are primarily
4 burned on a grate (similar to a charcoal grill) that is 15 feet below the natural gas burners,
5 (ii) in order to protect the natural gas burners from the extreme heat of the furnace portion
6 of the boiler, a continuous forced stream of cooling air was injected into the boiler in order
7 to cool the burners. This continuous stream of cooling air was being injected at all times
8 into the boiler at a point 15 feet above the grate and at a point where the stream of fuel
9 fines and ash from the solid fuels being burned below was rising and still in the process of
10 combusting, (iii) the continuous stream of cooling air was entering the furnace portion of
11 the boiler at point where the temperature was 2100 Deg F to 2700 Deg F. That much cooler
12 air had a significant detrimental impact on the combustion gases from the solid fuels being
13 burned below, and (iv) operating the natural gas burners introduced heat into the furnace
14 portion of the boiler at the very same point where the cooling air was being injected, thus
15 minimizing the problem created by the cooling air. Thus, the only effective way to reduce
16 the slag buildup and improve combustion and CO emissions performance was to burn more
17 natural gas and thereby inject heat into the boiler at the exact location where the cooling
18 air was being introduced and thereby correct the temperature profile in the boiler.
19 Accordingly, TES began to burn natural gas continuously on June 28, 2018.

1 **Q. DID BURNING NATURAL GAS CORRECT THE OPERATIONAL,**
2 **PERMITTING AND SAFETY ISSUES?**

3 A. Yes. Continuously burning natural gas corrected the temperature profile of the boiler,
4 optimized the CO emissions, avoided any additional CO exceedances of TES's Title V Air
5 Use Permit, and reduced the slag build-up from 432 cubic feet to between 27 and 64,
6 thereby eliminating the safety issues which the increased slag created for the plant
7 employees and the plant itself.

8
9 **Q. WHAT WOULD HAVE HAPPENED IF TES HAD NOT BURNED NATURAL GAS**
10 **CONTINUOUSLY?**

11 A. If TES had not corrected the clinker and emissions problems by beginning to burn natural
12 gas, it likely would have exceeded its Renewable Operating Permit limitations and would
13 have failed to comply with the MATS requirements that it operate the plant "At all times .
14 . . in a manner consistent with . . . good air pollution control practices for minimizing
15 emissions" and "optimize combustion to minimize generation of CO and NOx." It would
16 also have failed to correct the dangerous clinker problem and thereby failed to operate the
17 plant safely as also required by MATS.

18
19 **Q. HOW MUCH NATURAL GAS DID FILER CITY INITIALLY BURN PER DAY**
20 **TO CORRECT FOR THE IMPACT OF THE COOLING AIR AND COMPLY**
21 **WITH THE MATS RULES?**

1 A. The Filer City plant burned an approximate average of 2,200 MCF per day of natural gas
2 beginning in late June 2018 to prevent damage to the natural gas burners and ensure
3 compliance with the CO emission limits.

4

5 **Q. WAS ALL OF THAT 2,200 MCF PER DAY OF NATURAL GAS THAT TES**
6 **BURNED IN 2018 ATTRIBUTABLE TO THE MATS BURNERS?**

7 A. As it turned out, no. Although not immediately evident, the Filer City plant had existing
8 boiler condition and maintenance issues in 2018 that increased the amount of combustion
9 air in the boiler beyond the amount of cooling air used to keep the MATS burners within
10 manufacturer specified temperature limits. Those boiler conditions were repaired in 2019
11 at a cost of \$1,442,095.

12

13 **Q. EXACTLY WHEN WERE THOSE BOILER CONDITIONS REPAIRED?**

14 A. The boiler repairs were made during the period from March 3, 2019 through April 14,
15 2019.

16

17 **Q. WHAT HAPPENED AFTER THE BOILER CONDITION ISSUES WERE**
18 **CORRECTED?**

19 A. After the boiler condition issues were corrected, Filer City was able to reduce its natural
20 gas usage from approximately 2,200 MCF/day to 1,100 MCF/day at that time and still
21 correct for the slagging and CO issues created by the cooling air. Based upon that fact,
22 1,100 MCF/day was the approximate minimum amount of natural gas that was needed in
23 2019 to operate the plant when using both boilers in a manner that maintains the

1 temperature requirements for the MATS natural gas burners and prevents unacceptable
2 balance of plant impacts, including increased slagging and less efficient fuel combustion
3 leading to increased CO emissions.

4
5 **Q. PLEASE DESCRIBE THE IMPACT OF BURNING NATURAL GAS**
6 **REGULARLY?**

7 A. Both the variability in CO emission rates and the peak emission rates decreased
8 significantly as compared to installing and operating the MATS burners and cooling air
9 fans without burning natural gas as the Plant attempted to do prior to June 28, 2018.
10 Burning natural gas continuously was entirely consistent with the EPA requirements at 40
11 CFR 63.10021(e)(6) that TES “optimize combustion to minimize generation of CO and
12 NO_x.”

13
14 **Q. HOW DID TES DETERMINE THE AMOUNT OF NATURAL GAS ITS BURNED?**

15 A. TES determined the amount of natural gas it burned by continuously monitoring air
16 emissions and boiler performance.

17
18 **Q. HOW DID PPA AMENDMENT NO. 3 AFFECT THE TES FILER CITY PLANT’S**
19 **NEED TO BURN NATURAL GAS?**

20 A. TES Filer City’s consumption of natural gas decreased significantly in 2023 as a result of
21 Amendment No. 3, dated February 28, 2023, which “converted [the TES Filer City plant]
22 from a must-run, baseload generation facility to an economically dispatchable facility.”
23 That PPA amendment was approved by the Commission in a July 7, 2023 Order in Case

1 No. U-21407 and did not affect TES Filer City's eligibility for cost recovery under Act 286
2 of 2008

3

4 **Q. PLEASE EXPLAIN IN MORE DETAIL?**

5 A. As I indicated earlier, the TES plant was constructed with two identical stoker boilers, one
6 VAX turbine, one generator. Under Amendment No. 3, TES ceased operating both boilers
7 continuously, and began to operate the plant using only one boiler continuously and using
8 the second boiler only intermittently. Doing that substantially reduced TES's need to burn
9 natural gas and, therefore, its recovery of natural gas costs.

10 As indicated above, TES previously sought to recover its costs for 1,100 MCF/day
11 of its 2,200 MCF/day of natural gas usage. In 2023, TES stopped using two boilers
12 continuously and began to operate the plant using only one boiler for the most part. Given
13 that, TES has reduced its request for natural gas cost recovery by that same percentage, i.e.,
14 from 1,100 MCF/day to 550 MCF/day. TES is only requesting uncapped cost recovery for
15 550 MCF/day of natural gas.

16

17 **Q. HOW WOULD YOU CHARACTERIZE TES'S COST RECOVERY REQUEST**
18 **FOR ITS NATURAL GAS COSTS?**

19 A. It is a very conservative request. TES is only requesting uncapped cost recovery for 550
20 MCF/day of natural gas, which is attributable to the operation of one boiler, even though
21 there were times when Consumers dispatched the TES in a manner which required it to
22 operate both boilers.

1 As in prior years, TES could have included all of its natural gas costs in its uncapped
2 cost recovery request in 2023 but is only requesting uncapped cost recovery of 550
3 MCF/day of natural gas. It has included its costs for the remainder of its natural gas above
4 550 MCF/day in its capped cost recovery request. That is consistent with TES's cost
5 recovery request in previous proceedings and is intended to avoid an argument. All of TES
6 Filer City's natural gas was burned in a very well maintained and properly functioning
7 generating plant to deliver electricity to Consumers Energy and its customers.

8
9 **Q. WERE TES'S ACTIONS IN BURNING NATURAL GAS CONSISTENT WITH**
10 **THE MATS RULES?**

11 A. Yes, burning natural gas introduced heat into the boiler in the same place where the cooling
12 air was being injected and thereby corrected the temperature profile of the boiler in
13 accordance with 40 CFR 63.10021(e)(6), corrected the air emissions problems in
14 accordance with 40 CFR 63.10021(e)(6) and 40 CFR63.10021, and corrected the slagging
15 and resulting safety problems in accordance with 40 CFR 63.10000(b).

16
17 **Q. WHY IS TES'S COST RECOVERY REQUEST FOR ITS GAS COSTS**
18 **CONSISTENT WITH MCL 460.6a(10)?**

19 A. MCL 460.6a(10) provides that:

20 “The \$1,000,000 limit, as adjusted, does not apply with respect to
21 actual fuel and variable operation and maintenance costs that are
22 incurred **due to** changes in Federal or State environmental laws or
23 regulations that are implemented after the bill's effective date.”
24 Emphasis added.

1 The definition of the phrase “due to” is “as a result of” or “because of.”²

2 MCL 460.6a(10) requires that TES prove that its natural gas costs were incurred
3 “due to” MATS. There can be no doubt whatsoever that TES has met that statutory
4 standard. TES incurred the natural gas costs for which it now seeks uncapped cost recovery
5 “because of” MATS. Those costs were a “result of” TES’s statutory obligation to comply
6 with MATS. TES had no choice but to comply with MATS. TES would not have installed
7 the natural gas burners but for MATS. TES would not have operated the cooling fans but
8 for MATS. TES would not have experienced the fuel combustion problems, increased
9 slagging issues, increased CO emissions or air permit exceedances it experienced but for
10 the natural gas burners installed in compliance with MATS. TES would not have needed
11 to burn natural gas in order to correct the fuel combustion issues created by the cooling air
12 but for MATS. Indeed, TES would not have burned any natural gas whatsoever but for
13 MATS. TES would have continued to burn its historical fuels (coal, wood and TDF) but
14 for MATS.

15
16 **C. CSAPR NO_x ALLOWANCE COSTS**

17 **Q. TURNING TO THE PLANT’S NO_x ALLOWANCE COSTS, YOU INDICATED**
18 **THAT TES IS SEEKING TO RECOVER COSTS THAT IT INCURRED**
19 **PURSUANT TO THE CROSS STATE AIR POLLUTION RULE. PLEASE**
20 **DESCRIBE THESE COSTS.**

21 **A.** Yes, TES incurred \$196,875 in 2023 for seasonal NO_x allowances to comply with the U.S.
22 EPA’s Cross State Air Pollution Rule, 40 CFR 97 Subparts AAAAAA to FFFFFF (“CSAPR”).

² Merriam-Webster.com.

1 CSAPR is a federal market-based cap-and-trade program that applies to power plants in
2 multiple states. The allowance expenses are identified on Exhibit BMP-7.

3
4 **Q. WHAT CSAPR REQUIREMENTS WAS TES REQUIRED TO SATISFY IN 2023?**

5 A. CSAPR requires that affected sources of air pollution must hold both annual and seasonal
6 allowances adequate to cover its actual emissions. First, CSAPR required TES to hold
7 *annual* NO_x allowances. The specific condition in CSAPR that required it to do so are
8 found at 40 CFR Part 97, Subpart AAAAA, §97.406(c). Second, CSAPR also requires TES
9 to hold CSAPR *seasonal* NO_x allowances. The specific condition in CSAPR that required
10 it to do so are found at 40 CFR Part 97, Subpart EEEEE, §97.806(c).

11
12 **Q. WHAT ARE ALLOWANCES?**

13 A. They are authorizations to emit a limited amount of air pollutants per year. The need for
14 allowances arises in direct proportion to the generator's level of operation and each
15 allowance represents the right to emit one ton of pollutants. The EPA allocates a certain
16 number of allowances to each generator and, if any additional allowances are needed to
17 cover actual emissions, the generator must purchase those allowances in the open market.

18
19 **Q. EXHIBIT BMP-7 INDICATES THAT TES IS SEEKING TO RECOVER THE
20 CSAPR NO_x ALLOWANCE COSTS AS UNCAPPED COSTS, PLEASE EXPLAIN.**

21 A. Section 6a(7) of 2008 PA 286, MCL 460.6a(9), allows TES to "recover the amount, if any,
22 by which the merchant plant's reasonably and prudently incurred actual fuel and variable
23 operation and maintenance costs exceed the amount that the merchant plant is paid under

1 the contract for those costs.” Section 6a(8) of 2008 PA 286, MCL 460.6a(10), further
2 provides that: “the \$1,000,000.00 limit specified in this subsection, as adjusted, does not
3 apply to actual fuel and variable operation and maintenance costs that are incurred due to
4 changes in federal or state environmental laws or regulations that are implemented after
5 October 6, 2008.” TES incurred its CSAPR allowance costs due to changes in federal or
6 state environmental laws or regulations that were implemented after October 6, 2008.

7
8 **Q. WHAT WAS THE CHANGE IN FEDERAL OR STATE ENVIRONMENTAL**
9 **LAWS OR REGULATIONS THAT WAS IMPLEMENTED AFTER OCTOBER 6,**
10 **2008 THAT CAUSED TES (AS WELL AS GENESEE AND GRAYLING) TO**
11 **INCUR THESE CSAPR ALLOWANCE COSTS?**

12 A. The change was the new Cross State Air Pollution Rule (“CSAPR”) which was proposed
13 after October 6, 2008, noticed after October 6, 2008, promulgated after October 6, 2008,
14 revised after October 6, 2008, and implemented after October 6, 2008.

15
16 **Q. PLEASE EXPLAIN.**

17 A. CSAPR was originally proposed on July 6, 2010 and notice of the proposed rule was
18 published in the Federal Register on August 2, 2010 (75 FR 45210). See, Exhibit BMP-12.
19 The CSAPR regulations were promulgated by the U.S. Environmental Protection Agency
20 on August 8, 2011 (76 FR 48208). See also, Exhibit BMP-13. The purpose of the CSAPR
21 regulations was to limit the interstate transport of emissions of nitrogen oxides (NO_x) and
22 sulfur dioxide (SO₂) and the CSAPR regulations specify both seasonal and annual
23 allowance requirements for NO_x and annual allowance requirements for SO₂.

1 A proposed revision to the CSAPR regulations was published on October 14, 2011
2 (76 FR 63817, et seq.) and a supplemental rule adopted on December 27, 2011 (76 FR
3 80760, et seq.). See also, Exhibits BMP-14 and BMP-15. This supplemental rule required
4 five additional states to make seasonal NO_x reductions under CSAPR (Iowa, Michigan,
5 Missouri, Oklahoma and Wisconsin). CSAPR was implemented on January 1, 2015.
6 CSAPR is codified in the Code of Federal Regulations at 40 CFR 97 Subparts AAAAAA to
7 FFFFFF.

8 http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr97_main_02.tpl
9

10 **Q. WHEN WAS TES REQUIRED TO COMPLY WITH THE NEW CSAPR RULE?**

11 A. TES was required to comply with the new CSAPR regulations beginning on January 1,
12 2015. Compliance with CSAPR's Phase 1 emissions budgets was initially proposed for
13 2012, but subsequently delayed until 2015. (79 FR 71663, et seq.) BMP-16. The EPA's
14 website clearly states that "*CSAPR implementation began on January 1, 2015.*" See,
15 <https://www.epa.gov/csapr/cross-state-air-pollution-rule-csapr-basics>
16

17 **Q. DID TES EVER INCUR CSAPR NO_x ALLOWANCE COSTS PRIOR TO 2015?**

18 A. No.
19

20 **Q. WHY DIDN'T TES PURCHASE CSAPR NO_x ALLOWANCES BEFORE 2015?**

21 A. The CSAPR requirements were not promulgated until 2011 and were not implemented
22 until 2015. Accordingly, TES was not subject to any CSAPR regulations until 2015 and

1 was not required to purchase any CSAPR allowances until the new requirements were
2 implemented in 2015.

3
4 **Q. ARE THERE ANY DOCUMENTS THAT CONFIRM THE FACT THAT THE**
5 **CSAPR RULES WERE NOT PROMULGATED UNTIL 2011 AND WERE NOT**
6 **MADE EFFECTIVE UNTIL 2015?**

7 A. Yes. See Exhibits BMP-11, BMP-12, BMP-13, BMP-14, BMP-15 and BMP-16, all
8 discussed above.

9
10 **Q. WHAT ARE THE BEGINNING AND ENDING DATES OF THE CSAPR *ANNUAL***
11 **NO_x ALLOWANCE PERIOD?**

12 A. January 1st through December 31st of each calendar year, starting in 2015 and each calendar
13 year thereafter.

14
15 **Q. DID TES INCURR ANY *ANNUAL* NO_x ALLOWANCE COSTS?**

16 A. No. The EPA allocated TES sufficient *annual* NO_x allowances to cover its annual NO_x
17 allowance requirement.

18
19 **Q. WHAT ARE THE BEGINNING AND ENDING DATES OF THE CSAPR**
20 ***SEASONAL* NO_x ALLOWANCE PERIOD?**

21 A. May 1st through September 30th of each calendar year.

1 **Q. DID TES INCUR *SEASONAL* NO_x ALLOWANCE COSTS?**

2 A. Yes. In 2023, TES filer City incurred \$196,875 for *seasonal* NO_x allowances to comply
3 with its the Cross State Air Pollution Rule. These expenditures were to satisfy TES's 2022
4 and 2023 NO_x allowance requirements. The U. S. EPA deadline for TES, Cadillac,
5 Genesee and Grayling to hold their 2022 seasonal NO_x allowances was June 1, 2023.
6 [https://www.epa.gov/Cross-State-Air-Pollution/important-dates-good-neighbor-plan-nox-](https://www.epa.gov/Cross-State-Air-Pollution/important-dates-good-neighbor-plan-nox-ozone-season-group-3-trading)
7 [ozone-season-group-3-trading](https://www.epa.gov/Cross-State-Air-Pollution/important-dates-good-neighbor-plan-nox-ozone-season-group-3-trading)

8
9 **Q. WHAT WERE TES's FILER CITY's CSAPR NO_x SEASONAL ALLOWANCE**
10 **REQUIREMENTS IN 2023?**

11 A. TES Filer City was required to hold 481 seasonal allowances for the 2022 Ozone Season
12 and 216 seasonal allowances for the 2023 Ozone Season. The total number of allowances
13 that TES held to satisfy those requirements included (i) the number of allowances
14 remaining in TES's account from previous years, (ii) the number of allowances which the
15 U. S. EPA allocated to TES, and (iii) TES's market purchases of additional CSAPR NO_x
16 seasonal allowances.

17
18 **Q. HOW MANY SEASONAL NO_x ALLOWANCES DID TES FILER CITY HOLD AT**
19 **THE BEGINNING OF 2023, HOW MANY SEASONAL NO_x ALLOWANCES DID**
20 **THE EPA ALLOCATE TO TES FOR 2023, AND HOW MANY SEASONAL**
21 **ALLOWANCES DID TES PURCHASE FOR THE 2022 AND 2023 OZONE**
22 **SEASONS?**

1 A. TES held 500 allowances in its account balance at the beginning of 2023. On September
2 5, 2023, the U.S. EPA allocated 136 allowances to TES for its 2023 requirement and 152
3 allowances for its 2024 requirements. TES purchased 45 allowances on October 5, 2023.
4 After taking into account its 2022 and 2023 compliance requirements, TES held 353
5 allowances in its account at the end of 2023, 216 of which needed to be surrendered to
6 meet TES's 2023 NOx allowance requirements.

7

8 **Q. WHY WAS IT PRUDENT FOR TES TO HAVE PREVIOUSLY PURCHASED**
9 **MORE ALLOWANCES THAN IT ACTUALLY NEEDED?**

10 A. Because there are penalties for not holding sufficient allowances to cover actual emissions.
11 For the CSAPR NOx annual program, 40 CFR 97.424(d) provides that if an emission
12 source does not hold sufficient allowances to cover actual emissions, the EPA will then
13 deduct two allowances per each ton of excess emissions as a penalty.

14 Further, allowances prices fluctuate year-to-year. Thus, additional allowances
15 beyond the direct need for NOx annual compliance were purchased to minimize allowance
16 purchase costs in future years because any unused allowances remain the facility's
17 compliance account and can be used for future compliance.

18

19 **Q. IS THERE A DOCUMENT IN WHICH THE EPA SUGGESTED A PRUDENT**
20 **MARGIN TO ACCOUNT FOR CORRECTIONS AND RECONCILIATIONS?**

21 A. Yes. An EPA document under the Acid Rain program states that it:

22 "...recommends that compliance accounts hold more allowances
23 than are needed to cover emissions in the event that after the
24 allowance transfer deadline, NOx or SO₂ emissions are discovered

1 to be greater than what was originally reported or accounting or
2 other types of errors were made.” Exhibit BMP-11.

3
4 The EPA recommends holding more allowances than are needed to cover emissions in
5 order “To avoid costly excess emissions penalties--\$3,825 a ton for Acid Rain affected
6 sources, and a 2 for 1 allowance surrender for sources subject to CSAPR....” *Id.*

7
8 **Q. WERE THERE ANY OTHER REASONS FOR BUYING MORE ALLOWANCES**
9 **THAN WERE REQUIRED TO COVER ACTUAL EMISSIONS?**

10 A. Yes. The determination of NOx emissions is accomplished through the use of continuous
11 emissions monitoring systems (CEMS) operated and maintained in accordance with 40
12 CFR Part 75. While TES diligently maintains the monitoring equipment and attempts to
13 follow all of the EPA’s related guidance and reporting instructions, internal or external
14 EPA audits of the data submitted under 40 CFR Part 75 could result in a need to revise
15 previously reported NOx emissions after the deadline for acquiring allowances. By
16 maintaining a reasonable margin of allowances above the reported NOx emissions for a
17 given compliance period, TES is able to minimize the likelihood that any necessary data
18 revisions would result in its failure to hold a sufficient number of allowances to cover
19 emissions. Thus, having some extra allowances in our account gives TES the ability to use
20 those allowances to cover any shortfall caused by compliance deductions, which helps to
21 avoid costly and unpredictable EPA penalties. Additionally, the price of allowances was
22 very reasonable at the time these allowances were purchased.

1 **Q. ARE CSAPR NO_x ALLOWANCES A FUEL OR VARIABLE OPERATION AND**
2 **MAINTENANCE COST?**

3 A. Yes. In at least three cases, the MPSC has held that allowances costs are fuel costs (MPSC
4 Case Nos. U-10335 (p. 67), U-13937 (p. 9) and U-15415 (p. 11)). Additionally, the need
5 for allowances arises as a result of the operation of the generator's facility and varies
6 according to its electrical output.

7 Also, the Commission has allowed TES Filer City to recover its NO_x allowances
8 costs in every proceeding for every year since 2015 when Filer City was first required to
9 hold and purchase them.

10

11 **VIII. CSAPR NO_x ALLOWANCE PROCUREMENT PROCEDURES**

12 **Q. DID TES MAKE REASONABLE EFFORTS TO MINIMIZE ITS NO_x**
13 **ALLOWANCE COSTS?**

14 A. Yes, to the extent practicable, we made every reasonable effort to control these costs. TES
15 used both CMS ERM Co's expertise, which did not charge for its service, and an
16 independent broker in acquiring our NO_x allowances.

17

18 **Q. AT THE TIME TES PURCHASED THE CSAPR ALLOWANCES, WERE THOSE**
19 **PRICES THE BEST PRICES THAT WERE REASONABLY AVAILABLE TO**
20 **TES?**

21 A. Yes. I instructed our broker to acquire the NO_x allowances at the lowest possible price.

1 **Q. IN CONNECTION WITH YOUR CSAPR ALLOWANCE PROCUREMENT**
2 **DECISIONS, DID YOU EXERCISE YOUR BEST JUDGMENT?**

3 A. Yes.

4
5 **Q. IN YOUR OPINION, WERE TES's DECISIONS TO PURCHASE CSAPR**
6 **ALLOWANCES AFTER RECEIVING INPUT FROM CMS ERM CO.**
7 **REASONABLE AND PRUDENT BASED ON THE FACTS AND**
8 **CIRCUMSTANCES KNOWN OR REASONABLY FORESEEABLE AT THE**
9 **TIME WHEN THE DECISIONS WERE MADE?**

10 A. Yes.

11
12 **Q. IN YOUR OPINION, WERE TES's CSAPR ALLOWANCE PURCHASES**
13 **REASONABLE AND PRUDENT?**

14 A. Yes. Receiving input from a CMS ERM Co staff member experienced in purchasing
15 allowances and using an independent broker allowed us to purchase the allowances at the
16 lowest possible cost.

17
18 **X. CONCLUSION**
19 **Q. IN YOUR OPINION, WERE TES's PURCHASING PRACTICES REASONABLE**
20 **AND PRUDENT?**

21 A. Yes.

1 **Q. IN YOUR OPINION, WERE TES's ACTUAL FUEL AND VARIABLE**
2 **OPERATION AND MAINTENANCE COSTS FOR THE PERIOD FROM**
3 **JANUARY 1, 2023 THROUGH DECEMBER 31, 2023 REASONABLY AND**
4 **PRUDENTLY INCURRED?**

5 A. Yes.

6
7 **Q. ARE TES's RECORDS WITH RESPECT TO FUEL AND VARIABLE**
8 **OPERATION AND MAINTENANCE COSTS AUDITED?**

9 A. Yes. Our plant's 2023 records were audited by Hungerford, Aldrin, Nichols & Carter, PC.

10

11 **Q. IN YOUR OPINION, AS A PERSON WITH EXTENSIVE EXPERIENCE IN THE**
12 **FIELD OF FUEL PROCUREMENT, DO YOU THINK THAT ANY OF TES's**
13 **ACTUAL FUEL OR VARIABLE OPERATION AND MAINTENANCE COSTS**
14 **WERE EXTRAVAGANT, UNNECESSARY, OR IMPRUDENT?**

15 A. Absolutely not.

16

17 **Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

18 A. Yes, it does.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for approval to implement a power cost)
recovery plan for the 12-months ending)
December 31, 2023.)
_____)

Case No. U-21258

DIRECT TESTIMONY

OF

DON ADAMS

ON BEHALF OF

NATIONAL ENERGY OF LINCOLN, LLC

AND

NATIONAL ENERGY OF MCBAIN, LLC

INTRODUCTION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Don Adams and my business address is 6751 W. Gerwoude Drive, McBain, Michigan.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed as the Director for both the National Energy of McBain and Lincoln Power Stations.

Q. PLEASE BRIEFLY DESCRIBE YOUR PLANT.

A. The Lincoln and McBain Power Stations are merchant plants consisting of electric generating equipment and associated facilities, each with a nameplate capacity of approximately 18 MW. With our good management practices and experience with the equipment, we are able to achieve an actual capacity of 18.5 - 19 MWe (megawatt electric) at each plant. Our plants are located in Lincoln, Michigan and McBain, Michigan and are not owned or operated by an electric utility.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I graduated from Bay City Western High School in 1982 and have taken 16 credit hours of classes at Baker College. I was an Honor Graduate from the U.S. Navy's Boiler Technician Class "A" School, participated in a Michigan Environmental Workshop and have taken a

1 Michigan Dep't of Labor Safety Course. I served in the U.S. Navy from 1982 to 1987 when
2 I was honorably discharged.

3 I have worked at National Energy of McBain since 1988. I began working there as
4 an equipment operator in September 1988 to April 1989. I was a Unit Supervisor from
5 April 1989 to January 1993, the Operations Supervisor from January 1993 to May 1998,
6 Production Supervisor from May 1998 to January 2000, Plant Manager from January 2000
7 to 2005, and Regional Procurement Manager from 2005 until March 2020 when I was
8 promoted to Director for both National Energy of Lincoln and McBain which is my current
9 position.

10 I have extensive experience in operations and maintenance of power plant and
11 production facilities. My experience includes Operations and Maintenance Management,
12 Boiler/Steam Turbines, Production Facility Management, Power Generation, Safety and
13 Environmental Oversight, among other things.

14
15 **Q. PLEASE DESCRIBE YOUR JOB RESPONSIBILITIES.**

16 A. I am responsible for working with all management teams to provide guidance regarding
17 financial, operations, maintenance and environmental aspects of both the Lincoln and
18 McBain Power Stations.

19
20 **Q. ARE YOU FAMILIAR WITH THE LINCOLN AND McBAIN PLANTS' FUEL
21 PROCUREMENT AND OPERATION & MAINTENANCE EXPENSES IN 2023?**

22 A. Yes.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MICHIGAN PUBLIC**
2 **SERVICE COMMISSION?**

3 A. Yes.

4

5 **Q. ON WHOSE BEHALF ARE YOU SUBMITTING YOUR TESTIMONY IN THIS**
6 **PROCEEDING?**

7 A. My testimony is on behalf of National Energy of Lincoln and National Energy of McBain.

8

9 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

10 A. Yes. I am sponsoring Exhibits BMP-8, BMP-9, BMP-21 and am co-sponsoring Exhibits
11 BMP-1 and BMP-2.

12

13 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**
14 **SUPERVISION?**

15 A. Yes as to the portions of Exhibits BMP-1 and BMP-2 relating to Lincoln and McBain,
16 Exhibits BMP-8 and BMP-9. I have also reviewed and agree with the remainder of BMP-
17 1 and BMP-2. The lists of maintenance costs of \$25,000 or greater in and the corporate
18 officer's certificates in Exhibits BMP-20 & 21 were prepared at my request by our
19 Controller in accordance with the settlement agreement in MPSC Case No. U-17918-R.

1 **PURPOSE OF TESTIMONY**

2 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

3 A. The purpose of my testimony is to describe the Lincoln and McBain Power Stations' actual
4 fuel and variable operation and maintenance costs for the period from January 1, 2023 to
5 December 31, 2023 and to demonstrate that those costs were reasonably and prudently
6 incurred. I will also testify as to the amounts that Consumers Energy Company paid the
7 Lincoln and McBain Power Stations for fuel and variable operation and maintenance costs
8 incurred during 2023. My testimony provides factual support for National Energy of
9 Lincoln and McBain's requests for cost under Public Act 286 of 2008, which permits
10 recovery of costs that exceed the amount that a merchant plant is paid under contract with
11 an eligible utility for those costs.

12
13 **ELIGIBILITY FOR COST RECOVERY**

14 **Q. ARE THERE POWER PURCHASE AGREEMENTS ("PPAs") BETWEEN**
15 **NATIONAL ENERGY OF LINCOLN AND MCBAIN, ON THE ONE HAND, AND**
16 **CONSUMERS ENERGY COMPANY, ON THE OTHER HAND?**

17 A. Yes. Complete copies of the agreements, as amended, have been previously provided to
18 the MPSC. I understand that they were provided to the parties in both Consumers Energy's
19 2009 and 2010 PSCR Reconciliation cases, MPSC Case Nos. U-15675-R and U-16045-R.

1 **Q. WERE THERE ANY CHANGES TO THE PPAs FROM THE TIME THEY WERE**
2 **ENTERED INTO THE RECORD OF THOSE PROCEEDINGS THROUGH 2023?**

3 A. Yes, amendments to the PPAs were filed with the MPSC in Case No. U-20496 and
4 approved in an April 18, 2019 order in that case.

5
6 **Q. WERE THE NATIONAL ENERGY OF LINCOLN AND MCBAIN'S PPAs**
7 **ENTERED ON OR BEFORE JANUARY 1, 2008?**

8 A. Yes.

9
10 **Q. DO BOTH PPAs HAVE INITIAL TERMS OF 20 YEARS OR MORE?**

11 A. Yes.

12
13 **Q. DO BOTH PPAs PROVIDE FOR THE LINCOLN AND MCBAIN PLANTS TO**
14 **SELL ELECTRICITY TO AN ELECTRIC UTILITY WHOSE RATES ARE**
15 **REGULATED BY THE COMMISSION WITH 1,000,000 OR MORE RETAIL**
16 **CUSTOMERS IN THIS STATE?**

17 A. Yes, our PPAs are with Consumers Energy Company.

18
19 **Q. AT ANY TIME PRIOR TO JANUARY 1, 2008, DID THE LINCOLN AND MCBAIN**
20 **PLANTS GENERATE ANY ELECTRICITY IN WHOLE OR IN PART FROM**
21 **WOOD OR SOLID WOOD WASTES AND SELL THAT ELECTRICITY TO**
22 **CONSUMERS ENERGY COMPANY?**

23 A. Yes.

1 Q. DO THE LINCOLN AND MCBAIN PLANTS STILL GENERATE ELECTRICITY
2 IN WHOLE OR IN PART FROM WOOD OR SOLID WOOD WASTES AND SELL
3 THAT ELECTRICITY TO CONSUMERS ENERGY COMPANY?

4 A. Yes.

5
6 Q. WITH RESPECT TO ENERGY DELIVERED BETWEEN JANUARY 1, 2023 AND
7 DECEMBER 31, 2023, DID CONSUMERS ENERGY COMPANY MAKE
8 PAYMENTS TO NATIONAL ENERGY OF LINCOLN AND MCBAIN UNDER
9 THE TERMS OF THEIR PPAs?

10 A. Yes.

11
12 Q. DID PORTIONS OF THE PAYMENTS FROM CONSUMERS ENERGY TO
13 NATIONAL ENERGY OF LINCOLN AND MCBAIN INCLUDE PAYMENTS FOR
14 FUEL AND VARIABLE OPERATION AND MAINTENANCE (“O&M”) COSTS?

15 A. Yes. Please see Exhibits BMP-1, BMP-2, BMP-8 and BMP-9.

16
17 Q. DID THE AMOUNTS OF NATIONAL ENERGY OF LINCOLN AND MCBAIN’S
18 ACTUAL FUEL AND VARIABLE O&M COSTS EXCEED THE AMOUNT THAT
19 CONSUMERS ENERGY PAID THOSE PLANTS FOR THOSE COSTS UNDER
20 THEIR PPAs?

21 A. Yes. Please see Exhibits BMP-1, BMP-2, BMP-8 and BMP-9.

1 **Q. ARE THE LINCOLN AND MCBAIN PLANTS LANDFILL GAS PLANTS, HYDRO**
2 **PLANTS, OR MUNICIPAL SOLID WASTE PLANTS?**

3 A. No.

4

5 **Q. IS EITHER NATIONAL ENERGY OF LINCOLN OR MCBAIN ENGAGED IN**
6 **LITIGATION AGAINST AN ELECTRIC UTILITY SEEKING HIGHER**
7 **PAYMENTS FOR POWER DELIVERED PURSUANT TO A CONTRACT?**

8 A. No.

9

10

COST DATA

11 **Q. WHAT AMOUNT HAS NATIONAL ENERGY OF LINCOLN IDENTIFIED ON**
12 **EXHIBIT BMP-8 AS ITS ACTUAL FUEL AND VARIABLE OPERATION AND**
13 **MAINTENANCE COSTS FOR 2023?**

14 A. National Energy of Lincoln has identified \$7,121,225 in actual fuel and variable operation
15 and maintenance costs for sales to Consumers Energy Company in 2023.

16

17 **Q. WHAT AMOUNT HAS NATIONAL ENERGY OF MCBAIN SET FORTH ON**
18 **EXHIBIT BMP-9 AS ITS ACTUAL FUEL AND VARIABLE OPERATION AND**
19 **MAINTENANCE COSTS FOR 2023?**

20 A. National Energy of McBain has identified \$8,580,731 in actual fuel and variable operation
21 and maintenance costs for sales to Consumers Energy Company in 2023.

1 **Q. PLEASE STATE THE AMOUNT THAT CONSUMERS ENERGY PAID TO**
2 **NATIONAL ENERGY OF LINCOLN AND McBAIN PURSUANT TO THE PPA**
3 **BETWEEN IT AND CONSUMERS ENERGY FOR FUEL AND VARIABLE**
4 **OPERATION AND MAINTENANCE COSTS INCURRED DURING 2023.**

5 A. Under the terms of our PPAs, Consumers Energy paid Lincoln a total of \$5,307,223 for
6 actual fuel and variable operation and maintenance costs incurred for 2023 and paid
7 McBain a total of \$5,103,091 for actual fuel and variable operation and maintenance costs
8 incurred for 2023.

9
10 **Q. WAS THERE A SHORTFALL BETWEEN THE FUEL AND VARIABLE O & M**
11 **COSTS THAT NATIONAL ENERGY OF LINCOLN AND McBAIN INCURRED**
12 **FOR SALES TO CONSUMERS AND THE PAYMENTS THAT IT RECEIVED**
13 **FROM CONSUMERS FOR THOSE COSTS UNDER ITS PPA?**

14 A. Yes, National of Lincoln's shortfall was \$1,814,003 and McBain's shortfall was
15 \$3,477,640.

16
17 **Q. DO YOU HAVE DOCUMENTATION TO SUPPORT THE COST AND PAYMENT**
18 **FIGURES THAT YOU HAVE PROVIDED IN RESPONSE TO THE ABOVE**
19 **QUESTIONS?**

20 A. Yes. The actual fuel and variable operation and maintenance costs and Consumers'
21 payments to Lincoln and McBain are detailed on Exhibits BMP-8 and BMP-9.

1 **Q. WHAT AMOUNTS ARE NATIONAL ENERGY OF LINCOLN AND MCBAIN**
2 **SEEKING TO RECOVER IN THIS PROCEEDING.**

3 **A.** As set forth in Exhibit BMP-1, National Energy of Lincoln is seeking to recover \$1,018,397
4 of the shortfall in fuel and variable O & M costs as set forth in Exhibit BMP-1, and National
5 Energy of McBain is seeking to recover \$1,967,747. These amounts could change in the
6 unlikely event that an adjustment is made to the fuel and variable operation and
7 maintenance expense which any other BMP is seeking to recover in this proceeding with
8 respect to a month in which the collective payments to the BMPs exceed the statutory cap
9 on cost recovery. While we do not believe that any adjustment to any other BMPs' costs
10 would be appropriate or required, it is theoretically possible that an adjustment could be
11 made. In that event, the capped amount would be reallocated among all of the BMPs, taking
12 into account the adjustment. The result of this reallocation process would be that the
13 amounts that National Energy of Lincoln and McBain are seeking to recover in this
14 proceeding would change in order to accurately reflect their proportionate share of the
15 capped amount.

16
17 **Q. THE MPSC'S AUGUST 11, 2009 ORDER IN CASE NO. U-16048 ALLOWS THE**
18 **BMPS TO SUBMIT MONTHLY INVOICES TO CONSUMERS FOR THE**
19 **AMOUNTS RECOVERABLE UNDER PA 286. THE SAME ORDER REQUIRES**
20 **CONSUMERS TO MAKE INTERIM MONTHLY PAYMENTS TO THE BMPs TO**
21 **COVER 80% OF THE INVOICED AMOUNTS. DID CONSUMERS MAKE**
22 **PARTIAL PAYMENTS TO NATIONAL ENERGY OF LINCOLN OR MCBAIN IN**
23 **2023?**

1 A. Yes, as reflected in Exhibits BMP-2 and BMP-8, Consumers Energy paid National Energy
2 of Lincoln \$720,815 of the \$1,018,397 that Lincoln seeks to recover in this proceeding,
3 leaving a balance due to Lincoln of \$297,582.

4 As reflected in Exhibits BMP-2, and BMP-9, Consumers Energy paid National
5 Energy of McBain \$1,409,967 of the \$1,967,747 that McBain seeks to recover in this
6 proceeding, leaving a balance due to McBain of \$557,780.

7
8 **Q. ARE YOU SEEKING RECOVERY OF ANY ACTUAL FUEL AND VARIABLE**
9 **OPERATION AND MAINTENANCE COSTS THAT WERE INCURRED DUE TO**
10 **CHANGES IN FEDERAL OR STATE ENVIRONMENTAL LAWS OR**
11 **REGULATIONS THAT WERE IMPLEMENTED AFTER OCTOBER 6, 2008?**

12 A. No.

13

14

PROCUREMENT PROCEDURES

15 **Q. PLEASE DESCRIBE THE FUEL OR FUELS THAT THE LINCOLN AND**
16 **MCBAIN PLANTS USED TO GENERATE ELECTRICITY DURING 2023.**

17 A. Both the Lincoln and McBain plants used chipped waste wood, creosote treated wood and
18 tire derived fuel (“TDF”), to generate electricity from January 1, 2023 through December
19 31, 2023.

1 **Q. WITH RESPECT TO EACH OF THE FUELS THAT YOU HAVE LISTED,**
2 **PLEASE IDENTIFY THE VOLUMES THAT WERE USED AT THE LINCOLN**
3 **PLANT DURING 2023.**

4 A. The volumes of fuels used were as follows:

- 5 • Waste Wood 196,188 Tons
- 6 • Tire Derived Fuel 10,797 Tons

7 Thus, the total volume of fuel used in 2023 was 206,985 Tons.

8
9 **Q. WITH RESPECT TO EACH OF THE FUELS THAT YOU HAVE LISTED,**
10 **PLEASE STATE THE VOLUMES THAT WERE USED AT THE MCBAIN PLANT**
11 **DURING 2023.**

12 A. The volumes of fuels used were as follows:

- 13 • Waste Wood 153,739 Tons
- 14 • Tire Derived Fuel 7,658 Tons

15 Thus, the total volume of fuel used in 2023 was 161,397 Tons.

16

17 **FUEL, VARIABLE OPERATION & MAINTENANCE COSTS**

18 **Q. DOES NATIONAL ENERGY HAVE FUEL SUPPLY AGREEMENTS WITH ANY**
19 **FUEL SUPPLIERS?**

20 A. Yes.

1 **Q. PLEASE DESCRIBE THE PROCESS THAT WAS USED TO ENTER INTO**
2 **THESE FUEL SUPPLY AGREEMENTS.**

3 A. Once a contact has been established with a potential supplier, we will issue that new
4 supplier a package consisting of our terms and conditions, insurance requirements, and fuel
5 specifications. Once the terms and conditions have been signed, we will issue a fuel supply
6 agreement identifying the price per ton and any other special conditions.

7
8 **Q. PLEASE SUMMARIZE THE PRINCIPAL TERMS OF YOUR FUEL SUPPLY**
9 **AGREEMENTS, INCLUDING THE PRICE OF THE FUEL AND THE DURATION**
10 **OF THE AGREEMENT.**

11 A. Our contracts are “at will” contracts. All of our suppliers are given 12-month quota
12 contracts in which National Energy will guarantee to receive “X” number of tons of energy
13 chips and the supplier guarantees to deliver this amount. All contracts automatically revert
14 to a month-to-month contract until a new Fuel Supply Agreement is executed. With this
15 guaranteed receive and deliver contract, the supplier is also guaranteed a firm base price
16 for the term of the contract. All tonnage is averaged over a rolling three-week period.

17
18 **Q. WHEN YOU ENTERED INTO THESE SUPPLY AGREEMENTS, DID**
19 **NATIONAL CONSIDER OTHER AVAILABLE ALTERNATIVE SUPPLIERS?**

20 A. Yes.

1 **Q. WHAT WERE THE EFFECTS OF ENTERING INTO THE FUEL SUPPLY**
2 **AGREEMENTS?**

3 A. The effects of entering into these agreements were that National Energy was able to secure
4 a supply of fuel that was adequate to meet its generating needs, reliable enough to assure
5 its continued performance, and sufficiently diversified to ensure the stability of its fuel
6 supply, all within the context of an overall effort to minimize costs as much as reasonable
7 and practicable.

8
9 **Q. WHEN NATIONAL PROCURES FUEL, IS ONE OBJECTIVE TO MINIMIZE**
10 **THE COST OF FUEL PURCHASED?**

11 A. Yes. Cost is always a very important consideration. Another important consideration is
12 the reliability of the fuel supply.

13
14 **Q. WHAT STEPS DID LINCOLN AND MCBAIN TAKE TO ACHIEVE THESE**
15 **OBJECTIVES IN 2023?**

16 A. National Energy tracked pricing and reliability on a weekly basis to determine who could
17 deliver the most reliable, lowest cost fuel.

18
19 **Q. DID PURCHASING FUEL PURSUANT TO THE FUEL SUPPLY AGREEMENTS**
20 **PROVIDE LINCOLN AND MCBAIN THE BEST FUEL PRICING OPTIONS**
21 **REASONABLY AVAILABLE TO THEM IN 2023?**

22 A. Yes.

1 **Q. IN YOUR OPINION, WERE NATIONAL ENERGY'S DECISIONS TO ENTER**
2 **INTO THESE FUEL SUPPLY AGREEMENTS REASONABLE AND PRUDENT**
3 **BASED ON THE FACTS AND CIRCUMSTANCES KNOWN OR REASONABLY**
4 **FORESEEABLE AT THE TIME WHEN THE DECISIONS WERE MADE?**

5 A. Yes.

6

7 **Q. PLEASE EXPLAIN.**

8 A. National entered into agreements based on known market conditions and reliable data
9 concerning the actual historical performance of suppliers.

10

11 **Q. WERE THERE SEASONAL VARIATIONS IN YOUR FUEL COSTS?**

12 A. No, along with being fuel-diversified, Lincoln and McBain were not subject to seasonal
13 cost variations.

14

15 **Q. ARE THERE REGIONAL DIFFERENCES IN FUEL COSTS?**

16 A. Yes. Regional differences can occur depending on fuel market demand within any given
17 region. Fiberboard and lumber markets can shift without much warning. This generally
18 results in an unpredicted increase in wood fiber costs. When this occurs, fuel may have to
19 be purchased outside a typical geographic area resulting in higher prices due to increased
20 transportation costs. Being fuel-diversified has helped mitigate the price fluctuations.

1 **Q. DOES THE DISTANCE BETWEEN THE FUEL SOURCE AND THE PLANT**
2 **HAVE AN IMPACT ON THE FINAL FUEL PRICE?**

3 A. Yes, shipping costs are an important component of fuel costs. Fuel becomes more
4 expensive if purchased from a more distant location.

5
6 **Q. IN CONNECTION WITH YOUR FUEL PROCUREMENT DECISIONS, DID**
7 **NATIONAL EXERCISE ITS BEST JUDGMENT?**

8 A. Yes.

9
10 **Q. IN YOUR OPINION, WERE NATIONAL ENERGY'S PURCHASING**
11 **PRACTICES REASONABLE AND PRUDENT?**

12 A. Yes.

13
14 **Q. TURNING TO THE TOPIC OF OPERATION AND MAINTENANCE COSTS,**
15 **PLEASE DESCRIBE THE VARIABLE OPERATION AND MAINTENANCE**
16 **COSTS THAT YOU ARE SEEKING TO RECOVER IN THIS PROCEEDING.**

17 A. We are seeking to recover those variable operation and maintenance costs identified in
18 Exhibit BMP-8 and BMP-9. Those costs include, among others: 1) water supply costs; 2)
19 sewer and wastewater disposal costs; 3) ash handling costs; 4) fuel handling costs; 5)
20 emission control costs; 6) water treatment costs; and 7) maintenance.

1 **Q. DID THE LINCOLN AND MCBAIN PLANT MINIMIZES THE FUEL AND**
2 **VARIABLE OPERATION AND MAINTENANCE COSTS?**

3 A. Yes, we made every reasonable effort to control these costs. National Energy has gone to
4 extraordinary lengths to obtain its fuel at the lowest available cost. During 2023, the
5 Lincoln and McBain plants continued an innovative fuel procurement strategy to provide
6 fuel to the facilities at costs substantially below other available options. This involved the
7 procurement of whole used railroad ties, shipping those to the plant in whole form and
8 having them processed into usable boiler fuel by its fuel supplier. The processing included
9 the removal of all metals such as tie plates, spikes, bolts and other miscellaneous metal
10 parts and sizing the wood to meet the boiler's fuel specifications. The processing was
11 accomplished using two highly specialized pieces of grinding equipment that first shred
12 the ties into pieces 4" to 6" long and removed metal parts in the process. The second grinder
13 was a fine grinder that sized the primary shreds into 2" to 3" fuel chips that can be
14 efficiently fed to the boiler for combustion. All costs to process this material into fuel,
15 including the cost of operating and maintaining the grinding equipment are captured as fuel
16 costs for recovery under PA 286. These reasonable and prudently incurred costs replaced
17 costs which would have been included in the price per ton paid for traditionally procured
18 wood fuel, and this was done at a lower cost than other available options. The cost savings
19 were garnered by first shipping the ties whole, which resulted in much lower transportation
20 costs and, second, by having the ties processed into boiler fuel on site, eliminating the
21 transportation cost for chipped fuel.

1 **Q. PLEASE EXPLAIN OTHER MEASURES THAT THE NATIONAL OF LINCOLN**
2 **AND MCBAIN PLANTS UNDERTOOK TO CONTROL ITS VARIABLE**
3 **OPERATION AND MAINTENANCE COSTS.**

4 A. We utilize a variety of measures to control our variable costs. Purchases are competitively
5 bid where practicable in accordance with written company policies and procedures.
6 Markets are monitored to determine prevailing prices. Equipment is shut down when not
7 in use. Additionally, equipment is maintained in accordance with a preventive and
8 predictive maintenance program that ensures the equipment is operating at its peak
9 efficiency. Unnecessary repairs or modifications are not made.

10

11 **Q. THE SETTLEMENT AGREEMENT IN CONSUMERS' 2016 PSCR**
12 **RECONCILIATION REQUIRED YOU TO: (i) PREPARE A LIST OF ALL**
13 **EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING COST**
14 **RECOVERY; (ii) IDENTIFY WHICH, IF ANY, OF THE EXPENSES ARE**
15 **RELATED TO ONE ANOTHER AND (iii) HAVE AN ACCOUNTANT CERTIFY**
16 **THAT ANY EXPENDITURES OVER \$25,000 FOR WHICH YOU ARE SEEKING**
17 **COST RECOVERY ARE PROPERLY CHARACTERIZED AS CURRENT**
18 **EXPENSES AND NOT AS CAPITAL EXPENDITURES. HAVE YOU DONE SO?**

19 A. Yes. Our company's CPA, Ms. Haley Fell, prepared those lists and they are attached as
20 Exhibit BMP-21. Those lists also identify which expenses are related. Ms. Fell has
21 confirmed the characterization of the expenses of \$25,000 or greater and issued the
22 attached certifications, Exhibits BMP-30 and BMP-31, in accordance with the settlement
23 agreement.

CONCLUSION

1
2 **Q. IN YOUR OPINION, WERE THE LINCOLN AND MCBAIN PLANTS’**
3 **PURCHASING PRACTICES REASONABLE AND PRUDENT?**

4 A. Yes.

5
6 **Q. IN YOUR OPINION, WERE THE LINCOLN AND MCBAIN PLANTS’ ACTUAL**
7 **FUEL AND VARIABLE OPERATION AND MAINTENANCE COSTS FOR THE**
8 **PERIOD FROM JANUARY 1, 2023 THROUGH DECEMBER 31, 2023**
9 **REASONABLY AND PRUDENTLY INCURRED?**

10 A. Yes.

11
12 **Q. IN YOUR OPINION, DO YOU THINK THAT ANY OF THE LINCOLN OR**
13 **MCBAIN PLANTS’ ACTUAL FUEL OR VARIABLE OPERATION AND**
14 **MAINTENANCE COSTS WERE EXTRAVAGANT, UNNECESSARY,**
15 **INEFFICIENT OR IMPRUDENT?**

16 A. Absolutely not.

17
18 **Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

19 A. Yes, it does.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Exhibits BMP-1 through BMP-24?

3 Hearing none, those exhibits are
4 admitted.

5 Thank you, Mr. Waters.

6 MR. WATERS: Thank you, Your Honor.

7 JUDGE WALLACE: Mr. Keimach, we did
8 complete the Company's case; correct? I didn't want to
9 run ahead too quickly.

10 MR. KEIMACH: We did, Your Honor.

11 JUDGE WALLACE: All right. You guys are
12 set. Mr. Waters, you're set.

13 Okay. Moving on to you, Ms. Gill.

14 MS. GILL: Thank you, Your Honor.

15 By stipulation of the parties, the
16 Attorney General moves to bind in the direct
17 testimony and exhibits of Mr. Sebastian Coppola.
18 Mr. Coppola's testimony is 24 pages long and
19 includes a cover page followed by 23 pages of
20 questions and answers, and Appendix A containing
21 his experience and qualification was filed with his
22 testimony and should be -- should also be bound
23 into the record.

24 Mr. Coppola sponsored AG-1 through
25 AG-7 with his direct testimony.

1 JUDGE WALLACE: Okay. Is there any
2 objection to binding in the direct testimony of
3 Mr. Coppola, including Appendix A?

4 Hearing none, the testimony is bound
5 in.

6 (Testimony bound in)

7 - - -

8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)
CONSUMERS ENERGY GAS COMPANY)
for the Reconciliation of its Power Supply) MPSC Case No. U-21258
Cost Recovery (PSCR) Plan Costs)
(Case No. U-21257) for the Calendar Year)
2023)
_____)

**Direct Testimony
And Exhibits
of
Sebastian Coppola**

**On behalf of
Attorney General Dana Nessel**

December 18, 2024

Qualifications

1

2 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND ADDRESS.**

3 A. My name is Sebastian Coppola. I am an independent business consultant. My office is
4 located at 5928 Southgate Rd., Rochester, Michigan 48306.

5 **Q. PLEASE SUMMARIZE YOUR PROFESSIONAL QUALIFICATIONS.**

6 A. I am a business consultant specializing in financial and strategic business issues in the
7 fields of energy and utility regulation. I have more than forty years of experience in public
8 utility and related energy work, both as a consultant and utility company executive. I have
9 testified in several regulatory proceedings before the Michigan Public Service
10 Commission (“MPSC” or “Commission”) and other regulatory jurisdictions. I have
11 prepared and/or filed testimony in general rate case proceedings, revenue decoupling
12 reconciliations, infrastructure replacement mechanisms, gas conservation programs, Gas
13 Cost Recovery (“GCR”) cases and Power Supply Cost Recovery (“PSCR”) cases, among
14 many other regulatory matters.

15 **Q. WHAT EXPERIENCE DO YOU HAVE WITH ELECTRIC UTILITIES?**

16 A. I have performed rate case analyses and filed testimony in several electric general rate
17 cases addressing issues such as revenue requirements, sales level determination, operation
18 and maintenance expenses, cost allocations, cost of capital, cost of service and rate design,
19 and various cost tracking mechanisms. In addition, I have performed analyses of power

1 costs and filed testimony in power supply cost recovery cases, including cases involving
2 reconciliation of annual power supply costs.

3 In my position as Senior Vice President of Finance at MCN Energy Group (MCN), I had
4 responsibility for project financing of independent power generation plants in which MCN
5 was an owner. In this regard, I was intricately involved with and became knowledgeable
6 of PURPA qualified cogeneration plants in Michigan and other states. In addition, I was
7 involved in negotiating the development and financing of power generation and electricity
8 distribution plants in other countries, such as India.

9 **Q. PLEASE LIST SOME OF THE MORE RECENT CASES YOU HAVE**
10 **PARTICIPATED IN BEFORE THE MPSC AND OTHER REGULATORY**
11 **AGENCIES.**

12 A. Here is a partial list of the most recent regulatory cases in which I have participated:

- 13 ○ Filed testimony on behalf of the Michigan Attorney General in Consumers
14 Energy Company (CECo) 2024 electric rate case U-21585 on several issues,
15 including operation and maintenance expenses, capital expenditures, cost of
16 capital, and other items.
- 17 ○ Filed testimony on behalf of the Michigan Attorney General in DTE Electric
18 Company (DTEE) 2024 electric rate case U-21534 on several issues, including
19 operation and maintenance expenses, capital expenditures, cost of capital, and
20 other items.
- 21 ○ Filed testimony on behalf of the Michigan Attorney General in the Upper
22 Peninsula Power Company (UPPCO) 2024 gas rate case U-21555 on several
23 issues, including operation and maintenance expenses, capital expenditures, cost
24 of capital, and other items.
- 25 ○ Filed testimony on behalf of the Michigan Attorney General in the Michigan
26 Gas Utilities Corporation (MGUC) 2024 gas rate case U-21540 on several
27 issues, including operation and maintenance expenses, capital expenditures, cost
28 of capital, and other items.

- 1 ○ Filed testimony on behalf of the Michigan Attorney General in SEMCO Energy
2 Gas Company (SEMCO) 2023-2024 GCR plan in case No. U-21277.
- 3 ○ Filed testimony on behalf of the Michigan Attorney General in DTE Gas
4 Company (DTE Gas) 2024 gas rate case U-21291 on several issues, including
5 sales, operation and maintenance expenses, capital expenditures, cost of capital,
6 and other items.
- 7 ○ Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2022-
8 2023 GCR reconciliation in case No. U-21065.
- 9 ○ Filed testimony on behalf of the Michigan Attorney General in CECo's 2023
10 gas rate case U-21490 on several issues, including sales, operation and
11 maintenance expenses, capital expenditures, cost of capital, and other items.
- 12 ○ Filed testimony on behalf of the Michigan Attorney General in DTM Michigan
13 Lateral Company (DMLC) 2023 Act 9 Transportation Service rate update in
14 case No. U-21525.
- 15 ○ Filed testimony on behalf of the Michigan Attorney General in DTEE 2022
16 PSCR reconciliation in case No. U-21051.
- 17 ○ Filed testimony on behalf of the Michigan Attorney General in MGUC 2022-
18 2023 GCR reconciliation case No. U-21067.
- 19 ○ Filed testimony on behalf of the Michigan Attorney General in CECo 2022
20 PSCR reconciliation in case No. U-21049.
- 21 ○ Filed testimony on behalf of the Michigan Attorney General in the Indian
22 Michigan Power Company's 2023 electric rate case U-21461 on several issues,
23 including sales, operation and maintenance expenses, capital expenditures, cost
24 of capital, and other items.
- 25 ○ Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2023-
26 2024 GCR plan in case No. U-21271.
- 27 ○ Filed testimony on behalf of the Michigan Attorney General in CECo 2023-
28 2024 GCR plan in case No. U-21269.
- 29 ○ Filed testimony on behalf of the Michigan Attorney General in CECo 2023
30 electric rate case U-21389 on several issues, including operation and
31 maintenance expenses, capital expenditures, cost of capital, and other items.
- 32 ○ Filed testimony on behalf of the Michigan Attorney General in SEMCO 2023-
33 2024 GCR plan in case No. U-21277.
- 34 ○ Filed testimony on behalf of the Michigan Attorney General in DTEE 2023 rate
35 case U-21297 on several issues, including operation and maintenance expenses,
36 capital expenditures, cost of capital, and other items.
- 37 ○ Filed testimony on behalf of the Michigan Attorney General in MGUC 2023-
38 2024 GCR plan in case No. U-21273.

- 1 ○ Filed testimony on behalf of the Michigan Attorney General in CECo 2022 gas
2 rate case U-21308 on several issues, including sales revenues, operation and
3 maintenance expenses, capital expenditures, cost of capital, and other items.
- 4 ○ Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2021-
5 2022 GCR plan reconciliation case No. U-20817.
- 6 ○ Filed testimony on behalf of the Michigan Attorney General in DTEE 2021
7 PSCR plan reconciliation case No. U-20827.
- 8 ○ Filed testimony on behalf of the Michigan Attorney General in MGUC 2021-
9 2022 GCR plan reconciliation case No. U-20819.
- 10 ○ Filed testimony on behalf of the Michigan Attorney General in Upper Peninsula
11 Power Company 2022 general rate case No. U-21286.
- 12 ○ Filed testimony on behalf of the Michigan Attorney General in SEMCO 2021-
13 2022 GCR plan reconciliation case No. U-20823.
- 14 ○ Filed testimony on behalf of the Michigan Attorney General in CECo 2022-
15 2023 GCR plan case No. U-21062.
- 16 ○ Filed testimony on behalf of the Michigan Attorney General in SEMCO 2022-
17 2023 GCR plan case No. U-21070.
- 18 ○ Filed testimony on behalf of the Michigan Attorney General in CECo 2022
19 electric rate case U-21224 on several issues, including operation and maintenance
20 expenses, capital expenditures, cost of capital, and other items.
- 21 ○ Filed testimony on behalf of the Public Counsel Division of Washington Attorney
22 General in the Avista 2022 electric and gas rate cases on several issues, including
23 operation and maintenance expenses, capital expenditures, and other items.
- 24 Appendix A elaborates further on my qualifications in the regulated energy field.

25

Prepared Direct Testimony

26 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

27 A. I have been asked by the Michigan Department of Attorney General to make an
28 independent analysis of Consumers Energy Company's (CECo) PSCR Reconciliation for
29 the year 2023. This testimony presents a report of my analysis.

30 **Q. WHAT TOPICS ARE YOU ADDRESSING IN YOUR TESTIMONY?**

31 A. I will be addressing five major topics in this case:

- 1 1. The disallowance of replacement power costs related to power outages at the
- 2 Campbell power plant Units 2 and 3.
- 3 2. The adjustment of replacement power costs related to several power outages at the
- 4 Zeeland power plant Units 3, 4, and 5.
- 5 3. The adjustment of Biomass Power (BMP) plant costs.
- 6 4. The adjustments to the Company's reported PSCR cost under-recovery balance for
- 7 the year 2023.

8 The absence of a discussion of other matters in my testimony should not be taken as an
9 indication that I agree with those aspects of CECo's PSCR reconciliation filing. Instead,
10 my testimony is focused on certain issues based on the available resources.

11 **Q. IS YOUR TESTIMONY ON THESE TOPICS ACCOMPANIED BY EXHIBITS?**

12 A. Yes. the following exhibits accompany this testimony:

- 13 1. Exhibit AG-1 CECo Responses for Campbell 2 Outages 108-111
- 14 2. Exhibit AG-2 CECo Responses for Campbell 3 Outage Event 111
- 15 3. Exhibit AG-3 CECo Responses for Campbell Unit 3 Event 231
- 16 4. Exhibit AG-4 CECo Responses for Zeeland Units 3, 4, 5 Event 21, 22, 29
- 17 5. Exhibit AG-5 Variance Analysis of BMP PPA Energy Costs
- 18 6. Exhibit AG-6 CECo Responses to BMP Cost Comparisons
- 19 7. Exhibit AG-7 AG Revised PSCR Reconciliation Under-Recovery Amount

20 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE TOPICS**
21 **YOU IDENTIFIED ABOVE.**

22 A. I summarize my conclusions and recommendations as follows:

1 A. According to witness Nathan J. Hoffman’s direct testimony, the Company had 424 outages
2 in 2023 at its power generating plants.¹ This number was lower by 99 outages from the
3 number of outages in 2022. The lower number partially reflects the retirement of the Karn
4 1 and 2 generating units in May 2023.² The total potential amount of lost power from the
5 424 outages was 13,676,568 MWh.³ Exhibit A-10 (NJH-1) lists the 2023 outages in
6 summary form with the related lost power. Exhibit A-12 (NJH-3) provides additional
7 details with causes and corrective actions for 51 of the outages where the generating units
8 had lower availability than the established industry standards (NERC-GADS).⁴

9 After reviewing the outage information in Exhibits A-10, A-12, and responses to discovery
10 requests, I have determined that there are nine outage incidents where the Company or its
11 contractors failed to exercise proper care and diligence, resulting in higher power costs to
12 PSCR customers during 2023. The outage incidents occurred at the Campbell Units 2 and
13 3, and Zeeland Units 3, 4, and 5. The incremental power costs that I propose to disallow
14 from these incidents total to \$4,622,074 for 2023. I will describe each of the incidents
15 below.

16 **Campbell Unit 2 Outages #108 Through #111**

17 **Q. PLEASE DESCRIBE THE OUTAGE INCIDENTS AT THE CAMPBELL UNIT 2.**

¹ Direct testimony of Nathan Hoffman at page 3.

² *Id.*

³ AG-WP1 summarizing MWh from Exhibit A-10.

⁴ Direct testimony of Nathan Hoffman at page 5.

1 A. The outage Events #108 through #111 relate to start-up boiler feed pump failure from
2 damage caused during post-maintenance testing that began on August 10, 2023 and lasted
3 through the end of the year. Pages 8 through 11 of Exhibit A-12 provide a summary
4 description of the events and root cause. According to two final root cause analysis reports
5 provided by the Company in response to discovery:

6 During unit startup on 8/10/23 the startup boiler feed pump (SUBFP) was utilized as
7 part of startup. This was the first start on this pump since it had been overhauled the
8 month prior (reference issue ID 2127 for work scope). The pump failed PMT [Post-
9 Maintenance Testing] in less than 3 minutes with extremely high vibrations and a
10 significant thrust event. Upon discovery, significant damage was identified in the
11 pump bearings, pump element/gearbox coupling, gearbox bearings and pump
12 element.⁵

13 The reports also explain that the root cause of the pump failure is attributed to an error
14 during reassembly of the pump following its July 2023 overhaul. Apparently, the pump
15 was no completely purged of non-compressible gasses (vented) or an air bubble was
16 trapped in the pump. According to the root cause reports, the Company had no set
17 procedure to ensure complete purging of the pump and relied on basic operator knowledge.
18 The operator failed to fully purge the pump of trapped gases in the pump.⁶

19 **Q. DID THE CAMPBELL UNIT 2 OUTAGE EVENTS #108 THROUGH #111**
20 **INCREASE POWER COSTS INCLUDED IN THIS RECONCILIATION CASE?**

21 A. Yes. As a result of the power outage, the Company had to purchase replacement power
22 during that outage period at an incremental cost of \$2,355,042. Exhibit AG-1 includes the

⁵ Exhibit AG-1 includes DR AG-CE-0052 with ATT2 and ATT4, and DR AG-CE-0099.

⁶ Id. ATT 2 and ATT4.

1 Company's response and the summary attachment to discovery request AG-CE-0052
2 Hahn_Campbell_2_Events_38_73_108-111 with this information.⁷

3 **Q. WHAT IS YOUR ASSESSMENT OF THE CAMPBELL UNIT 2 OUTAGES**
4 **BEGINNING AUGUST 10, 2023?**

5 A. As described by the Company in the attachments to discovery response AG-CE-0052, the
6 root cause of the power outages was an improper purging of the boiler feed pump. The
7 error caused the generating unit to abort the start-up and required repairs which carried
8 through at least the end of 2023.⁸ As a result, the Company had to purchase replacement
9 power during the outage period at an incremental cost of \$2,355,042. The incremental
10 power costs for this outage that the Company seeks to recover in this reconciliation case
11 are the result of Company personnel or a contractor working on behalf of the Company
12 failing to perform a basic task of purging the boiler feed pump of trapped gases within the
13 pump. Customers should not pay for the incremental cost of replacement power resulting
14 from an error caused by Company employees or its contractors.

15 As stated earlier, the Company had 424 power outages, both planned and unplanned, in
16 2023 with the potential loss of 13,676,568 MWh of power generation. Customers are

⁷ The Confidential designation in the DR pertains to the supporting detailed calculations also provided in addition to the summary schedule, which are not included in Exhibit AG-1. In response to DR AG-CE-0093b, the Company confirmed that the summary schedule showing the total amount of replacement power costs does not contain confidential information.

⁸ The last outage report #111 shows an end date of January 1, 2024, which coincides with the end of the 2023 PSCR reconciliation period. Based on ATT3 to DR AG-CE-0052, the Company continue to perform some analysis of the 2023 outages into 2024 and it is likely that the pump repairs and unit outage continued in 2024.

1 already absorbing the incremental cost of most of these power outages and should not be
2 responsible for higher power costs that are the result of errors by the Company.

3 Therefore, I recommend that the Commission disallow \$2,355,042 of power costs for this
4 outage from the total power costs included in this reconciliation case.

5 **Campbell Unit 3 Outages #111**

6 **Q. PLEASE DESCRIBE THE OUTAGE INCIDENT #111 AT THE CAMPBELL UNIT**
7 **3.**

8 A. Page 15 of Exhibit A-12 describes this incident as a failure of a section of a boiler tube
9 that failed on May 14, 2023 and caused an unplanned power outage lasting approximately
10 15 days. According to the report, incorrect material installed in the platen Superheater
11 tube element failed due to the improper material's properties. The tube with the wrong
12 material was installed in 2007. In response to DR AG-CE-0100, the Company elaborated
13 on the incident, stating that laboratory analysis of the failed section of tubing showed the
14 material used in manufacturing the tube did not conform to the specified grade 91 material
15 for use in the boiler of the power generating unit. The document further states that the
16 incorrect material could have been installed erroneously in the shop when the component
17 was fabricated.⁹

⁹ Exhibit AG-2 includes DR AG-CE-0100 and Attachment JHC3_111.

1 **Q. DID THE CAMPBELL UNIT 3 OUTAGE EVENTS #111 INCREASE POWER**
2 **COSTS INCLUDED IN THIS RECONCILIATION CASE?**

3 A. Yes. As a result of the two power outages, the Company had to purchase replacement
4 power during that outage period at an incremental cost of \$565,977. Exhibit AG-2
5 includes the Company's summary attachment to discovery request AG-CE-0100 Campbell
6 3 Event 111 with this information.

7 **Q. WHAT IS YOUR ASSESSMENT OF THE CAMPBELL UNIT 3 OUTAGE**
8 **STARTING ON MAY 14, 2023?**

9 A. As discuss above, on page 12 of Exhibit A-12 and in response to discovery, the Company
10 has admitted that an incorrect section of tubing was installed in the boiler which did not
11 conform to the required grade of pipe. The Company's claim that the visual inspection of
12 the pipe did not identify incorrect tubing had been installed is not relevant. Given the
13 critical use of this tubing within a superheated boiler, the Company or its contractor should
14 have taken appropriate precautions to ensure the correct material was used. In this case,
15 the Company failed to do so and improperly installed a section of tubing that did not meet
16 the required specifications. As a result, the tubing failed and caused a two-week power
17 outage that required the Company to purchase replacement power at an incremental cost
18 of \$565,9777.

19 The incremental power costs for this outage that the Company seeks to recover in this
20 reconciliation case are the result of a Company error. Customers should not pay for the

1 incremental cost of replacement power resulting from errors by Company employees or
2 its contractors.

3 Therefore, I recommend that the Commission disallow \$565,977 of power costs for this
4 outage from the total power costs included in this reconciliation case.

5 **Campbell Unit 3 Outage #231**

6 **Q. PLEASE DESCRIBE THE OUTAGE INCIDENT AT THE CAMPBELL UNIT 3.**

7 A. The outage Event #231 at the Campbell Unit 3 relates to an unplanned outage that occurred
8 on August 28, 2023 and lasted for nearly 7 days (162.53 hours). According to the periodic
9 outage report provided by the Company in response to DR AG-CE-0038 ATT1, the
10 generating unit experienced a protective relay trip due to a fault in the 33D1 motor control
11 center (MCC).¹⁰ Subsequent to a follow-up discovery request, the Company provided a
12 root cause analysis report that elaborates further on the cause of the MCC fault.

13 The report identifies three related reasons for the MCC fault:

- 14 1. Unidentified deteriorating insulating components within the MCC.
- 15 2. Grommets and other wire chaffing points in Furnas MCCs have been observed
16 during pre-fault and post-fault inspections.
- 17 3. Inadequate Preventive Maintenance Plan application for Furnas MCCs.

18 The root cause analysis report provided by the Company also points out that the
19 standardized operational process was not followed, the process document was not clear

¹⁰ Exhibit AG-3 includes DR AG-CE-0037 and ATT1,

1 and sufficient, and the team member was not sufficiently qualified or trained on the
2 standardized process.¹¹

3 **Q. DID THE CAMPBELL UNIT 3 OUTAGE EVENT #231 DURING 2023 INCREASE**
4 **POWER COSTS INCLUDED IN THIS RECONCILIATION CASE?**

5 A. Yes. As a result of the power outage, the Company had to purchase replacement power
6 during that outage period at an incremental cost of \$1,046,270. Exhibit AG-3 includes the
7 Company's summary attachment to discovery request AG-CE-0038 Hahn Campbell 3
8 Event 231 with this information.

9 **Q. WHAT IS YOUR ASSESSMENT OF THE CAMPBELL UNIT 3 OUTAGE OF**
10 **AUGUST 28, 2023?**

11 A. As described in the root cause analysis report, the Company failed to properly train its
12 employees on the standardized process to maintain the MCC equipment and failed to
13 perform preventive maintenance that could have avoided the power outage. The failure
14 caused the generating unit to trip into a power outage that lasted approximately 7 days. As
15 a result, the Company had to purchase replacement power during the outage period at an
16 incremental cost of \$1,046,270. The incremental power costs for this outage that the
17 Company seeks to recover in this reconciliation case are the result of negligence by the
18 Company. Customers should not pay for the incremental cost of replacement power

¹¹ Id, includes DR AG-CE-0093 and ATT1.

1 resulting from deficient operating procedures and lack of prudent actions by Company
2 employees.

3 Therefore, I recommend that the Commission disallow \$1,046,270 of power costs for this
4 outage from the total power costs included in this reconciliation case.

5 **Zeeland Units 3, 4, 5 and Outages #21, 22, 29**

6 **Q. PLEASE DESCRIBE THE OUTAGE INCIDENTS AT THE ZEELAND UNITS.**

7 A. In September 2023 there was an outage incident that contemporaneously affected three of
8 the power generating units at the Zeeland plant. This incident affected Zeeland Unit 3
9 (Event 22), Zeeland Unit 4 (Event 21), and Zeeland Unit 5 (Event 29). On September 3,
10 2023, a 10-foot section of pipe shared by the three units broke off the 28 HRH steam line
11 shutting down all three units. According to the periodic outage reports provided by the
12 Company, the breakage was precipitated by weld fatigue due to lack of proper pipe
13 support. The Company stated that the original plant design did not include proper pipe
14 support.¹²

15 The root cause reports provided by the Company in response to discovery requests confirm
16 the improper design of the pipe system, a lack of planning and awareness to add a support
17 structure, and that the plant's post-commissioning activities did not remove the temporary
18 drain and did not add the required pipe support.¹³

¹² Exhibit AG-4 includes DR AG-CE-0049, AG-CE-0050, and AG-CE-0051 with related attachments of the periodic outage reports for the three events.

¹³ Id. includes the root cause analysis reports as ATT2 and ATT3.

1 **Q. DID THE ZEELAND OUTAGE EVENTS INCREASE POWER COSTS**
2 **INCLUDED IN THIS RECONCILIATION CASE?**

3 A. Yes. As a result of the power outage, the Company had to purchase replacement power
4 during that outage period at an incremental cost of \$654,785. Exhibit AG-4 includes the
5 Company's summary calculation attachment to discovery request AG-CE-0049 Hahn
6 Zeeland 345, Event 22-21-29 with this information.

7 **Q. WHAT IS YOUR ASSESSMENT OF THE ZEELAND OUTAGE OF SEPTEMBER**
8 **3, 2023?**

9 A. The root cause analysis report provided by the Company shows that the design flaw of the
10 pipe was the cause of the power outage. The responsibility for that failure lies with the
11 Company. The following Q&A is instructive in assessing how the root cause of the outage
12 originated.

13
14 **Point of Cause**

15
16 Design - The drain line installed for commissioning should have included pipe support for the drain since it was not removed after commissioning. With no support, a 2-inch, approximately 6-foot long horizontal run was only supported by its connection point to the main piping drain leading to a piping connection point with high-stress and prone to fatigue.

1

Cause Analysis**Why**

Stress/Fatigue at weld connection;Horizontal pipe run caused stress/fatigue at weld;Horizontal pipe run unsupported;Post-commissioning activities did not remove temporary drain and did not add support;Improper design

Root Cause

Design Improper

Physical Root

Piping Connection fatigue/stress

Human Root

Lack of planning for post-commissioning support or removal of drain.

Systemic Root

Lack of awareness to add support or remove drain.

2

3 Although the pipe may have been installed in the early 2000s by the previous owner of the
4 plant, it is still the responsibility of the Company to perform a thorough review of the
5 facility and make necessary modifications and improvements to ensure the equipment is
6 in proper working order and not prone to failure. It is now apparent that the Company
7 failed to identify the problem during the due-diligence phase of the plant acquisition and
8 after several years of ownership subsequent to the purchase of the plant for more than 10
9 years.

10 The incremental power costs for this outage that the Company seeks to recover in this
11 reconciliation case are the result of Company's failure to correct an inherent equipment
12 design problem. Customers should not pay for the incremental cost of replacement power
13 resulting from errors or lack of corrective actions by the Company or the prior owner of
14 the plant.

1 by each BMP with the related variance for each plant. The variance in total for the six
2 plants is \$1,633,144. This amount is the additional energy costs recorded by the Company
3 in PSCR expense for 2023 above the amount reported by the BMPs. Although in
4 discovery, the Attorney General asked the Company to explain the differences between
5 Exhibit A-29 and the BMP reported amounts, no pertinent response was provided.¹⁵

6 **Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO THE \$1,633,144**
7 **VARIANCE?**

8 A. The variable energy amounts shown by the Company in Exhibit A-29 for the BMPs remain
9 unexplained and unsupported. Therefore, relying on the more detailed amounts provided
10 in the BMP exhibits and to protect customers from excessive recorded costs, I recommend
11 that the Commission disallow the excess amount of \$1,633,144 included in the Company's
12 Exhibit A-29.

13 **Q. PLEASE DISCUSS THE OTHER COST ITEM FOR O&M EXPENSE AND**
14 **ENVIRONMENTAL COSTS.**

15 A. Under MCL 460.6a(8), the BMPs are allowed to recover other O&M expenses up to a
16 combined monthly cap amount of \$1 million for all the BMPs. Under the statute, the
17 monthly cap is adjusted annually for the Consumer Price Index-Urban (CPI-U) inflation
18 factor from 2009 to present. The BMPs presented those calculations for the year 2023 in
19 Exhibit BMP-1 and BMP-2. Exhibit BMP-2 shows an inflation adjusted cap for all six

¹⁵ Id.

1 active plants of \$17,042,240 for the year 2023. The exhibit also shows that the BMPs only
2 received payment from the Company of \$12,125,284 for the capped O&M expenses and
3 are due an additional \$4,917,956. Under existing Commission orders, the Company only
4 pays 80% of the capped O&M expenses during the year with final settlement of the final
5 amount at the end of PSCR reconciliation. In addition, the BMPs are seeking recovery of
6 permissible environmental compliance expenses of \$2,386,253 incurred during 2023. The
7 total amount of incremental cost recovery requested by the BMPs is \$7,304,209, as shown
8 in column (I) of Exhibit BMP-2.

9 **Q. DO THE COMPANY'S EXHIBITS CONFORM TO THE O&M EXPENSE AND**
10 **ENVIRONMENTAL COSTS REQUESTED BY THE BMPS?**

11 A. No. Line 86 of Exhibit A-29 shows a different amount for O&M and other costs recorded
12 to PSCR expense. The total amount recorded by the Company is \$15,156,601. Based on
13 responses to discovery, it appears that this amount represents an inflation-adjusted monthly
14 capped amount of \$1,263,050 multiplied by 12 for an annual amount of \$15,156,601. To
15 arrive at the \$1,263,050, the Company used a cumulative inflation factor of 26.305% from
16 2009 to 2021 applied to the original \$1 million monthly cap amount. During 2023, the
17 Company paid the BMPs 80% of the \$15,156,601 for a total amount of \$12,125,284. This
18 is the amount shown in column (F) of Exhibit BMP-2.

19 In discovery, the Attorney General asked both the Company and BMPs to compare,
20 reconcile, and validate the amounts shows in Exhibit BMP-2 and on line 86 of Exhibit A-
21 29. After considerable disagreement between the Company and the BMPs as to the correct

1 inflation adjustment calculations and which amounts in the exhibits were correct, the
2 parties agreed that the inflation adjusted and capped O&M expenses in Exhibit BMP-2
3 were correct. Exhibit AG-6 includes the various discovery responses from each of the
4 parties with the final resolution in chronological order. The purpose for including the
5 discovery responses in Exhibit AG-6 is to highlight a fundamental problem that currently
6 exists between financial information included in the exhibits filed by the BMPs and the
7 information included in the Company's exhibits pertaining to the same financial
8 transactions between the parties. The parties need to do more to reconcile the differences
9 before filing testimony and exhibits, and need to proactively explain any reconciled or
10 unreconcilable differences.

11 **Q. WHAT ARE YOUR RECOMMENDATIONS PERTAINING TO O&M AND**
12 **OTHER COST ADJUSTMENTS THAT SHOULD BE MADE TO THE**
13 **COMPANY'S RECORDED PSCR RECONCILIATION EXPENSES?**

14 A. As stated above, the Company recorded O&M expenses paid or payable to the BMPs of
15 \$15,156,601, as shown on line 86 of Exhibit A-29. Exhibit BMP-2 shows that the actual
16 capped expenses for 2023 were \$17,043,240. The difference of \$1,886,639 is the
17 additional amount due to the BMPs and should be included with PSCR expenses in this
18 reconciliation. The BMPs also requested environmental compliance cost recovery in the
19 amount of \$2,386,253, as shown in column (H) of Exhibit BMP-2. At least so far, the
20 Company has not objected to these additional costs due to the BMPs. Therefore, the total
21 amount of \$4,272,892 (\$1,886,639 + \$2,386,253) needs to be included in this PSCR
22 reconciliation in addition to costs currently reported by the Company.

1 **Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS FOR THE COMMISSION**
2 **PERTAINING TO BMP COST REPORTING AND RECONCILIATION?**

3 A. Yes. As discussed above and shown in the various discovery questions and responses
4 included in Exhibit AG-6, the costs recorded by the Company in its exhibits and the
5 revenue and costs reported by the BMPs often do not match to each other, creating
6 confusion and often considerable difficulty by the Commission Staff and intervenors, such
7 as the Attorney General, to properly reconcile and validate that the appropriate costs that
8 should be recorded to PSCR expense and whether any cost adjustments are necessary.

9 Therefore, I recommend that before filing their testimony and exhibits the BMP reconcile
10 their reported revenues and costs with the Company and identify any reconciling items
11 with applicable explanations in a separate exhibit schedule. If there are any disagreements,
12 the BMPs should identify and address them in filed testimony.

13 Similarly, I also recommend that the Company file supplemental testimony shortly after
14 the BMPs file their direct testimony to reconcile or confirm the BMP costs recorded in
15 Exhibit A-29, or similar exhibit, the additional expense amounts owed to the BMP, and
16 the additional amount that the Company requests be added to the PSCR expense previously
17 filed.

18 In the current reconciliation case, the Administrative Law Judge included a similar
19 procedure for the Company to respond to the BMP testimony filings. However, the
20 scheduled Company rebuttal testimony to the BMP's testimony comes after Staff and
21 Intervenors have filed their testimony. This reverse sequence puts Staff and Intervenors

1 in a difficult situation because they cannot easily respond to the Company's position or
2 any controversy after they have filed their direct testimony. Instead of rebuttal testimony
3 after Staff and Intervenor testimony is filed, the case schedule should require that the
4 Company file supplemental or responsive testimony to the BMP testimony at least 30 days
5 before the scheduled date of Staff and Intervenor testimony, as described in my
6 recommendation above.

7 **PSCR Reconciliation Balance**

8 **Q. PLEASE EXPLAIN THE REVISED PSCR RECONCILIATION BALANCE**
9 **BASED ON THE ADJUSTMENTS YOU HAVE PROPOSED IN YOUR**
10 **TESTIMONY AND ANY OTHER REQUIRED ADJUSTMENTS.**

11 A. With direct testimony, the Company filed Exhibits A-5 showing an under-recovery
12 balance of \$255,175,669 at the end of 2023 inclusive of interest. However, this is a
13 preliminary balance that does not include the Commission determination of the approved
14 PSCR reconciliation balance for 2022. As of the date of filing of my testimony, the
15 Commission had not yet issued an order in Case No. U-21049. Therefore, the Company's
16 filed under-recovery balance may change.

17 In Exhibit AG-7, I show the Company's filed under-recovery amount, my proposed cost
18 disallowances, and other adjustments. The net amount of those adjustments is \$1,982,326.
19 Therefore, the adjusted PSCR under-recovery balance at the end of 2023, before any
20 additional interest adjustment, should be \$253,193,343.

1 I recommend that the Commission adopt my adjustments in addition to any other
2 adjustments from Case No. U-21049 or proposed by the Commission Staff and other
3 parties to this proceeding, including any applicable adjustments to interest expense.

4 **Q. DOES THIS CONCLUDE YOUR PREPARED DIRECT TESTIMONY?**

5 A. Yes, it does. However, I reserve the right to amend, revise and supplement my testimony
6 to incorporate new information that may become available.

Experience and Qualifications of Sebastian Coppola

Mr. Sebastian Coppola is an independent energy business consultant and president of Corporate Analytics, Inc., whose place of business is located at 5928 Southgate Rd., Rochester, Michigan 48306.

EMPLOYMENT BACKGROUND

Mr. Coppola has been an independent consultant for 22 years. Before that, he spent three years as Senior Vice President and Chief Financial Officer of SEMCO Energy, Inc. with responsibility for all financial operations, corporate development and strategic planning for the company's Michigan and Alaska regulated and non-regulated operations. During the period at SEMCO Energy, he had also responsibility for certain storage and pipeline operations as President and COO of SEMCO Energy Ventures, Inc. Prior to SEMCO, Mr. Coppola was Senior Vice President of Finance for MCN Energy Group, Inc., the parent company of Michigan Consolidated Gas Company (now DTE Gas Company).

ENERGY INDUSTRY EXPERTISE

During his 27-year career at SEMCO Energy, MCN Energy and MichCon, Mr. Coppola held various analytical, accounting, managerial and executive positions, including Manager of Gas Accounting with responsibility for maintaining the accounting records and preparing financial reports for gas purchases and gas production. In this role, he had also responsibility for preparing Gas Cost Recovery (GCR) reconciliation analysis and reports, and supporting preparation of testimony for the cost of gas reconciliation proceedings before the MPSC. Over the years, Mr. Coppola also held the positions of Treasurer, Director of Investor Relations, Director of Accounting Services, Manager of Corporate Finance, Manager of Customer Billing and Manager of Materials Inventory and Warehousing Accounting. In many

Experience and Qualifications of Sebastian Coppola

of these positions he interacted with various operating areas of the company and was intricately involved in construction and operating programs, defining gas purchasing strategies, rate case analysis, cost of capital studies and other regulatory proceedings.

Mr. Coppola is intricately knowledgeable of capital markets and financial institutions. As Treasurer and Vice President of Finance, he directed the issuance of more than \$2 billion in securities, including common stock, corporate bonds, tax-deductible preferred stock and high-equity value convertible securities. He established bank lines of credit, commercial paper and asset acquisition facilities. He has had extensive interactions with equity and debt investors, financial analysts, rating agencies and other members of the financial community.

ENERGY INDUSTRY AND REGULATORY EXPERIENCE

As a business consultant, Mr. Coppola specializes in financial and strategic business issues in the fields of energy and utility regulation. He has more than forty years of experience in public utility and related energy work, both as a consultant and utility company executive. He has testified in several regulatory proceedings before State Public Service Commissions. He has prepared and/or filed testimony in electric and gas general rate case proceedings, power supply and gas cost recovery mechanisms, revenue and cost tracking mechanisms/riders, multi-year rate plans and incentive ratemaking, and other regulatory matters.

Mr. Coppola has extensive experience with gas and electric utilities in the areas of gas operations, gas supply and regulatory proceedings. He has led or participated in the financial operations, gas supply planning and/or gas cost recovery arrangements of two major gas utilities in Michigan and in Alaska. He has prepared

Experience and Qualifications of Sebastian Coppola

testimony in multiple electric and gas general rate cases, Power Supply Cost Recovery (PSCR) and Gas Cost Recovery (GCR) reconciliation proceedings, Cast Iron and Pipeline Replacement Programs and other regulatory cases on behalf of the Michigan Attorney General, Citizens Against Rate Excess (CARE), the Public Counsel Division of the Washington Attorney General, the Illinois Attorney General, the Maryland Office of Public Counsel, and the Ohio Office of Consumers Counsel in electric and gas utility rate cases, including AEP Ohio, Ameren-Illinois Utilities, Avista, Consumers Energy, DTE Electric Company, MichCon (DTE Gas Company), Michigan Gas Utilities Corp, Nicor Gas, PacifiCorp, Peoples Gas, Puget Sound Energy, SEMCO, Upper Peninsula Power Company, Washington Gas, and Wisconsin Public Service Company.

Mr. Coppola has also provided assistance and proposals to the Maryland Office of Peoples Counsel on Multi-Year Rate Plans and Performance-Based Ratemaking. Additionally, he prepared a report on the financial condition and risks of AltaGas and Washington Gas Light Company which was filed with the Maryland Public Service Commission in July 2019 in Case No. 9449.

As accounting manager and later financial executive for two regulated gas utilities, he has been intricately involved in construction materials procurement, gas purchase strategies and CGR reconciliation cases. He has had direct responsibility for preparing GCR reconciliation analysis and reports, and supporting preparation of testimony for the cost of gas reconciliation proceedings before the Michigan Public Service Commission (MPSC). He is intricately familiar with construction projects, the power supply and gas cost recovery mechanisms, gas supply and pricing issues, and regulatory issues faced by utilities.

Experience and Qualifications of Sebastian Coppola

During his long career at DTE Gas, among other responsibilities, Mr. Coppola was responsible to oversee the operation of the MichCon Wet Header System, a pipeline that transported natural gas and gas liquids from Michigan gas producing fields in the Niagaran Reef in the northern area of the lower peninsula of Michigan to processing plants in Kalkaska, MI. His responsibility included ensuring the day-to-day flow of gas and liquids, and identifying operating issues requiring corrective action.

He was also responsible for the study to assess the feasibility of building the Saginaw Bay Pipeline, a transmission line to move Praire Du Chein natural gas reserves in the eastern area of Michigan to processing plants. Prior to the construction of the pipeline, Mr. Coppola worked with operating management to prepare requests for proposal for the construction project and the selection of qualified bids. During and subsequent to the construction of the pipeline, Mr. Coppola assisted in the management and oversight of the pipeline, including review of operating performance and profitability.

Additionally, as Manager of Materials Inventory, Warehousing and Procurement at DTE Gas, Mr. Coppola worked closely with suppliers of pipe, control valves, flanges, meters, fittings, equipment and thousands of other parts and materials used in the construction, repair and maintenance of DTE Gas's transmission, distribution and storage facilities, including repairs and upgrades to compressor stations, and replacement of cast iron mains, bare and wrapped steel pipelines and service lines. His responsibilities included the review of design and construction blueprints and plans with frequent visits to construction sites during excavation of new pipeline trenches, and during replacement of defective or leaky

Experience and Qualifications of Sebastian Coppola

pipes, and replacement of control valves. Mr. Coppola also made frequent visits and inspection to storage facilities owned by DTE Gas to understand materials requirements during planned construction projects. Mr. Coppola was also responsible to ensure that materials and equipment were ordered to meet material standards and safety codes.

Through these responsibilities, Mr. Coppola gained knowledge and expertise with field construction project procedures, pipeline trenching problems, installation inspections, operation and maintenance cycles, and the material procurement of pipe, valves, flanges, meters and thousands of other parts and equipment used in the construction of natural gas transmission, distribution and storage facilities.

During his career with MCN Energy Group, Mr. Coppola was responsible for the evaluation of investments in interstate pipelines, new gas storage facilities, gas cogeneration plants, and construction of new power plants in the U.S. and India. Mr. Coppola was a key member of the negotiating team with contractors and suppliers tasked to build the power facilities, including the evaluation of Engineering, Procurement and Construction (EPC) bids and contracts.

Subsequent to his move to SEMCO Energy Corporation in 1999, Mr. Coppola was responsible for the acquisition and integration of pipeline construction companies providing services to gas utilities and interstate pipelines. In addition to its gas utility business in Michigan and Alaska, serving approximately 350,000 customers, SEMCO Energy owned SEMCO Pipeline Construction, a non-regulated business providing gas pipeline and natural gas facilities construction services to gas utilities and interstate pipelines in the Midwest and Eastern regions of the U.S.

Experience and Qualifications of Sebastian Coppola

SEMCO Pipeline Construction provided construction services similar to KS Energy, Northern Pipeline and other contractors used by the Company. During his tenure at SEMCO Energy, Mr. Coppola reviewed dozens of pipeline construction companies and acquired six companies. Mr. Coppola's responsibilities included management of the performance and profitability of the pipeline construction services business requiring field visits to construction projects and quality reviews. In this process, Mr. Coppola learned firsthand how pipeline construction companies operate, construction project challenges, their bidding practices and the bidding of construction projects, including pricing, bidding procedures and policies both from the contractor's side and the gas utility side.

Mr. Coppola has testified extensively on gas utility pipeline, service lines and inside meters replacement programs related to at-risk pipes that provide safety issues to customers and the general public.

In his role as Treasurer and Chairman of the MCN/MichCon Risk Committee from 1996 through 1998, Mr. Coppola was involved in reviewing and deciding on the appropriate gas purchase price hedging strategies, including the use of gas future contracts, over the counter swaps, fixed price purchases and index price purchases.

In March 2001, Mr. Coppola testified before the Michigan House Energy and Technology Subcommittee on Natural Gas Fixed Pricing Mechanisms. Mr. Coppola frequently participates in natural gas issue forums sponsored by the American Gas Association and stays current on various energy supply issues through review of industry analyst reports and other publications issued by various trade groups.

Experience and Qualifications of Sebastian Coppola

Mr. Coppola performed rate case analyses and filed testimony in several electric general rate cases addressing issues on revenue requirement, sales level determination, operation and maintenance expenses, capital expenditures, cost allocations, cost of capital, cost of service and rate design, and various cost tracking mechanisms. In addition, he has performed analysis of power costs and filed testimony in power supply cost recovery cases, including reconciliation of annual power supply costs.

In his position as Senior Vice President of Finance at MCN, Mr. Coppola also had responsibility for project financing of independent power generation plants in which MCN was an owner. In this regard, he was intricately involved and became knowledgeable of PURPA qualified cogeneration plants in Michigan and other states. In addition, he was involved in negotiating the development and financing of power generation and electricity distribution plants in other countries, such as India.

➤ **Specific Regulatory Proceedings and Related Experience:**

- Filed testimony on behalf of the Michigan Attorney General in Consumers Energy Company (CECo) 2024 electric rate case U-21585 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE Electric Company (DTEE) 2024 gas rate case U-21534 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in Michigan Gas Utilities Corporation (MGUC) 2024 gas rate case U-21540 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO Energy Gas Company (SEMCO) 2023-2024 GCR plan in case No. U-21277.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas Company (DTE Gas) 2024 gas rate case U-21291 on several issues, including

Experience and Qualifications of Sebastian Coppola

sales, operation and maintenance expenses, capital expenditures, cost of capital, and other items.

- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2022-2023 GCR reconciliation in case No. U-21065.
- Filed testimony on behalf of the Michigan Attorney General in CECo 2023 gas rate case U-21490 on several issues, including sales, operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTM Michigan Lateral Company (DMLC) 2023 Act 9 Transportation Service rate update in case No. U-21525.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2022 PSCR reconciliation in case No. U-21051.
- Filed testimony on behalf of the Michigan Attorney General in Michigan Gas Utilities Corporation (MGUC) 2022-2023 GCR plan in case No. U-21067.
- Filed testimony on behalf of the Michigan Attorney General in CECo 2023 PSCR reconciliation in case No. U-21049.
- Filed testimony on behalf of the Michigan Attorney General in Indiana Power Company 2023 electric rate Case U-21461 on several issues, including sales, operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE 2023-2024 GCR plan in case No. U-21271.
- Filed testimony on behalf of the Michigan Attorney General in CECo 2023-2024 GCR plan in case No. U-21269.
- Filed testimony on behalf of the Michigan Attorney General in CECo 2023 electric rate Case U-21389 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO Energy Gas Company (SEMCO) 2023-2024 GCR plan in case No. U-21277.
- Filed testimony on behalf of the Michigan Attorney General in DTE Electric Company (DTEE) 2023 rate Case U-21297 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in MGUC 2023-2024 GCR plan in case No. U-21273.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2022 gas rate Case U-21308 on several issues, including sales revenues, operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2021-2022 GCR plan reconciliation case No. U-20817.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2021 PSCR plan reconciliation case No. U-20827.
- Filed testimony on behalf of the Michigan Attorney General in MGUC 2021-2022 GCR plan reconciliation case No. U-20819.
- Filed testimony on behalf of the Michigan Attorney General in Upper Peninsula Power Company 2022 general rate case No. U-21286.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2021-2022 GCR plan reconciliation case No. U-20823.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2022-2023 GCR plan case No. U-21062.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2022-2023 GCR plan case No. U-21070.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2022 electric rate Case U-21224 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Public Counsel Division of Washington Attorney General in the Avista 2022 electric and gas rate cases on several issues, including operation and maintenance expenses, capital expenditures, and other items.
- Filed testimony on behalf of the Michigan Attorney General in the Act 9 application in Case No. U-20993 by Saginaw Bay Pipeline Company to set transportation rates for services to DTE Gas Company.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2022 electric rate Case U-20836 on several issues, including operation

Experience and Qualifications of Sebastian Coppola

and maintenance expenses, capital expenditures, cost of capital, and other items.

- Filed rebuttal testimony on behalf the Illinois Attorney General for the reconciliation of the rate surcharge for the Qualified Infrastructure Program (Rider QIP) of the Peoples Gaslight & Coke Company (Peoples Gas) in Docket 17-0137.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2021 gas rate Case U-21148 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2020-2021 GCR plan reconciliation case No. U-20554.
- Filed rebuttal testimony on behalf of the Illinois Attorney General for the reconciliation of the rate surcharge for the Qualified Infrastructure Program (Rider QIP) of the Northern Illinois Gas Company (Nicor Gas) in Docket 20-0330.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2020-2021 GCR plan reconciliation case No. U-20552.
- Filed testimony on behalf of the Michigan Attorney General in MGUC 2020-2021 GCR plan reconciliation case No. U-20546.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2020 PSCR plan reconciliation case No. U-20526.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2020 PSCR plan reconciliation case No. U-20528.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2019-2020 GCR plan reconciliation case No. U-20236.
- Filed rebuttal testimony on behalf of the Illinois Attorney General for the reconciliation of the rate surcharge for the Qualified Infrastructure Program (Rider QIP) of the Ameren Illinois Company (Ameren) in Docket 20-0323.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2021-2022 GCR plan case No. U-20816.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2021-2022 GCR plan case No. U-20822.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2021 electric rate Case U-20963 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2021 gas rate Case U-20940 on several issues, including sales, operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE Michigan Lateral Company (DMCL) 2021 Act 9 filing to convert a pipeline and build two interconnections for transportation services to DTE Gas Company in case No. U-20894.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2021 power plant and tree trimming securitization costs in case No. U-21015
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2021 PSCR plan case No. U-20802.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2019-2020 GCR reconciliation case No. U-20234.
- Filed testimony on behalf of the Maryland Office of Public Counsel in Washington Gas Light Company's 2020 rate Case 9651 on several issues, including operation and maintenance expenses, capital expenditures, and other items.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2020 Karn 1 & 2 Retirement Cost and Bond Securitization Case U-20889.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2019 PSCR Reconciliation in case U-20222.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2020-2021 GCR plan case No. U-20543.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO Gas Company (SEMCO) 2020-2021 GCR plan case No. U-20551.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in CECO 2020 electric rate Case U-20697 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in in the complaint against Upper Peninsula Power Company's (UPPCO) Revenue Decoupling Mechanism (RDM) in Case No. U-20150.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2019 gas rate Case U-20650 on several issues, including sales, operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas Company 2019 gas rate Case U-20642 on several issues, including sales, operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2018-2019 GCR reconciliation Case U-20210.
- Prepared a report on the financial condition and risks of AltaGas and Washington Gas Light Company on behalf of the Maryland Office of People's Counsel filed with the Maryland Public Service Commission in July 2019 in Case No. 9449.
- Filed rebuttal testimony on behalf of the Illinois Attorney General for the reconciliation of the rate surcharge for the Qualified Infrastructure Program (Rider QIP) of the Northern Illinois Gas Company (Nicor Gas) in Docket 19-0294.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2018-2019 GCR reconciliation case U-20209.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2018-2019 GCR reconciliation case U-20215.
- Provided assistance and proposals to the Maryland Office of Peoples Counsel on Multi-Year Rate Plans and Performance-Based Ratemaking.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2018 PSCR Reconciliation in case U-20203.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in CEC0 2018 PSCR Reconciliation in case U-20202.
- Filed direct testimony on behalf of the Illinois Attorney General for the reconciliation of the rate surcharge for the Qualified Infrastructure Program (Rider QIP) of the Northern Illinois Gas Company (Nicor Gas) in Docket 19-0294.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2019 electric rate Case U-20561 on several issues, including sales, operation and maintenance expenses, capital expenditures, cost of capital, and other items.
- Filed testimony on behalf of the Michigan Attorney General in Indiana Michigan Power Company (I&M) 2019 electric rate Case U-20239 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2019 gas rate Case U-20479 on several issues, including sales, operation and maintenance expenses, capital expenditures, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2019-2020 GCR Plan case U-20245.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2019-2020 GCR Plan case U-20233.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2019 PSCR Plan case U-20221.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2019-2020 GCR Plan case U-20235.
- Filed testimony on behalf of the Michigan Attorney General in Michigan Gas Utilities Corporation (MGUC) 2019-2020 GCR plan case U-20239.
- Filed rebuttal testimony on behalf of the Illinois Attorney General in Nicor Gas 2018 rate case on capital expenditures and rate base additions in Docket 18-1775.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2017-2018 GCR reconciliation case U-20076.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2017-2018 GCR reconciliation case U-20075.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2018 gas rate Case U-20322 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in I&M Tax Credit C Calculation in case U-20317.
- Filed direct testimony on behalf of the Illinois Attorney General in Nicor Gas 2018 rate case on capital expenditures and rate base additions in Docket 18-1775.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas Tax Credit C Calculation in case U-20298.
- Filed testimony on behalf of the Michigan Attorney General in MGUC 2017-2018 GCR Reconciliation case U-20078.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 Tax Credit C Calculation for the Gas and Electric Divisions in case U-20309.
- Filed testimony on behalf of the Michigan Attorney General in Upper Peninsula Power Company 2018 electric rate Case U-20276 on several issues, including excess deferred taxes, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2017 PSCR Reconciliation in case U-20068.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2018 rate Case U-20162 on several issues, including operation and maintenance expenses, capital expenditures, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2018 Tax Credit B refund for the Electric Division in case U-20286.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in CEC0 2018 Integrated Resource Plan in case U-20165.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2018 Tax Credit B refund case U-20287 for the natural gas business.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2018 Tax Credit B refund case U-20189.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2018 electric rate Case U-20134 on several issues, including capital expenditures, cost of capital, rate design and other items.
- Filed direct testimony on behalf of the Illinois Attorney General for the reconciliation of the rate surcharge for the Qualified Infrastructure Program (Rider QIP) of the Peoples Gas and Coke Company's (Peoples Gas) in Docket 16-0197.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2016-2017 GCR reconciliation case U-17941-R.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2018-2019 GCR Plan case U-18417.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2018 Tax Credit A refund case U-20102.
- Filed testimony on behalf of the Michigan Attorney General in I&M 2018 PSCR Plan case U-18404.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2018-2019 GCR Plan case U-18412.
- Filed testimony on behalf of the Michigan Attorney General in Upper Peninsula Power Company (UPPCO) 2018 Tax Credit A refund case U-20111.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2018 Tax Credit A refund case U-20106.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2018 PSCR Plan case U-18403.
- Filed testimony on behalf of the Michigan Attorney General in CEC0 2018 PSCR Plan case U-18402.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2017 gas rate Case U-18999 on several issues, including revenue, operations and maintenance costs, capital expenditures, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2017 gas rate Case U-18424 on several issues, including revenue, operations and maintenance costs, capital expenditures, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2016 PSCR reconciliation case U-17918-R.
- Assisted the Michigan Attorney General in the review of several GCR and PSCR cases during 2017 and 2018, and proposed terms for settlement of those cases.
- Assisted the Michigan Attorney General in the filing of comments with the Michigan Public Service Commission relating to rate case filing requirements in case U-18238, refunds of tax savings from the lower federal tax rate in case U-18494 and Performance Based Regulation.
- Filed direct and rebuttal testimony on behalf of the Illinois Attorney General for the reconciliation of the rate surcharge for the Qualified Infrastructure Program (Rider QIP) of the Peoples Gas and Coke Company's (Peoples Gas) in Docket 15-0209.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2017 electric Rate Case U-18255 on a several issues, including revenue, operations and maintenance costs, capital expenditures, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2017 electric rate Case U-18322 on a several issues, including revenue, operations and maintenance costs, capital expenditure programs, cost of capital and other items.
- Filed direct and rebuttal testimony on behalf of the Illinois Attorney General for the re-opening of proceedings in the restructuring of the Peoples Gas's main replacement program and gas system modernization plan in Docket 16-0376.
- Filed testimony on behalf of the Michigan Attorney General in the Upper Michigan Energy Resources Corporation (UMERC) application

Experience and Qualifications of Sebastian Coppola

for a certificate of public necessity and convenience to build two power plants in the Upper Peninsula of Michigan in case U-18202.

- Filed testimony on behalf of the Michigan Attorney General in SEMCO application for a certificate of public necessity and convenience to build a pipeline in the Upper Peninsula of Michigan in case U-18202.
- Filed testimony on behalf of the Public Counsel Division of the Washington Attorney General in Puget Sound Energy's 2016 Complaint for Violation of Gas Safety Rules in Docket No. UE-160924.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2017 PSCR Plan case U-18143.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2015 Power Supply Cost Recovery (PSCR) reconciliation case U-17678-R.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2016 gas general rate case U-18124 on a several issues, including revenue, operations and maintenance costs, capital expenditures, working capital, cost of capital and other items.
- Filed testimony on behalf of the Illinois Attorney General for the restructuring of the Peoples Gas's main replacement program in Docket 16-0376.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2014-2015 GCR Plan reconciliation case U-17332-R.
- Filed testimony on behalf of the Michigan Attorney General in the formation of UMEREC and the transfer of Michigan assets of Wisconsin Public Service Corporation and Wisconsin Electric Company to UMEREC in Case U-18061.
- Filed testimony on behalf of the Michigan Attorney General in CECO Court of Appeals Remand Case U-17087 for review of the Automated Meter Infrastructure (AMI) opt-out fees.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2016 electric Rate Case U-17990 on a several issues, including revenue, operations and maintenance costs, capital expenditure programs, cost of capital, rate design and other items.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in Michigan Gas Utilities Corporation (MGUC) 2016-2017 GCR Plan case U-17940.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2016 electric Rate Case U-18014 on a several issues, including revenue, revenue decoupling, operations and maintenance costs, capital expenditures, cost of capital, rate design and other items.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2016-2017 GCR Plan case U-17942.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2016-2017 GCR Plan case U-17941.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2015 gas general rate case U-17999 on a several issues, including revenue, operations and maintenance costs, capital expenditures, main replacement program, Revenue Decoupling Mechanism (RDM) program, cost of capital and other items.
- Filed testimony on behalf of the Michigan Attorney General in CEC Co 2016-2017 GCR Plan case U-17943.
- Filed testimony on behalf of the Michigan Attorney General in CEC Co 2016 PSCR Plan case U-17918.
- Filed testimony on behalf of the Michigan Attorney General in CEC Co 2014-2015 GCR Plan reconciliation case U-17334-R.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2016 PSCR Plan case U-17920.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2014-2015 GCR Plan reconciliation case U-17333-R.
- Filed testimony on behalf of the Michigan Attorney General in CEC Co 2015 gas general rate case U-17882 on a several issues, including revenue, operations and maintenance costs, capital expenditures, main replacement program, infrastructure cost recovery mechanism, cost of capital and other items..
- Filed testimony on behalf of the Michigan Attorney General in CEC Co Gas Choice and End-User Transportation tariff changes case U-17900.

Experience and Qualifications of Sebastian Coppola

- Analyzed the gas rate case filings of MGUC in Case U-17880 and assisted the Michigan Attorney General in settlement of the case.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2014 PSCR reconciliation case U-17317-R.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2013-2014 GCR Plan reconciliation case U-17131-R.
- Filed testimony on behalf of the Michigan Attorney General in DTEE 2014 electric Rate Case U-17767 on a several issues, including operations and maintenance costs, capital expenditures, AMI program, cost of capital and other items.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas 2015-2016 GCR Plan case U-17691.
- Filed testimony on behalf of the Illinois Attorney General in Ameren Illinois Company's 2015 general rate case on operation and maintenance costs in Docket 15-0142.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2014 electric Rate Case U-17735 on a several issues, including sales, operations and maintenance costs, capital expenditures, cost of capital, AMI program, revenue decoupling and infrastructure cost recovery mechanisms.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2015-2016 GCR Plan case U-17693.
- Filed testimony on behalf of the Michigan Attorney General in MGUC 2015-2016 GCR Plan case U-17690.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2015 PSCR Plan case U-17678.
- Analyzed the electric rate case filings of Northern States Power in Case U-17710 and Wisconsin Public Service Company U-17669, and assisted the Michigan Attorney General in settlement of these cases.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2013-2014 GCR Plan reconciliation case U-17133-R.
- Filed testimony on behalf of the Michigan Attorney General in MGUC 2013-2014 GCR Plan reconciliation cases U-17130-R.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2013-2014 GCR Plan reconciliation case U-17132-R.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2014 gas general rate case U-17643 on a several issues, including revenue, operations and maintenance costs, capital expenditures, main replacement program, cost of capital and other items..
- Filed testimony on behalf of the Illinois Attorney General in Wisconsin Energy merger with Integrys on the Peoples Gas and Coke Company's Accelerated Main Replacement Program Docket 14-0496.
- Filed testimony on behalf of Citizens Against Rate Excess in Wisconsin Public Service Company's 2013 PSCR plan reconciliation case U-17092-R.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2014 PSCR plan case U-17317.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2014 OPEB Funding case U-17620.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2014-2015 GCR Plan case U-17333.
- Filed testimony on behalf of the Michigan Attorney General in MGUC 2014-2015 GCR Plan case U-17331.
- Filed testimony on behalf of the Michigan Attorney General in CECO 2014-2015 GCR Plan case U-17334.
- Filed testimony for Citizens Against Rate Excess in Wisconsin Public Service Company's 2014 PSCR plan case U-17299.
- Filed testimony in March 2013 on behalf of the Michigan Attorney General in CECO's electric Rate Case U-15645 on remand from the Michigan Court of Appeals for review of the AMI program.
- Filed testimony for Citizens Against Rate Excess in Upper Peninsula Power Company's 2012 PSCR plan case U-17298.
- Filed testimony on behalf of the Michigan Attorney General in MGUC 2012-2013 GCR Reconciliation case U-16920-R.
- Filed testimony on behalf of the Michigan Attorney General in DTE Gas Company 2012-2013 GCR Reconciliation case U-16921-R.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in CEC0 2012-2013 GCR Reconciliation case U-16924-R.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2012-2013 GCR Reconciliation case U-16922-R.
- Filed testimony for Citizens Against Rate Excess in Upper Peninsula Power Company's 2012 Power Supply Cost Recovery (PSCR) reconciliation case U-16881-R.
- Filed testimony in Puget Sound Energy's 2013 Power Cost Only Rate Case on behalf of the Public Counsel Division of the Washington Attorney General in Docket No. UE-130167 on the power costs adjustment mechanism.
- Filed testimony in PacifiCorp's 2013 General Rate Case on behalf of the Public Counsel Division of the Washington Attorney General in Docket No. UE-130043 on power costs, cost allocation factors, O&M expenses and power cost adjustment mechanisms.
- Filed testimony on behalf of the Michigan Attorney General in SEMCO 2013-2014 GCR Plan case U-17132.
- Filed testimony on behalf of the Michigan Attorney General in MGUC 2013-2014 GCR Plan case U-17130.
- Filed testimony on behalf of the Michigan Attorney General in CEC0's 2012 electric Rate Case U-17087 on a several issues, including cost of service methodology, rate design, operations and maintenance costs, capital expenditures and infrastructure cost recovery mechanism and other revenue/cost trackers.
- Filed reports on gas procurement and hedging strategies of four gas utilities before the Washington Utilities and Transportation Commission on behalf of the Washington Attorney General – Office of Public Counsel in April 2013.
- Filed testimony on behalf of the Michigan Attorney General in MGUC and SEMCO 2011-2012 GCR Plan reconciliation cases U-16481-R and U-16483-R.
- Filed testimony for Citizens Against Rate Excess in Upper Peninsula Power Company's 2012 Power Supply Cost Recovery (PSCR) plan case U-17091.

Experience and Qualifications of Sebastian Coppola

- Filed testimony in MichCon's 2012 gas Rate Case U-16999 on a several issues, including sales volumes, revenue decoupling mechanism, operations and maintenance costs, capital expenditures and infrastructure cost recovery mechanism.
- Filed testimony on behalf of the Washington Attorney General – Office of Public Counsel on executive and board of directors' compensation in the 2012 Avista general rate case.
- Filed testimony for Citizens Against Rate Excess in Upper Peninsula Power Company's 2011 Power Supply Cost Recovery (PSCR) reconciliation case U-16421-R.
- Filed testimony on behalf of the Ohio Office of Consumers Counsel in AEP Ohio's power supply restructuring case in June 2012.
- Filed testimony on behalf of the Michigan Attorney General in MGUC and SEMCO 2012-2013 GCR Plan cases U-16920 and U-16922.
- Filed testimony for Citizens Against Rate Excess in Upper Peninsula Power Company's 2012 PSCR plan case U-16881.
- Filed testimony for Citizens Against Rate Excess in Wisconsin Public Service Corporation's 2012 PSCR plan case U-16882.
- Filed testimony for the Michigan Attorney General in CECO's gas business Pilot Revenue Decoupling Mechanism in case U-16860.
- Filed testimony for the Michigan Attorney General in Consumers Energy Gas 2011 Rate Case U-16855 on several issues, including sales volumes, operations and maintenance cost, employee benefits, capital expenditures and cost of capital.
- Filed testimony for the Michigan Attorney General in SEMCO and MGUC 2010-2011 GCR Plan reconciliation cases U-16147-R and U-16145-R.
- Filed testimony for the Michigan Attorney General in Consumers Energy 2011 electric Rate Case U-16794 on several issues, including electric sales forecast, revenue decoupling mechanism, operations and maintenance cost, employee benefits, capital expenditures and cost of capital.
- Filed testimony for the Michigan Attorney General in CECO's electric business Pilot Revenue Decoupling Mechanism in case U-16566.

Experience and Qualifications of Sebastian Coppola

- Filed testimony on behalf of the Michigan Attorney General in SEMCO and MGUC 2011-2012 GCR Plan cases U-16483 and U-16481.
- Filed testimony for the Michigan Attorney General in Detroit Edison 2010 electric Rate Case U-16472 on several issues, including revenue decoupling mechanism, operations and maintenance cost, executive compensation and benefits, capital expenditures and cost of capital.
- Filed testimony for the Michigan Attorney General in SEMCO 2009-2010 GCR reconciliation case U-15702-R.
- Filed testimony for Michigan Attorney General in MGUC 2009-2010 GCR reconciliation case U-15700-R.
- Filed testimony for Michigan Attorney General, in Consumers Energy Gas 2010 Rate Case U-16418 on several issues, including sales volumes, operations and maintenance costs, capital expenditures and cost of capital.
- Filed testimony for Michigan Attorney General, in SEMCO 2010 Rate Case U-16169 on several issues, including sales volumes, rate design, operations and maintenance cost, executive compensation and benefits, capital expenditures and cost of capital.
- Filed testimony, for Michigan Attorney General in Consumers Energy 2009 electric Rate Case U-16191 on several issues, including sales volumes, revenue decoupling mechanism, operations and maintenance cost and capital expenditures.
- Filed testimony for Michigan Attorney General, in MichCon 2009 gas Rate Case U-15985 on several issues, including sales volumes, revenue decoupling mechanism, operations and maintenance cost, capital expenditures and cost of capital.
- Filed testimony for Michigan Attorney General and was cross-examined in Consumers Energy 2009 gas Rate Case U-15986 on several issues, including sales volumes, revenue decoupling mechanism, operations and maintenance cost, capital expenditures and cost of capital.
- Prepared testimony and assisted the Michigan Attorney General in discussions and settlement of SEMCO and MGUC 2010-2011 GCR Plan cases U-16147 and U-16145.

Experience and Qualifications of Sebastian Coppola

- Prepared testimony and assisted Michigan Attorney General in settlement of SEMCO 2009-2010 GCR case U-15702.
- Prepared testimony and assisted Michigan Attorney General in settlement of MGUC 2009-2010 GCR case U-15700.
- Prepared testimony and assisted the Michigan Attorney General in discussions and settlement of SEMCO 2008-2009 GCR case U-15452 and reconciliation case U-15452-R.
- Prepared testimony and assisted Michigan Attorney General in discussions and settlement of MGUC 2008-2009 GCR reconciliation case U-15450-R.
- Prepared testimony for Michigan Attorney General in SEMCO GCR 2007-2008 Reconciliation Case U-15043-R.
- Prepared testimony for Michigan Attorney General filed in MGUC 2007-2008 GCR Reconciliation Case U-15040-R.
- Participated in drafting of testimony for all aspects of SEMCO rate case filing with the Regulatory Commission of Alaska (RCA) in 2001.
- Filed testimony in 2001 before the (RCA) and was cross-examined on the financing plans for the acquisition of Enstar Corporation and the capital structure of SEMCO.
- Developed a cost of capital study in support of testimony by company witness in the Saginaw Bay Pipeline Company rate request proceeding in 1989.
- Prepared testimony for company witness on cost of capital and capital structure in MichCon 1988 gas rate case.
- Filed testimony in MichCon gas conservation surcharge case in 1986-87.
- Testified before MPSC ALJ in MichCon customer bill collection complaints in 1983.
- Participated in analysis of uncollectible gas accounts expense for inclusion in rate filings between 1975 and 1988.
- Participated in analysis of allocation of corporate overhead to subsidiaries and use of the “Massachusetts Formula” at MichCon and at SEMCO in 1975 and 2000.

Experience and Qualifications of Sebastian Coppola

- Prepared support information on GCR and rate case-O&M testimony at MichCon from 1975 to 1988.
- Filed testimony in MichCon financing orders in 1987 and 1988.
- Participated in rate case filing strategy sessions at MichCon and SEMCO from 1975 to 2001.
- Provided Hearing Room assistance and guidance to counsel on financial and policy issues in various cases from 1975 to 2001.

EDUCATIONAL BACKGROUND

Mr. Coppola did his undergraduate work at Wayne State University, where he received the Bachelor of Science degree in Accounting in 1974. He later returned to Wayne State University to obtain his Master of Business Administration degree with major in Finance in 1980.



1 JUDGE WALLACE: Is there any objection
2 to the admission of Exhibits AG-1 through AG-7?

3 Hearing none, those exhibits are
4 admitted.

5 MS. GILL: The Attorney General would
6 also move for the admission of Hearing Room Exhibits
7 AG-8 through AG-15 which consist of various discovery
8 responses in lieu of cross-examination.

9 JUDGE WALLACE: Thank you, Ms. Gill.
10 Is there any objection to the
11 admission of Exhibits AG-8 through AG-15?

12 Hearing none, those exhibits are
13 admitted.

14 MS. GILL: Thank you.

15 JUDGE WALLACE: Thank you, Ms. Gill.
16 Okay. Moving on then, Mr. Singh?

17 MR. SINGH: Thank you, Your Honor.

18 First Staff moves to bind in the
19 revised qualifications and direct testimony of its
20 witness Dolores Midkiff-Powell which consists of a
21 cover page and eight pages of questions and
22 answers.

23 Associated with that testimony is
24 Exhibit S-1.0 Revised and Exhibit S-1.1 Revised.

25 JUDGE WALLACE: Is there any objection

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

to binding in the revised testimony of
Ms. Midkiff-Powell?

Hearing none, the testimony is bound
in.

(Testimony bound in)

- - -

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * *

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

QUALIFICATIONS AND **REVISED** DIRECT TESTIMONY OF
DOLORES A. MIDKIFF-POWELL
MICHIGAN PUBLIC SERVICE COMMISSION

~~December 6, 2024~~ March 11, 2025

QUALIFICATIONS OF DOLORES A. MIDKIFF-POWELL
CASE NUMBER U-21258
PART I

1 Q. Please state your name and business address.

2 A. My name is Dolores A. Midkiff-Powell, and my business address is 7109 West
3 Saginaw, Lansing, MI 48917.

4 Q. By whom are you employed and in what capacity?

5 A. I am employed by the Michigan Public Service Commission (MPSC or
6 Commission) as the Manager for Energy Cost Recovery Reconciliation Section of
7 the Regulated Energy Division.

8 Q. Please outline your academic training.

9 A. I graduated from the University of Maryland, College Park, in 1990 with a B.S.
10 degree in accounting. In addition, I have participated in several continuing
11 education courses and training sessions at the MPSC. I also attended the Institute
12 of Public Utilities – Regulatory Studies Program for two weeks and have
13 participated in numerous advanced classes.

14 Q. Please describe your professional background.

15 A. I am currently licensed as a Certified Public Accountant in the state of Maryland.
16 Since graduating I have used my accounting credentials in the health care and
17 construction industries. I was instrumental in setting up the accounting policy and
18 procedures for the newly established Georgetown Infusion Services, part of
19 Georgetown University in Washington, D.C. In December of 2006, I began
20 working at the MPSC. I was the Chairperson for the National Association for
21 Regulatory Commissioners (NARUC)-Subcommittee on Accounting and Finance,
22 from 2015-2018. Currently I am the Registrar for the Subcommittee on
23 Accounting and Finance from 2015 to now. I have done several training

QUALIFICATIONS OF DOLORES A. MIDKIFF-POWELL
CASE NUMBER U-21258
PART I

1 conferences with NARUC in conjunction with the United States Agency for
2 International Development (USAID). I am also a speaker and coach at NARUC
3 Rate School.

4 Q. Briefly discuss your experience with the Commission.

5 A. I was promoted to Manager of the Act 304 Reconciliations Section on January 3,
6 2011. Previously, I served as the lead auditor and case coordinator, as well as
7 provided support and accounting expertise in various cases. I have provided
8 support and accounting expertise in the following cases:

9 U-15160: The Detroit Edison Company for recovery of enhanced
10 security costs

11 U-14864-R: Ontonagon Rural Electric Co-operative Power
12 Supply Cost Recovery (PSCR) and TIER (Times Interest Earned Ratio)

13 U-14718-R: SEMCO Gas Cost Recovery (GCR) Reconciliation

14 U-15043-R: SEMCO MPSC Division GCR Reconciliation

15 U-15130-R: SEMCO Battle Creek Division GCR Reconciliation

16 U-15041-R: Consumers Energy Company (Consumers) Gas GCR Reconciliation

17 U-15679: SEMCO Case – Accounting Treatment for OPEB from sale
18 of SEMCO

19 U-16418: Consumers Gas Rate Case

20 U-16246: Detroit Edison – Restoration Expense Tracker and Line Clearance

21 U-16546: Consumers – Reconciling Self-Implemented Electric Rates Revenue

22 U-16564: Consumers – Reconciliation of costs recoverable pursuant to
23 MCL 460.10a(6) and the former MCL 460.10d(4)

**QUALIFICATIONS OF DOLORES A. MIDKIFF-POWELL
CASE NUMBER U-21258
PART I**

- 1 U-16567: Upper Peninsula Power Co - Uncollectible Expense Tracker
- 2 U-16568: Upper Peninsula Power Co - Revenue Decoupling Mechanism
- 3 U-16569: Michigan Gas Utility - Uncollectible Expense Tracker
- 4 U-16570: Michigan Gas Utility - Revenue Decoupling Mechanism
- 5 U-16578: Detroit Edison - Restoration Expense Tracker and Line Clearance
- 6 U-16756: Detroit Edison – Reconciliation of Choice Incentive Mechanism
- 7 U-16759: Consumers – Reconcile Electric Utility Residual Balances
- 8 U-16761: Consumers – Uncollectible Expense True-Up Mechanism
- 9 U-17547: Michigan Gas Utility – Revenue Decoupling Mechanism
- 10 U-17548: Michigan Gas Utility – Uncollectible Expense True-Up Mechanism
- 11 U-17555: Upper Peninsula Power Co – Revenue Decoupling Mechanism
- 12 U-20211: Detroit Thermal 2018-19 SSCR Reconciliation
- 13 U-20811: UPPCO 2021 PSCR Reconciliation
- 14 U-20821: Northern States Power 2021-22 GCR Reconciliation
- 15 Q. Have you previously presented testimony before the MPSC?
- 16 A. Yes. I have provided testimony in the following cases:
- 17 U-15190: Consumers - Gas Rate Case
- 18 U-15245: Consumers - Electric Rate Case
- 19 U-15244: Detroit Edison - Electric Rate Case
- 20 U-15549: MGU – Gas Rate Case
- 21 U-15500: Wisconsin Electric Power Company – Rate Case
- 22 U-15645: Consumers - Electric Rate Case
- 23 U-15768: Detroit Edison - Electric Rate Case

**QUALIFICATIONS OF DOLORES A. MIDKIFF-POWELL
CASE NUMBER U-21258
PART I**

- | | |
|----|---|
| 1 | U-15981: Wisconsin Electric Power Company – Electric Rate Case |
| 2 | U-16191: Consumers – Electric Rate Case |
| 3 | U-16566: Consumers – Revenue Decoupling Mechanism |
| 4 | U-16421-R: Upper Peninsula Power Company – 2011 PSCR Reconciliation |
| 5 | U-17087: Consumer – Electric Rate Case |
| 6 | U-17095-R: Consumer 2013 PSCR Reconciliation |
| 7 | U-17333-R: SEMCO 2014-2015 GCR Reconciliation |
| 8 | U-20220: Consumers 2019 PSCR Reconciliation |
| 9 | U-20526: Consumers 2020 PSCR Reconciliation |
| 10 | U-20803: Consumers 2021 PSCR Reconciliation |
| 11 | U-21053: I&M 2022 PSCR Reconciliation |
| 12 | U-21049: Consumers 2022 PSCR Reconciliation |
| 13 | U-21262: I&M 2023 PSCR Reconciliation |

REVISED DIRECT TESTIMONY OF DOLORES A. MIDKIFF-POWELL
CASE NUMBER U-21258
PART II

1 Q. What is the purpose of your testimony?

2 A. The purpose of my testimony is to present the MPSC Staff's (Staff)
 3 recommendation regarding Consumers Energy's ("Consumers" or "the
 4 Company") cumulative Power Supply Cost Recovery ("PSCR") reconciliation for
 5 the 12-month period ending December 31, 2023.

6 Q. Are you sponsoring any exhibits in this proceeding?

7 A. Yes, I am sponsoring the following exhibits:

<u>Exhibit</u>	<u>Title</u>
S-1.0 Revised	Monthly Over (Under) Recovery
S-1.1 Revised	BMP Summary Calculation

11 Q. Were these exhibits prepared by you or under your direction?

12 A. Yes.

13 Q. Please explain Exhibit S-1.0 Revised.

14 A. Exhibit S-1.0 Revised presents Staff's calculation of Consumers' cumulative
 15 PSCR under recovery, with interest. The starting point for Staff's calculation was
 16 Consumers' Revised Exhibit A-5 (LEF-1). First, Staff verified the mathematical
 17 accuracy of the Company's exhibit. Staff made very minor layout changes and
 18 added the interest calculation section when compared to Revised Exhibit A-5
 19 (LEF-1). Exhibit S-1.0 Revised incorporates Staff's ~~three~~ two adjustments to the
 20 PSCR calculation discussed below.

21 Q. Please explain Exhibit S-1.1 Revised.

22 A. Exhibit S-1.1 Revised presents Staff's calculation of Consumers' additional
 23 expenses for the Biomass Merchant Plants (BMPs) purchased power. The starting

REVISED DIRECT TESTIMONY OF DOLORES A. MIDKIFF-POWELL
CASE NUMBER U-21258
PART II

1 point for Staff's calculation was BMPs' Exhibit BMP-2. First, Staff verified the
2 mathematical accuracy of the BMPs' exhibit. Staff made very minor layout
3 changes and added lines 9 through 13 to calculate the additional expenses. ~~The~~
4 ~~Company expensed the correct amount for BMP, no adjustment needed.~~

5 ~~Q. Please explain Staff's first adjustment to the Company's filed figures.~~

6 ~~A. Staff's first adjustment is the addition of expenses that the Company needs to~~
7 ~~apply to the BMPs' expense for Purchased and Interchange Power Costs. Exhibit~~
8 ~~S-1.1 shows Staff's calculation of the increased amount of expenses so that the~~
9 ~~Company accurately captures all the expenses for Purchased and Interchange~~
10 ~~Power Costs. Staff used the amount that the BMPs recorded on BMP 2, line 8,~~
11 ~~Column E of \$17,043,240 (capped costs with CPI adjustment). Staff then added~~
12 ~~the uncapped costs of \$2,386,254. Finally, Staff subtracted the amount the~~
13 ~~Company had expensed which is shown on Exhibit A-29, line 86, column (h)~~
14 ~~\$15,156,601; therefore, \$4,272,893 is the amount that the Company needs to add~~
15 ~~to their expenses in order for the BMPs' expenses to properly report purchased~~
16 ~~and interchange power costs. This is shown on Exhibit S-1.0, line 21.~~

17 ~~Q. Does this affect the amount of money that the Company owes to the BMPs?~~

18 ~~A. No. The above adjustment is only for recording the expenses of the Company's~~
19 ~~Purchase and Interchange Power Costs for this PSCR period.~~

20 Q. Please explain Staff's ~~second~~ first adjustment.

21 A. Exhibit S-1.0 Revised, line ~~22~~ 21, shows the disallowance of \$52,199 adjustment
22 made to the Power Cost from Staff Witness Raushawn Bodiford. This adjustment
23 is related to an extended outage at Ludington and the resulting replacement power

REVISED DIRECT TESTIMONY OF DOLORES A. MIDKIFF-POWELL
CASE NUMBER U-21258
PART II

1 costs. Please see Mr. Bodiford's testimony for additional details on this
2 adjustment.

3 Q. Please explain Staff's ~~last~~ **second** adjustment.

4 A. The last change to the Company's PSCR calculation is the flow-through effect
5 that results from the above adjustments that causes the monthly over/(under)
6 recovery average balances to change. The interest is calculated by multiplying
7 each month-end over/(under) average recovery balance by the appropriate interest
8 rate. If the average recovery balance is a positive number, it is an over recovery
9 and the Company is required to pay its customers an interest rate equal to the
10 Company's allowed Rate of Equity (R.O.E). Should the average recovery balance
11 be a negative number, it is an under recovery and customers must pay interest to
12 the Company equal to the Company's monthly short-term interest rate. The
13 Company had an average under recovery for all the months of the year ending
14 December 31, 2023; therefore, Staff used the Company's monthly short-term
15 interest rates to calculate the interest that customers owed to the Company, shown
16 on Exhibit S-1.0 **Revised**, line 35.

17 Q. What is Staff's recommendation for Consumers Energy's 2023 PSCR
18 reconciliation period?

19 A. Staff recommends that the Commission recalculate the under recovery after the
20 previous Case No. U-20149 has an order issued with the beginning balance for
21 this case and accept the three adjustments made to the over/under recovery stated
22 in this testimony including the change in the interest amount.

23 Q. Does this conclude your testimony?

REVISED DIRECT TESTIMONY OF DOLORES A. MIDKIFF-POWELL
CASE NUMBER U-21258
PART II

1 || A. Yes, it does.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Revised Exhibits S-1.0 and S-1.1?
3 Hearing none, those exhibits are
4 admitted.

5 MR. SINGH: Thank you, Your Honor.
6 Next there is a confidential and a
7 public version of our witness's testimony. Staff
8 moves to bind in the redacted public direct
9 testimony of its witness Raushawn D. Bodiford
10 consisting of a cover page and 19 pages of
11 questions and answers.

12 Associated with that testimony is
13 Exhibit S-2.0 and Confidential Exhibit S-2.1. And
14 I would note that the confidential versions of the
15 testimony and the exhibits have been sent to the
16 executive secretary.

17 JUDGE WALLACE: Thank you. Is there any
18 objection to binding in the public and confidential
19 direct testimony of Mr. Bodiford?

20 Hearing none, the testimony is bound
21 in.

22 (Testimony bound in)

23 - - -

24

25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * *

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply)
cost recovery plan (Case No. U-21257))
for the 12 months ending)
December 31, 2023.)
_____)

Case No. U-21258

QUALIFICATIONS AND DIRECT TESTIMONY OF
RAUSHAWN D BODIFORD
MICHIGAN PUBLIC SERVICE COMMISSION

December 18, 2024

QUALIFICATIONS OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART I

1 Q. Please state your name, occupation, and business address.

2 A. My name is Raushawn D. Bodiford. I am employed by the Michigan Public
3 Service Commission (MPSC or Commission) as a Public Utilities Engineer
4 Specialist in the Energy Operations Division. My business address is 7109 W.
5 Saginaw Hwy., Lansing, Michigan 48917.

6 Q. What are your responsibilities in your current position?

7 A. I am an engineer in the Energy Cost Recovery & Generation Operations
8 (ECR&GO) section. My primary responsibilities are to participate in MPSC
9 Staff's (Staff's) analysis and review of power supply cost recovery (PSCR) plan
10 and reconciliation filings, as well as general rate case filings made to the MPSC.
11 When appropriate, I use the analysis to help develop Staff's position for
12 testimony, settlement discussions, and implementation of Commission orders.

13 Q. Please describe your educational experience.

14 A. I earned a Bachelor of Science degree in Mechanical Engineering in 2002 from
15 North Carolina Agricultural and Technical State University (NCA&T) in
16 Greensboro, NC.

17 Q. Please describe your work experience.

18 A. During my employment with the MPSC, I have worked on numerous utility
19 PSCR reconciliation cases, I have also served as lead engineer and case
20 coordinator in many utility PSCR plan and reconciliation cases, where I was
21 involved in analysis to help develop Staff's position regarding case settlement or
22 to aid in the development of a Commission order. In addition to analysis and case

QUALIFICATIONS OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART I

1 coordinator responsibilities, I have also filed testimony in numerous utility rate
 2 cases, and PSCR plan and reconciliation cases.

3 Some of the cases in which I have been involved in are listed below.

4	Case Number	Company	Subject
5	U-15417-R	DTE	PSCR Reconciliation
6	U-16031-R	UPPCO	PSCR Reconciliation
7	U-16039-R	Thumb	PSCR Reconciliation
8	U-17095-R	Consumers	PSCR Reconciliation
9	U-17317-R	Consumers	PSCR Reconciliation
10	U-17678-R	Consumers	PSCR Reconciliation
11	U-20202	Consumers	PSCR Reconciliation
12	U-15645	Consumers	Rate Case
13	U-16191	Consumers	Rate Case
14	U-17990	Consumers	Rate Case
15	U-20697	Consumers	Rate Case
16	U-16417	UPPCO	Rate Case
17	U-17274	UPPCO	Rate Case
18	U-18402	Consumers	PSCR Plan
19	U-20219	Consumers	PSCR Plan
20	U-15661	UPPCO	PSCR Plan
21	U-16042	Presque Isle	PSCR Plan
22	U-16421	UPPCO	PSCR Plan

QUALIFICATIONS OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART I

1 In addition to case work, I have attended the Institute of Public Utilities (IPU)
2 Annual Regulatory Studies Program and have achieved Tier I Continuing
3 Regulatory Education certification, as recognized by the IPU Regulatory Research
4 and Education at Michigan State University.

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 Q. What is the purpose of your testimony?

2 A. The purpose of my testimony is to present the MPSC Staff's (Staff) position on
3 Consumers Energy Company's (Consumers or the Company) Power Supply Cost
4 Recovery (PSCR) reconciliation for 2023.

5 Q. Are you sponsoring any exhibits?

6 A. Yes. I am sponsoring the following exhibits:

7 Exhibit S-2.0: Consumers' written responses to Staff's discovery request
8 Confidential Exhibit S-2.1: Excerpt from Discovery Response U21258-AG-CE-
9 0032_Ludington_Events_2023_CONFIDENTIAL.xlsx

10 Q. Did Staff conduct a review of Consumers Energy's filing in this case?

11 A. Yes.

12 Q. Please describe Staff's general review philosophy for PSCR reconciliations.

13 A. Staff reviewed the Company's direct and revised testimony to ascertain exactly
14 what it was requesting to be approved, to determine consistency with past
15 commission orders, to distinguish between projected and actual costs, and to
16 assess the reasonableness and prudence of the costs incurred during 2023 by
17 examining Consumers' policies and practices, focusing on costs that resulted from
18 actions within the utility's control. These actions include fuel purchasing
19 strategies, negotiated transportation contracts, bilateral purchased power
20 contracts, power plant performance, chemical costs, and certain operational
21 decisions such as taking a unit down for economic reasons. Staff sent the
22 Company discovery requests in this case to acquire additional information related
23 to these types of costs and reviewed Consumers' responses to the discovery

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 requests of other parties as well. A complete list of Staff discovery questions as
2 well as the Company's written responses can be found in Exhibit S-2.0.

3 Q. What is the Company requesting to be approved in the application for its 2023
4 PSCR Reconciliation case?

5 A. Per the Company's Application:

6 1). From January through December 2023, Consumers Energy incurred
7 approximately \$1.816 billion in PSCR costs. After accounting for \$ 1.992 billion
8 in PSCR revenues, Consumers Energy calculates a year-end over-recovery of
9 approximately \$177 million. This, combined with over \$416 million in under
10 recovery from the 2022 PSCR year, yields a cumulative under-recovery of
11 approximately \$239 million. Accrued interest owed to Consumers Energy for
12 2023, under Act 304, is about \$16 million, bringing the total net under-recovery
13 for 2023 to almost \$255 million.

14 2). From January through December 2022, the Company collected approximately
15 \$3.0 million in FCM surcharges while it recorded about \$2.6 million in revenue
16 for the FCM incentive for the same period. After accounting for the FCM over
17 recovery from the 2022 PSCR reconciliation proceeding, which is included in the
18 Company's beginning balance in the present case, the Company calculates that its
19 total FCM over-recovery in 2023, including interest, is approximately \$2.5
20 million. Consumers Energy proposes to incorporate this over-recovery into the
21 calculation of the updated FCM surcharges that will be implemented beginning
22 January 2026.

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 Q. Please further explain Staff's review of Consumers' 2023 PSCR reconciliation
2 filing.

3 A. Staff began its review by comparing Consumers' actual 2023 PSCR costs to the
4 estimated costs presented in its approved 2023 PSCR plan, Case No U-21257.
5 The Company presented this information in Exhibit A-7 (JWH-1). Staff will
6 present its review of Consumers' 2023 PSCR reconciliation filing in three
7 sections:

1. PSCR Costs

2. Outages

3. Conclusion

11 The FCM will be reviewed by Staff witness Bob Nichols of the MPSC.

12 **PSCR Costs**

13 Q. What is the approach that Staff took to review the PSCR Costs?

14 A. Staff compared the actual PSCR costs and the Total Energy Sales during 2023
15 with the same information from the projected 2023 PSCR plan year (Case No. U-
16 21257) and reviewed each pair of costs for reasonableness and prudence. Staff
17 also sent discovery question for verification of the Company's consistency with
18 strategies and proposed operations from the Company's plan Case No. U-21257.
19 Consumers Energy incurred approximately \$1.816 billion in Power Supply Cost
20 Recovery (PSCR) costs between January and December 2023. [1] After
21 accounting for \$1.992 billion in PSCR revenues, the Company reported a net
22 over-recovery for the period. [1]

23 Q. Please explain what Staff's position with regard to the Company's coal expenses.

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 A. The Company spent \$192.5 million for the as-burned cost of coal in 2023,
2 compared with the projected amount of \$275.8 million ¹. This represents a 30 %
3 decrease in as-burned coal costs overall. The energy produced from the coal
4 generation was 6,883,825 MWh, as compared with projected amount of
5 10,536,584 MWh ², representing a coal production decrease of about 35%. This
6 decrease in coal generated output was due primarily to lower than projected
7 availability of the Company's generating units. Additionally, the lower-than-
8 projected utilization rate was influenced by lower-than-forecast natural gas prices
9 (which is discussed below), which affected the economic dispatch of all of
10 Consumers' coal-fired units.

11 Staff accepts the Company's explanation of its coal purchasing strategies and
12 reasons for the slight increase in the unit price coal delivered ³ to the Company in
13 2023. Staff deems the Company's decisions regarding coal procurement and coal
14 consumption in its generating units to be reasonable.

15 Q. What is the primary reason for the significantly lower actual Gas and Oil expense
16 as compared to its 2023 PSCR forecast?

17 A. The Company spent \$229.855 million on Gas and Oil expenses during 2023,
18 compared with the projected amount of \$595 million, as shown in **Table 1**. The
19 actual cost is a 61 % decrease from the projection and mainly was due to the
20 actual unit price of gas decreasing substantially during 2023. According to the
21 Company's witness Rissman, page 6, lines 19-22:

¹ U-21258, Exhibit A-24 (AKR-2), line 5

² U-21258, Exhibit A-7 (JWH-1), line 1

³ U-21258, Rissman, page 5, lines 10-13

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 Q. Please explain the major differences between the projected and actual
2 costs of natural gas burned for electric generation during 2023 as
3 outlined in Exhibit A-25 (AKR-3).

4 A. In total, the actual costs of natural gas burned on
5 Consumers Energy's system in 2023 were substantially
6 lower than projected due primarily to lower commodity
7 prices.

8
9 The unit cost of gas decreased by more than 55% at all but one of the Company's
10 generating units as can be seen below in Table 1, column j. Table 1 corresponds
11 to Company exhibit A-25 (AKR-3) and illustrates the projected versus actual as-
12 burned natural gas quantities and costs.

13 **Table 1**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Natural Gas Units	Projected Burn Volumes (MCF)	Actual Burn Volumes (MCF)	Actual Burn Volume Change From Projection (%)	Projected Plan Cost (\$)	Actual Cost (\$)	Actual Cost Change From Projection (%)	Projected Unit Cost (\$/MCF)	Actual Unit Cost (\$/MCF)	Unit Cost Change From Projection (%)
DE Karn 3-4	0	788,514	N/A	5,566,679	9,460,379	69.9%	N/A	11.998	N/A
Jackson Plant	19,540,866	15,059,020	-22.9%	149,812,517	45,953,260	-69.3%	7.667	3.052	-60.2%
Zeelend Generating Station	29,885,011	35,921,042	20.2%	214,622,528	92,534,870	-56.9%	7.182	2.576	-64.1%
Covert Generating Station	36,126,033	31,642,650	-12.4%	224,998,238	81,906,454	-63.6%	6.228	2.588	-58.4%
Total Expense				594,999,961	229,854,962	-61.4%			

14
15 Company witness Rissman explained the outlying unit cost of gas for Karn Units
16 3-4 (Table 1, column i) as follows, "The per-unit average price for gas burned at
17 Karn was higher than the other plants mainly due to the fixed transportation costs
18 spread over the smaller burn volume." (Rissman, page 7, lines 11-12)

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 Staff accepts the Company's explanation and finds the Company's Gas and Oil
2 expenditures reasonable. The Company made the efforts to minimize the unit
3 price of Gas and Oil at all of its generating units, including the use of Gas
4 Management Service (GMS) agents for all of its gas purchases at its Jackson,
5 Zeeland, Covert and Karn plants ⁴.

6 Q. What is Staff's opinion regarding the Company's management of its Owned
7 Renewable resources and the associated PSCR applicable costs?

8 A. Consumers Energy experienced five pad-mounted transformer failures at its wind
9 generation facilities during 2023. The Company has proactively implemented a
10 few processes to mitigate these failures and minimize lost energy in the future
11 including established an inventory of spare pad-mounted transformers to decrease
12 repair times and implementing quarterly rounds and annual dissolved gas analysis
13 testing to allow for early identification of potential transformer failures.
14 Staff finds that Consumers Energy effectively managed its renewable resources in
15 2023. Although actual capacity factors fell short of the targeted capacity factor,
16 Consumers Energy's wind assets exceeded their targeted time-based availability.
17 This exceedance of time-based availability reflects Consumers Energy
18 maintaining its wind generation assets in a condition which allows for the creation
19 of customer value. Consumers Energy paid \$106,263,319 in Total Net Transfer
20 Costs on 1,256,067 MWh of Company Owned renewable generation ⁵ in 2023.

⁴ U-21258, Rissman, p. 7-8, lines 13-2

⁵ U-21258, Exhibit A-1 (ZSC-1), line 26

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 Staff finds the explanations for the Company's owned renewable energy costs and
2 generation to be reasonable.

3 Q. Please explain Staff's review of Consumers' Purchased Variable Cost in 2023.

4 A. The Purchased Variable Costs for Consumers include the costs associated with
5 PURPA variable energy payments, non-capacity renewable energy plan transfer
6 costs, the green generation program, energy only NUGs (Non-Utility Generators)
7 and certain hydro plant contract costs. The Company projected Purchased
8 Variable Costs of \$773.8 million in its plan Case No. U-21257, as compared to
9 \$726.9 million of actual spending in 2023 ⁶. This is a 6.5 % decrease in costs yet
10 the Company's actual Purchased Power in 2023 increased over 30% from the
11 Company's projection of 8,056,409 MWh to 10,507,992 ⁷. The escalation in
12 purchased power energy was primarily due to reduced availability of the
13 Company's owned generating resources (discussed below), the Company's
14 reduced energy requirement for the year as compared to projected, and the much
15 lower than projected cost of natural gas, which remained comparatively low
16 throughout the year.

17 Staff finds this explanation of Purchased Variable Costs to be reasonable.

18 Q. Did Staff conduct a review of Consumers' Chemical Costs?

19 A. Yes

20 Q. What is the Staff's conclusion after reviewing the Consumers' Chemical Costs?

21 A. **Urea Expense**

⁶ U-21258, Exhibit A-7 (JWH-1), line 15

⁷ U-21258, Exhibit A-7 (JWH-1), line 10

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 The company projected urea costs at \$4.145 million but actual expenses were
2 \$2.070 million ⁸, a significant \$2.075 million (nearly 50%) reduction. Company
3 witness Hoffman attributes this difference to both lower urea prices and decreased
4 generation due to lower availability of Campbell Units 2 and 3 ⁹. Urea prices are
5 linked to natural gas prices, which dropped in 2023 after sharp increases in 2022.
6 The projected urea price was \$832/ton, while the actual cost was \$563/ton; a 32%
7 decrease in unit costs.

8 **Aqueous Ammonia**

9 Projected costs were \$0.799 million, but the actual expense reached \$1.449
10 million, a \$0.650 million (over 80%) increase which corresponded with the
11 Company's addition of the Covert plant to the Company's fleet on June 1, 2023 ¹⁰.
12 The Company did note however that the Covert plant's aqueous ammonia expense
13 wasn't factored into the initial projections in Case No. U-21257.

14 **Lime**

15 Consumers Energy projected lime costs at \$8.205 million. Actual expenses totaled
16 \$7.761 million, a \$0.444 million decrease below projections, primarily attributed
17 to lower-than-projected capacity factors for Campbell Unit 3 and Karn Units 1
18 and 2. Campbell Unit 3 also operated primarily in "Recycle Mode," which uses
19 significantly less pebble lime than "Lime Only Mode" ¹¹.

20 Activated Carbon

⁸ U-21258, Exhibit A-17 (NJH-8)

⁹ U-21258, Hoffman, page 23, lines 14-20

¹⁰ U-21258, Hoffman, page 24, lines 10-12

¹¹ U-21258, Hoffman, page 26, lines 7-9

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 Consumers Energy's projected costs were \$2.271 million, while actual expenses
2 were \$1.684 million. This represents a \$0.587 million reduction in costs as
3 compared to the Company's original projection and was primarily attributed to
4 lower generation at the Campbell site, the use of higher-sulfur coal (which
5 typically has lower mercury content), and improved management of mercury
6 operating limits ¹².

7 **Chemical Cost Variance**

8 Staff finds the actual Chemical costs in the 2023 PSCR reconciliation case to be
9 reasonable and prudent due to the explanations outlined above.

10 Q. What is the Staff review regarding the Total Power Supply Costs?

11 A. The Company has spent \$1,815,645,264 billion as the Total Cost Allocated to
12 PSCR less Long-Term Industrial Load Retention Rate (LTILRR) costs ¹³ as
13 compared with the Company projected and approved amount of \$ \$2,228,299,000
14 billion in Case No. U-21257 ¹⁴. The total energy sales were down from the
15 projected 35,349,092 MWh to 34,429,864 MWh ¹⁵, which is 2.6 % decrease. Staff
16 has reviewed and analyzed the costs that were within Company's control and
17 found the total PSCR costs and the total energy purchased and produced for sale
18 to be reasonable due to the reasons that stated above.

19 **Outages**

20 Q. Please summarize the Company's outage events in 2023.

¹² U-21258, Hoffman, page 26, lines 19-23

¹³ U-21258, Exhibit A-5 (LEF-1), line 25, column n

¹⁴ U-21257, Exhibit A-7 (JWH-1), page 1, line 42, column o

¹⁵ U-21258, Exhibit A-7 (JWH-1), line 14

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 A. In 2023, there were a total of 424 outage events across the entire generation fleet,
2 99 fewer than in 2022 ¹⁶. Despite experiencing fewer overall outages, the
3 Company's total fossil MWh availability decreased slightly from 74.76% in 2022
4 to 74.58% in 2023 due to decreased availability at its Campbell Units 2 & 3, Karn
5 Unit 2, and the Company's Zeeland Combined-Cycle Units ¹⁷.

6 The Company planned for 12 outages scheduled to last 28 days or longer in 2023
7 but completed only 8 of the scheduled outages. Staff found the Company's
8 explanations for postponing or shifting the timeframe of outage work to be
9 completed to be reasonable, and the management of the planned outages prudent.

10 The Company reported 3 major outages lasting more than 90 days including a
11 149-day outage at Campbell Unit 2, a 102-day outage at Karn Unit 3 and a 100-
12 day outage at Zeeland Unit 1 that began in late 2022 and continued into 2023.

13 Staff will discuss these outages in more detail below.

14 Some of the challenges affecting the Company's other generating units in 2023
15 included outages at the Ludington Pumped Storage plant resulting from faulty
16 work by Toshiba America Energy Systems Corporation (TAES) ¹⁸, and planned
17 and forced outages due to Consumers' aging generation fleet.

18 Q. What did Staff determine about the Company's reported outages at the Ludington
19 Pumped Storage plant (Ludington) resulting from faulty work by TAES?

¹⁶ U-21258, Hoffman, page 3, lines 24-25

¹⁷ U-21258, Exhibit A-15 (NJH-6)

¹⁸ U-21258, Exhibit A-19 (NJH-10)

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 A. The Company recorded 19 outage events in 2023 that it determined occurred
2 because of defective work performed by TAES ¹⁹. The associated costs for these
3 outages were recorded to a regulatory asset that was approved in the
4 Commission's May 18, 2023, Order in Case No. U-21310.
5 After a thorough review of the Company's filing and discovery responses ²⁰
6 regarding the outages at Ludington, Staff takes no issue with the Company's
7 removal of \$838,535 in associated costs for those outages from the PSCR and
8 recording the costs to the approved regulatory asset. The Company's actions are
9 reasonable and in line with the Commission's order.

10 Q. Please discuss the Company's three major outage events that lasted longer than 90
11 days.

12 A. Company witness Hoffman provided detailed about Company's three longest
13 outages ²¹.

14 **Zeeland Unit 1**

15 Consumers' 96-day Zeeland Unit 1 outage began on December 27, 2022. The
16 outage continued into 2023 and ended on April 7, 2023. According to witness
17 Hoffman:

18 As previously discussed in this direct testimony, the
19 Zeeland Unit 1 outage began on December 27, 2022, upon
20 the economic changeout of the spare GSU (leased)
21 transformer from Zeeland Unit 1 to Zeeland Unit 5. The
22 outage lasted for a total of 100 days, 96 days in 2023, and
23 the unit was returned to service on April 7, 2023, upon
24 return of the repaired GSU transformer. (U-21258,
25 Hoffman, page 11, lines 17-23)

¹⁹ U-21258, Exhibit A-19 (NJH-10)

²⁰ Exhibit S-2.0, page 6

²¹ U-21258, Hoffman, pages 11-17

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1
2 Consumers, as a part of its GSU monitoring program, identified imminent failure
3 of the GSU transformer for Zeeland Unit 5 and made the decision swap the leased
4 GSU transformer installed on Zeeland Unit 1 and install it on Zeeland Unit 5.
5 Staff finds that the Company's actions were reasonable and did not cause or lead
6 to the extension of this outage.

7 **Karn Unit 3**

8 Consumers' 102-day Karn Unit 3 outage was unplanned and resulted from the
9 failure of a j-strap connector. J-strap connectors are used to provide flexibility as
10 the exciter heats up under load. The j-strap failure then led to a failure to provide
11 proper excitation to the generator, ultimately causing the outage. The exciter was
12 disassembled and shipped to the vendor for repair.

13 After reviewing discovery responses ²² and validating the Company's assertion
14 that the exciter showed no indication of pending failure when tested in 2022 ²³,
15 Staff finds that the Company's actions were reasonable and did not cause or lead
16 to the extension of this outage.

17 **Campbell Unit 2**

18 Consumers' 149-day Campbell Unit 2 outage was unplanned and was initially due
19 to a tube leak in the hydraulic coupling circuit oil cooler. This leak resulted in
20 water intrusion into the oil system, which forced the unit to be removed from
21 service. After repair, during the post-maintenance testing, the startup boiler feed

²² Exhibit S-2.0, page 23

²³ U-21258, Hoffman page 14, lines 8-10

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 pump (SUBFP) experienced a thrust event causing significant damage to SUBFP
2 internal flow element, the thrust bearing and the drive coupling.

3 Consumers Energy's older units were built in the 1960s which makes obtaining
4 readily available replacement parts difficult. This outage was such a case.

5 Because of its vintage an exact replacement for the drive coupling was not readily
6 available and there was a 33-week lead-time on procuring an identical

7 replacement. The Company made the decision to rebuild the SUBFP with a
8 replacement drive coupling, but the replacement drive coupling did not pass

9 vibration testing post-maintenance. Company witness Hoffman details several
10 attempts to restore the SUBFP to operational, but to no avail. Consumers

11 Campbell Unit 2 remained out of service for the balance of 2023.

12 Staff reviewed the Company's filing and discovery responses regarding the
13 extended forced outage at Campbell Unit 2 ²⁴ ²⁵ and finds that the Company acted
14 prudently in its efforts to restore the SUBFP to operational and did not take any
15 actions which caused or extended the duration of this outage.

16 Q. Did Staff evaluate any other Company outages?

17 A. Yes. In response to discovery, the Company provided Staff with all Company unit
18 outages greater than 7 days in length ²⁶. Staff reviewed all the periodic outage
19 reports for these outages in addition to the outages outline in the Company's filing
20 and apart from one outage at the Company's Ludington Unit 3, did not find that

²⁴ Exhibit S-2.0, page 18

²⁵ Exhibit S-2.0, page 22

²⁶ Exhibit S-2.0, page 6

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 the Company acted imprudently or negligently either in causing or extending the
2 duration of the outages reported.

3 Q. Please detail the Ludington Unit 3 outage with which Staff takes exception.

4 A. **Ludinton Unit 3**

5 In response to discovery the Company provided Staff with the Periodic Outage
6 Report for an outage that occurred on May 22, 2023, at Ludington Unit 3 (Event
7 Number 163). The outage was reported to have lasted 188.53 hours. According to
8 the Company's report, the root cause of the unplanned outage was determined to
9 be that "The operator applied the turbine generator's pneumatic brakes to the
10 incorrect unit." ²⁷. In a subsequent discovery response to Staff ²⁸, the Company
11 acknowledged that [REDACTED] ²⁹ in replacement power costs were associated with
12 this outage.

13 Q. What is Staff's conclusion regarding Ludington Unit 3 Outage Event Number
14 163?

15 A. Staff has long held that replacement power costs incurred as a result of the
16 negligence of an employee or agent of the utility acting within the scope of its
17 employment or agency are not recoverable. Disallowance of replacement power
18 costs for this very reason were affirmed in a Michigan Court of Appeals opinion
19 issued on February 1, 2024, in Case No. U-20526. Likewise, in the instant case,

²⁷ Exhibit S-2.0 (RDB-1), page 25

²⁸ Exhibit S-2.0 (RDB-1), page 21, U21258-ST-CE-0114

²⁹ Exhibit S-2.1 (RDB-2), Confidential, Excerpt taken from U21258-AG-CE-032_Ludington_Events_2023_CONFIDENTIAL

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 Staff has determined that replacement cost associated with this outage should be
2 borne by the Company and not collected through the PSCR.

3 Staff is recommending the Commission disallow recovery of [REDACTED] in
4 replacement power costs associated with the event in question due to operator
5 error.

6

7

8 **Conclusion**

9 Q. What are Staff's conclusions regarding Consumers Energy's 2023 PSCR
10 reconciliation filing?

11 A. The Michigan Public Service Commission (MPSC) Staff conducted a thorough
12 review of Consumers Energy's 2023 Power Supply Cost Recovery (PSCR)
13 reconciliation filing. The review focused on assessing the reasonableness and
14 prudence of costs incurred during 2023, examining areas such as fuel purchasing
15 strategies, power plant performance, and operational decisions. The Staff found
16 Consumers Energy's explanations for fluctuations in coal expenses, gas and oil
17 expenses, owned renewable resources, purchased variable costs, and chemical
18 costs to be reasonable. While the Company experienced fewer outages in 2023
19 compared to 2022, Staff did have a concern regarding a specific outage event at
20 Ludington Unit 3.

21 The Staff determined that the Ludington Unit 3 outage (Event Number 163) was
22 caused by operator error, specifically the application of turbine generator
23 pneumatic brakes to the incorrect unit. This resulted in [REDACTED] in replacement

DIRECT TESTIMONY OF RAUSHAWN D BODIFORD
CASE NUMBER U-21258
PART II

1 power costs. The Staff, consistent with its long-held position and affirmed by the
2 Michigan Court of Appeals' opinion, maintains that replacement power costs
3 resulting from employee or agent negligence are not recoverable. Therefore, the
4 Staff recommends that the Commission disallow the recovery of the [REDACTED] in
5 replacement power costs associated with Ludington Unit 3 Outage Event Number
6 163.

7

8 Q. Does this conclude your testimony?

9 A. Yes, it does.

1 JUDGE WALLACE: Is there any objection
2 to the admission of Exhibit S-2.0 and Confidential
3 Exhibit 12.1?

4 Hearing none, those exhibits are
5 admitted.

6 MR. SINGH: Thank you, Your Honor.

7 Lastly, Staff moves to bind in the
8 qualifications and direct testimony of its witness
9 Robert F. Nichols consisting of a cover page and
10 five pages of questions and answers. And there are
11 no exhibits associated with his testimony.

12 JUDGE WALLACE: Thank you, Mr. Singh.

13 Is there any objection to binding in
14 the testimony of Mr. Nichols?

15 Hearing none, the testimony is bound
16 in.

17 (Testimony bound in)

18 - - -

19

20

21

22

23

24

25

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * *

In the matter of the application of)
CONSUMERS ENERGY COMPANY)
for reconciliation of its power supply cost)
recovery plan (Case No. U-21257) for the)
12 months ended December 31, 2023.)
_____)

Case No. U-21258

QUALIFICATIONS AND DIRECT TESTIMONY OF
ROBERT F. NICHOLS II, CPA
MICHIGAN PUBLIC SERVICE COMMISSION

December 18, 2024

QUALIFICATIONS OF ROBERT F. NICHOLS II, CPA
CASE NUMBER U-21258
PART I

1 Q. Please state your name and business address.

2 A. My name is Robert F. Nichols II, and my business address is 7109 West Saginaw
3 Highway, Lansing, MI 48917.

4 Q. By whom are you employed and in what capacity?

5 A. I am employed by the Michigan Public Service Commission (Commission or
6 MPSC) as the Manager of the Revenue Requirements Section of the Regulated
7 Energy Division.

8 Q. How long have you been employed by the MPSC and what are your duties?

9 A. I have been employed by the MPSC since November of 2011. As Manager of the
10 Revenue Requirements Section, I am primarily responsible for the planning and
11 direction of electric and gas rate case audits and presentations, as well as cases
12 involving accounting standards and requests for accounting authority. From 2011
13 through March 2016, as an Auditor within the Revenue Requirements Section, my
14 responsibilities included auditing, analyzing, and making recommendations
15 regarding utility revenues, expenses, and rate base.

16 Q. Please describe your educational background.

17 A. I graduated from Davenport University, with highest honors, in 2009 with a
18 Bachelor of Business Administration degree in Accounting Information
19 Management. I attended a regulation and ratemaking conference hosted by the
20 Michigan State University Institute of Public Utilities (MSU IPU) in May of
21 2012. In August of 2012, I attended the National Association of Regulatory
22 Utility Commissioners (NARUC) annual two-week Regulatory Studies Program
23 held at Michigan State University. Each August from 2013 through 2016 and in

QUALIFICATIONS OF ROBERT F. NICHOLS II, CPA
CASE NUMBER U-21258
PART I

1 2019, I attended the Annual Regulatory Studies Program hosted by MSU IPU. I
 2 also attended a one-week Advanced Regulatory Studies Program in fall of 2013,
 3 2014, and 2016, hosted by MSU IPU.

4 Q. Please describe your professional background.

5 A. Prior to coming to the MPSC, from 2000 to 2011, I was employed by Genesee
 6 Cut Stone & Marble Company. My duties there included sales, drafting, and
 7 estimating.

8 Q. Do you have any professional licenses?

9 A. Yes. I am a Certified Public Accountant, licensed by the State of Michigan.

10 Q. Have you prepared testimony or assisted in any other proceedings?

11 A. I have assisted or filed testimony in the following cases:

<u>Case No.</u>	<u>Company</u>	<u>Subject/Type</u>
13 U-16855	Consumers Energy Co. Gas	Rate Case
14 U-16969	SEMCO Energy Gas Company	Merger and Acquisition
15 U-16794	Consumers Energy Co. Electric	Rate Case
16 U-16999	Michigan Consolidated Gas Co.	Rate Case
17 U-16855	Consumers Energy Co. Gas	Self-Implementation Refund
18 U-17087	Consumers Energy Co. Electric	Rate Case
19 U-17197	Consumers Energy Co. Gas	Rate Case
20 U-17273	Michigan Gas Utilities Corp.	Rate Case
21 U-17274	Upper Peninsula Power Co.	Rate Case
22 U-17440	Consumers Energy Co. Electric	Self-Implementation Refund
23 U-17488	Northern States Power Co. Gas	Rate Case
24 U-16999	DTE Gas IRM	Reconciliation
25 U-17620	Consumers Energy Co.	OPEB Trust Funding
26 U-17643	Consumers Energy Co. Gas	Rate Case
27 U-17669	WPSC Electric	Rate Case
28 U-17735	Consumers Energy Co. Electric	Rate Case
29 U-17882	Consumers Energy Co. Gas	Rate Case
30 U-17999	DTE Gas Company	Rate Case
31 U-18014	DTE Electric Company	Rate Case
32 U-17990	Consumers Energy Co. Electric	Rate Case
33 U-18124	Consumers Energy Co. Gas	Rate Case

QUALIFICATIONS OF ROBERT F. NICHOLS II, CPA
CASE NUMBER U-21258
PART I

1	U-18322	Consumers Energy Co. Electric	Rate Case
2	U-18255	DTE Electric Company	Rate Case
3	U-18370	Indiana Michigan Power Co.	Rate Case
4	U-18419	DTE Electric Company	Certificate of Necessity
5	U-18424	Consumers Energy Co. Gas	Rate Case
6	U-18999	DTE Gas Company	Rate Case
7	U-20111	Upper Peninsula Power Co.	TCJA Credit A Case
8	U-20268	Alpena Power Company	TCJA Credit B Case
9	U-20134	Consumers Energy Co. Electric	Rate Case
10	U-20287	Consumers Energy Co. Gas	TCJA Credit B Case
11	U-20165	Consumers Energy Co. Electric	Integrated Resource Plan
12	U-20162	DTE Electric Company	Rate Case
13	U-20276	Upper Peninsula Power Co.	Rate Case
14	U-20322	Consumers Energy Co. Gas	Rate Case
15	U-20350	Upper Peninsula Power Co.	Integrated Resource Plan
16	U-20479	SEMCO Energy Gas Co.	Rate Case
17	U-20359	Indiana Michigan Power Co.	Rate Case
18	U-20561	DTE Electric Company	Rate Case
19	U-20642	DTE Gas Company	Rate Case
20	U-20650	Consumers Energy Co. Gas	Rate Case
21	U-20697	Consumers Energy Co. Electric	Rate Case
22	U-20713	DTE Electric Company	Voluntary Green Pricing
23	U-21015	DTE Electric Company	Securitization Case
24	U-20940	DTE Gas Company	Rate Case
25	U-20963	Consumers Energy Co. Electric	Rate Case
26	U-21090	Consumers Energy Co. Electric	Integrated Resource Plan
27	U-21148	Consumers Energy Co. Gas	Rate Case
28	U-20836	DTE Electric Company	Rate Case
29	U-20993	Saginaw Bay Pipeline Co.	Rates for Transportation
30	U-21224	Consumers Energy Co. Electric	Rate Case
31	U-21286	Upper Peninsula Power Co.	Rate Case
32	U-21193	DTE Electric Company	Integrated Resource Plan
33	U-20827	DTE Electric Company	PSCR Reconciliation
34	U-21308	Consumers Energy Co. Gas	Rate Case
35	U-21297	DTE Electric Company	Rate Case
36	U-21389	Consumers Energy Co. Electric	Rate Case
37	U-21461	Indiana Michigan Power Co.	Rate Case
38	U-21525	DTM Michigan Lateral Co.	Rate Request
39	U-21490	Consumers Energy Co. Gas	Rate Case
40	U-21291	DTE Gas Company	Rate Case
41	U-21540	Michigan Gas Utilities Corp.	Rate Case
42	U-21555	Upper Peninsula Power Co.	Rate Case
43	U-21534	DTE Electric Company	Rate Case
44	U-21585	Consumers Electric Co. Electric	Rate Case

DIRECT TESTIMONY OF ROBERT F. NICHOLS II, CPA
CASE NUMBER U-21258
PART II

1 Q. What is the purpose of your testimony?

2 A. The purpose of my testimony is to present the MPSC Staff's (Staff) position on
3 the Financial Compensation Mechanism (FCM) for Consumers Energy Company
4 (Consumers Energy or the Company).

5 Q. Are you sponsoring any exhibits?

6 A. No.

7 **FINANCIAL COMPENSATION MECHANISM:**

8 Q. Referring to Exhibit A-20 (HLP-1), what is the Company's projected total over-
9 recovery amount FCM including interest?

10 A. Consumers projects a total over-recovery amount FCM including interest of
11 \$2,518,161.

12 Q. Does Staff agree with the Company calculation?

13 A. Yes, but there are a couple issues that need to be flagged for the Commission that
14 could impact the Company's calculated projection.

15 Q. What is the first issue to be flagged for the Commission?

16 A. First, the beginning balance of \$1,968,924 must be updated for any final decisions
17 impacting the FCM ending balance in MPSC Case No. U-20194, which is
18 Consumers Electric's pending Power Supply Cost Recovery (PSCR) case for
19 2022. The final ordered ending balance in U-21094 will be the beginning balance
20 in the instant case and the FCM must be recalculated in the instant case if the U-
21 21094 ending balance is changed. A change in the beginning balance will also
22 require interest to be recalculated by the Commission in the instant case.

23 Q. What is the second issue to be flagged for the Commission?

DIRECT TESTIMONY OF ROBERT F. NICHOLS II, CPA
CASE NUMBER U-21258
PART II

1 A. Second, the Company has included three energy-only contracts in its calculation
2 of the FCM recovery. Those contracts are identified on Exhibit A-21 (HLP-2) as
3 Autocam Medical, Otsego Paper, and Prairie View Dairy (lines 3, 42, 43). In the
4 pending MPSC Case No. U-21049 Consumers 2022 PSCR case, Staff noted that
5 the Commission may determine that energy-only contracts are not eligible for the
6 FCM. Staff recommends that if the Commission decides in that case that energy-
7 only contracts are not eligible for the FCM, then the three contracts identified as
8 energy-only contracts in this case should be disallowed and the FCM should be
9 recalculated.

10 **SUMMARY:**

11 Q. Please summarize Staff's recommendations.

12 A. Staff recommends that the Company's FCM calculations in the instant case are
13 reasonable. Staff recommends that the beginning balance in the instant case
14 should be updated if the ending balance in the MPSC Case No. U-21049
15 Consumers 2022 PSCR case is changed by the Commission in its final Order in
16 that case. Staff recommends that the three energy-only contracts included in the
17 FCM in the instant case should be disallowed if the Commission decides in
18 MPSC Case No. U-21049 Consumers 2022 PSCR case that energy-only contracts
19 are not eligible for the FCM. Lastly, Staff recommends that the FCM should be
20 recalculated by the Commission in the instant case for any final decisions
21 impacting the calculations in this case.

22 Q. Does this conclude your testimony?

23 A. Yes.

1 MR. SINGH: Thank you, Your Honor. And
2 that's everything from Staff.

3 JUDGE WALLACE: All right. Is that
4 everything from everybody? Did we miss anything? Did
5 I miss anything?

6 All right. We've got, then, the
7 schedule for the remainder of the case, the
8 briefing part of it, and I've got a PFD due date
9 sometime in June I think.

10 Is there anything else that we need
11 to take up while we're still on the record?

12 MR. KEIMACH: Nothing for the Company.

13 JUDGE WALLACE: Nothing from the
14 Company. Nothing, nothing, nothing.

15 All right, then.

16 Again, just one last reminder. Make
17 sure that you also file your -- the exhibits that
18 were admitted today, your official exhibits, in the
19 docket.

20 And with that, I think that we're
21 all set, and we are adjourned for the day. Thank
22 you all very much.

23 (At 9:25 AM the hearing adjourned.)

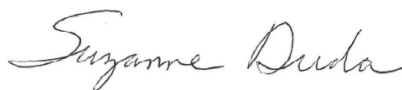
24 - -

25 -

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

I, Suzanne Duda, do hereby certify that I reported in stenotype the proceedings had in the within-entitled matter, that being Case No. U-21258, before Sally L. Wallace, Administrative Law Judge with MOAHR, for the Michigan Public Service Commission, Lansing, Michigan, on Thursday, March 20, 2025; and do further certify that the foregoing transcript, consisting of Public Volume 2, pages 10-ppp, is a true and correct transcript of my stenotype notes.



Suzanne Duda, CSR-3199, RPR, CRR
Notary Public

My Commission Expires: 5/6/31

DATE: March 24, 2025

(NOTE: Transcript continues at page ***
of the CONFIDENTIAL RECORD.)