

## 1 STATE OF MICHIGAN

## 2 BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

3  
4 In the matter of the Application of

5 CONSUMERS ENERGY COMPANY for

Case No. U-21859

6 Ex Parte Approval of Certain

Volume IV

7 Amendments to Rate GPD.

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9  
10 The Remote Teams Videoconference Hearing in the above

11 entitled matter held before Administrative Law Judge

12 Katherine Talbot in Lansing, Michigan,

13 Commencing at 9:06 a.m.,

14 Friday, August 1, 2025,

15 Before Leisa M. Pastor, CSR-3500, RPR, CRR.

16 Veritext Job #7466012  
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13 Natasha Fowles

14 Nicholas Revere

15 David W. Isakson

16 Shana Ramirez

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1 Lansing, Michigan

2 Friday, August 1, 2025

3 9:06 a.m.

4

5 JUDGE TALBOT: We're on the record in  
6 Michigan Public Service case No. U-21859. It's in the  
7 matter of the application of Consumers Energy Company  
8 for ex parte approval of certain amendments to Rate  
9 GPD.

10 My name is Katherine Talbot. I'm the  
11 presiding officer on behalf of the Commission.  
12 Today's date is August 1st, 2025. It's a day set  
13 aside for cross-examination.

14 I guess, let's start with the appearances.  
15 I'll start with the Company. Go ahead.

16 MS. UITVLUGT: Good morning, your Honor.  
17 Anne Uitvlugt appearing on behalf of Consumers Energy  
18 Company.

19 JUDGE TALBOT: Thank you. And staff?

20 MR. SINGH: Good morning, your Honor. Amit  
21 Singh and Adam Cozort on behalf of staff.

22 JUDGE TALBOT: Thank you. And the attorney  
23 general?

24 MR. WOLLENZIEN: Good morning, your Honor.  
25 Lucas Wollenzien on behalf of Attorney General Dana

1 Nessel.

2 JUDGE TALBOT: Thank you. And Data Center  
3 Coalition?

4 MR. VIJAYKAR: Good morning, your Honor.  
5 Nikhil Vijaykar and Travis Murray of the law firm  
6 Keyes & Fox on behalf of the Data Center Coalition.

7 JUDGE TALBOT: Thank you. And ABATE?

8 MR. CAMPBELL: Good morning, your Honor,  
9 Steve Campbell, Clark Hill, PLC, on behalf of the  
10 Association of Businesses Advocating Tariff Equity.

11 JUDGE TALBOT: Thank you. And MNSC?

12 MR. BZDOK: Good morning, your Honor.  
13 Christopher Bzdok on behalf of the firm Troposphere  
14 Legal for Michigan Environmental Council, Natural  
15 Resources Defense Counsel, Sierra Club, and Citizens  
16 Utility Board of Michigan.

17 Also appearing on behalf of Sierra Club are  
18 Shannon Fisk and Jacob Elkin. Also possibly appearing  
19 today on behalf of CUB is John Liskey, their general  
20 counsel.

21 JUDGE TALBOT: Thank you. Switch?

22 MS. BRADER: Good morning, your Honor.  
23 Valerie Brader of Rivenoak Law Group, PC, for Switch,  
24 Ltd. You may also see Rachel Kent of Switch watching  
25 various parts of today's testimony, but she will be

1 appearing as an observer and not as counsel. Thank  
2 you.

3 JUDGE TALBOT: Thank you. And the CEO?

4 MR. ABRAMS: Good morning, your Honor,  
5 Daniel Abrams appearing on behalf of the Ecology  
6 Center, the Environmental Law and Policy Center, the  
7 Union of Concerned Scientists, and Vote Solar,  
8 collectively, the Clean Energy Organizations, or CEO.  
9 And I'd also like to place an appearance on behalf of  
10 my colleague, Katie Duckworth. Thank you.

11 JUDGE TALBOT: Great. Thank you. And a  
12 group I have is MEIU? Mr. Ooms, Ms. Chappelle,  
13 Mr. Lundgren?

14 All right, well, they never indicated that  
15 they had cross, so we are proceeding.

16 As I just indicated, today is the time set  
17 for cross-examination. Prior to starting, the parties  
18 agreed that they would start with the staff witnesses.  
19 And so I guess we'll start with David Isakson? Are we  
20 ready to start, Mr. Singh?

21 MR. SINGH: We are, your Honor --

22 JUDGE TALBOT: Go ahead.

23 MR. SINGH: -- thank you.

24 Staff calls its witness, David W. Isakson.

25 JUDGE TALBOT: And go ahead and swear the

1 witness.

2 DAVID W. ISAKSON,  
3 was thereupon called as a witness herein, and after  
4 having first been duly sworn to testify to the truth,  
5 the whole truth and nothing but the truth, was  
6 examined and testified as follows:

7 DIRECT EXAMINATION

8 BY MR. SINGH:

9 Q. Good morning, Mr. Isakson.

10 A. Good morning.

11 Q. Would you please state your full name for the record?

12 A. My name is David W. Isakson.

13 Q. Thank you. For whom do you work and in what capacity?

14 A. I work for the Michigan Public Service Commission  
15 staff in the rates and tariffs section of the  
16 regulated energy division as a departmental analyst.

17 Q. Thank you. In this case did you cause to be filed the  
18 qualifications and direct testimony of David W.  
19 Isakson, consisting of a cover page and 30 pages of  
20 questions and answers?

21 A. Yes, I did.

22 Q. Do you have any changes?

23 A. No, I do not.

24 Q. If asked those same questions today, would you give  
25 the same responses?

1 A. Yes, I would.

2 Q. Okay.

3 MR. SINGH: Your Honor, at this time,  
4 staff -- excuse me, let me back up.

5 BY MR. SINGH:

6 Q. And associated with your testimony, did you also  
7 sponsor exhibits S-1, S-2, and S-3?

8 A. Yes, I did.

9 Q. Okay. In this case did you also cause to be filed the  
10 rebuttal testimony of David W. Isakson, consisting of  
11 a cover page and four pages of questions and answers?

12 A. Yes, I did.

13 Q. Okay.

14 MR. SINGH: Your Honor, at this time, staff  
15 moves to bind in the qualifications and direct  
16 testimony of its witness David W. Isakson, and the  
17 rebuttal testimony of David W. Isakson. And would  
18 move to admit the Exhibits S-1, S-2, S-3 at the  
19 conclusion of this cross-examination.

20 And at this time, I tender the witness.

21 JUDGE TALBOT: All right, thank you. Any  
22 objection to binding in the prefiled direct and  
23 rebuttal testimony of Mr. Isakson?

24 Okay. Hearing none, it's bound in.

25 (Direct and rebuttal testimony of David

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Isakson is bound into the record.)

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

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Case No. U-21859

In the matter of the application of  
**CONSUMERS ENERGY COMPANY**  
for Ex Parte Approval of Certain Amendments  
for Rate GPD.

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QUALIFICATIONS AND DIRECT TESTIMONY OF  
  
DAVID W. ISAKSON  
  
MICHIGAN PUBLIC SERVICE COMMISSION

June 12, 2025

**QUALIFICATIONS AND DIRECT TESTIMONY OF  
DAVID W. ISAKSON  
U-21859**

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1 Q. Please state your name, address, and current position.

2 A. My name is David W. Isakson (he/him/his). My business address is 7109 West Saginaw  
3 Hwy, Lansing, Michigan 48917. I am currently employed by the Michigan Public Service  
4 Commission (MPSC or Commission) in the Rates and Tariff Section of the Regulated  
5 Energy Division as a Departmental Analyst.

6 Q. Would you briefly describe your educational background?

7 A. I earned a B.S. in economics from Central Michigan University in 2008. In 2011, I  
8 completed an M.A. in economics at Central Michigan University.

9 Q. Have you attended any seminars or other training courses?

10 A. Yes. In August 2012, I completed the National Association of Regulatory Utility  
11 Commissioners (NARUC) Annual Regulatory Studies Program held at Michigan State  
12 University. I attended the AEIC Advanced Load Research Seminar in October 2012, and  
13 the Electric Cost of Service Study and Electric Utility Pricing courses hosted by EUCI in  
14 July 2019.

15 Q. What are your responsibilities in your current position?

16 A. I participate in rate, tariff amendment, reconciliation, integrated resource plan (IRP),  
17 special contract, *ex parte* tariff, and other cases under the supervision of the Rates and  
18 Tariff manager. My work involves performing electric rate design, gas rate design, and  
19 tariff analysis. My duties also involve performing research in special topics such as rate  
20 benchmarking, load research, demand response, and the economics of public utility  
21 regulation.

22 Q. Have you previously presented testimony in cases before the MPSC?

**QUALIFICATIONS AND DIRECT TESTIMONY OF  
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1 A. Yes, I have presented testimony in the following cases:

2	<u>MPSC Case</u>	<u>Company</u>	<u>Work Description</u>
3	U-17437	DTE Electric Company	PLD Transition Plan
4	U-17643	Consumers Energy Company	Gas Rate Design
5	U-17761	DTE Electric Company	PLD Trans. Reconciliation
6	U-17767	DTE Electric Company	Electric Rate Design
7	U-17999	DTE Gas Company	Gas Cost of Service Study
8	U-18014	DTE Electric Company	Electric Rate Design
9	U-18124	Consumers Energy Company	Gas Cost of Service Study
10	U-18322	Consumers Energy Company	Electric Rate Design
11	U-18424	Consumers Energy Company	Gas Cost of Service Study
12	U-18999	DTE Gas Company	Gas Cost of Service Study
13	U-20102	Consumers Energy Company	Electric TCJA Credit A
14	U-20103	Consumers Energy Company	Gas TCJA Credit A
15	U-20134	Consumers Energy Company	Electric Rate Design
16	U-20165	Consumers Energy Company	IRP- Demand Response (DR)
17	U-20287	Consumers Energy Company	Gas TCJA Credit B
18	U-20286	Consumers Energy Company	Electric TCJA Credit B
19	U-20309	Consumers Energy Company	TCJA Calculation C
20	U-20322	Consumers Energy Company	Gas Cost of Service Study
21	U-20471	DTE Electric Company	IRP - DR
22	U-20479	SEMCO Energy Gas Company	ASP Revenue
23	U-20561	DTE Electric Company	Electric Rate Design
24	U-20642	DTE Gas Company	Gas DR
25	U-20650	Consumers Energy Company	Gas DR, Tariffs
26	U-20940	DTE Gas Company	R&D Expense
27	U-20963	Consumers Energy Company	Electric Rate Design
28	U-21080	Consumers Energy Company	DR Reconciliation
29	U-21148	Consumers Energy Company	Renewable Natural Gas
30	U-21224	Consumers Energy Company	Electric Rate Design
31	U-21297	DTE Electric Company	Electric Rate Design
32	U-21389	Consumers Energy Company	Electric Rate Design
33	U-21540	Michigan Gas Utilities Corporation	Gas Cost of Service Study
34	U-21534	DTE Electric Company	Electric Rate Design
35	U-21585	Consumers Energy Company	Electric Rate Design
36			

37 Q. What is the purpose of your testimony?

38 A. The purpose of my testimony is to present the Michigan Public Service Commission

39 (MPSC or the Commission) Staff's (Staff's) recommendations regarding Consumers

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**QUALIFICATIONS AND DIRECT TESTIMONY OF  
DAVID W. ISAKSON  
U-21859**

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1 Energy Company's (the Company's) proposed tariff amendments for Rate GPD.

2 Q. Are you sponsoring any exhibits?

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

4 Exhibits:

5 S-1, "Staff's Proposed Rate GPD Large Load Customer Tariff Provision."

6 S-2, "Electricity Rate Designs for Large Loads: Evolving Practices and  
7 Opportunities."

8 S-3, "February 19, 2025 Order of the Commission in Indiana Cause No: 46097  
9 (Indiana Settlement)."

10 Q. How is your direct testimony organized?

11 A. I first provide background on the instant case by summarizing the Company's application  
12 and recommended tariff amendment provisions. Next, I discuss financial security and the  
13 risk of stranded assets. Following that discussion I outline activity in other states and  
14 review a recent large load customer tariff in Indiana. Finally, I provide Staff's specific  
15 recommendations regarding modifications of the Company's original tariff amendment  
16 proposal.

17

18 **Background**

19 Q. Why does the Company propose to amend its Rate GPD tariff for data center loads in  
20 excess of 100 MW?

21 A. The thesis statement for the Company's proposed amendment can be found in the direct  
22 testimony of Company witness Laura Connolly: "The Company must put tariff

**QUALIFICATIONS AND DIRECT TESTIMONY OF  
DAVID W. ISAKSON  
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1 provisions in place for data centers to protect other customers from stranded assets and  
2 increased costs should the data center load not materialize after resources are committed  
3 to serve them or the load is not in place for as long as expected.”<sup>1</sup> Staff agrees that  
4 customers with such large load pose a unique risk if that load is prepared for by the  
5 Company but not served for a period of time long enough to adequately recoup costs  
6 from that customer.

7 Q. What is the major concern with a sudden influx of large load customers?

8 A. For any single customer with a load large enough to significantly alter the costs faced by  
9 a utility, the Commission’s concern should be with what will happen if that load  
10 disappears before the customer can pay for its effect on the grid. Load growth, generally  
11 speaking, can be beneficial to the utility and to other customers because it grows the  
12 customer base and revenue generation. If that growth is moderate and diverse (i.e., it  
13 comes from several customer classes or from a variety of economic sectors), then load  
14 coming or going from many smaller customers is less likely to create a sudden, radical  
15 change to the Company’s cost drivers. Diverse load growth also is a hedge against that  
16 growth reversing. For example, in a scenario where load growth is diverse across  
17 economic sectors, if there is a downturn in any one sector the entirety of the expected  
18 load growth will not disappear necessarily. On the other hand, if the expected load growth  
19 is both far larger than can be accommodated by the existing grid and from a single  
20 customer or source, then there exists a single point of potential failure that could result in  
21 significant stranded assets. Essentially, concentrating load growth into a single customer

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<sup>1</sup> Direct testimony of Company witness Laura Connolly, page 4, lines 17-20.

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**QUALIFICATIONS AND DIRECT TESTIMONY OF  
DAVID W. ISAKSON  
U-21859**

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1 or industry increases the sensitivity of that load growth to outside factors. Ultimately  
2 however, customers with demand of the sizes contemplated by the Company's filing must  
3 be served as a utility customer, but that means protections should be well considered and  
4 put in place to mitigate any resulting spillover effects of serving that load.

5 Q. Could a data center customer, or any other large load customer, take service on Rate GPD  
6 right now?

7 A. Yes. There are currently no provisions in the Company's tariffs that would prevent a  
8 customer requiring service at such a high level of demand from signing a contract with  
9 the Company and taking service on Rate GPD. The only primary rate that data centers are  
10 explicitly barred from taking service on is the Company's economic development Rate  
11 LED.<sup>2</sup> As the Company points out in its application, this means that a customer could  
12 enter service and significantly increase the Company's current peak demand, and thus  
13 require substantial investments in generation capital, purchase power agreements,  
14 distribution infrastructure, and/or higher transmission expense to serve that load. In this  
15 scenario none of the Company's proposed protections in the Rate GPD tariff amendment  
16 would apply, potentially leaving other customers on the hook for recovery of the  
17 incremental costs to serve a data center or other large load customer if that customer exits  
18 service before sufficient revenue is generated to offset costs. The protections proposed by  
19 the Company, and modifications to the proposal made by Staff, are intended to mitigate  
20 the unique risk of large load customers by elevating the level of revenue security for  
21 those customers. The purpose of these protections is to not burden the Company or its

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<sup>2</sup> Company Rate Book, Sheet No. D-78.10.

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**QUALIFICATIONS AND DIRECT TESTIMONY OF  
DAVID W. ISAKSON  
U-21859**

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1 customers with stranded costs by holding large load customers to a more stringent  
2 guarantee of revenue generation.

3 Q. Could the risk of creating stranded assets occur when *other* customers leave service  
4 before generating revenue sufficient to cover their incremental cost of taking service?

5 A. Yes, but for large load customers the major difference is in scale. When a customer on  
6 Rate GPD which has less load than that contemplated by the proposed modifications exits  
7 service, one can expect that eventually the missing capacity burden will be replaced via  
8 regular load growth. Regular load growth here would mean that, while customers may  
9 leave, there are also new customers connecting to the system in their place. On balance,  
10 the effects of load growth (or decline) can be absorbed in base rates gradually because no  
11 single customer is likely to cause a significant shift in costs. Customers with a demand of  
12 100 MW or more are much rarer and thus less likely to be replaced by the load growth of  
13 other customers over the useful life of the assets put in place to serve those larger  
14 customers. This is evidenced by the fact that the Company does not currently serve any  
15 customers of that size.<sup>3</sup> There is also the matter of the diversity of loads over 100 MW  
16 when contemplating load growth that could absorb the capacity and attendant cost of  
17 serving such customers. There are simply not many industries or individual customers  
18 that could require that much capacity all at once, save for data centers. It is also unlikely  
19 that enough smaller customers would desire service to require that same capacity. The  
20 current GPD customer class is made up of customers from a variety of industries, such  
21 that a downturn in any one would not much affect the entire class. On the other hand, if

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<sup>3</sup> Direct Testimony of Company witness Laura Connolly, p 9, lines 15-16.

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**QUALIFICATIONS AND DIRECT TESTIMONY OF  
DAVID W. ISAKSON  
U-21859**

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1 interest and investment in artificial intelligence, for example, evaporates after the  
2 necessary infrastructure has been expanded to serve energy to data centers, then there is  
3 no obvious way in which other new customers would appear that would require the new  
4 capacity. This would leave existing customers and/or the utility with a tremendous  
5 amount of capacity that is no longer used and useful. So not only do large load customers  
6 expose the Company's system to greater costs, but also have a higher risk of stranding  
7 those costs than the existing customer base due to their uniquely high level of demand.

8 Q. What does the Company specifically propose in its proposed GPD tariff amendment?

9 A. The Company proposes to include a project proposal fee, a minimum contract term of 15  
10 years, a minimum billing demand of 80%, a one-time discretionary reduction in contract  
11 capacity, the ability to deny an increase to contract capacity over 1 MW, a financial  
12 security requirement, an exit fee, and annual reporting made to the Commission. The  
13 proposed tariff amendment would only be available to (or required of) data center  
14 customers with a load of 100 MW or more, and the tariff includes the definition of a data  
15 center customer.

16 Q. How do the Company's tariff amendment proposals compare to the existing Rate GPD  
17 tariff?

18 A. First, the Company proposes to set the minimum billing demand at 80% of contract  
19 capacity. Staff notes that current Rate GPD customers are subject to a minimum on-peak  
20 billing demand of 60% of their highest on-peak billing demand of the four preceding  
21 summer months.<sup>4</sup> This is to say that the Company's proposal is not entirely new, but

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<sup>4</sup> Company Rate Book, Sheet D-62.00.

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**QUALIFICATIONS AND DIRECT TESTIMONY OF  
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U-21859**

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1           instead at a higher level than exists by default for current, non-large load customers.  
2           Second, Rate GPD customers are currently required to have a written contract with the  
3           Company for a minimum term of one year. Again, the Company's proposal is similar to  
4           existing tariff provision, but for a longer term. Third, while the current Rate GPD tariff  
5           does not specifically mention allowing the Company to deny increases in contract  
6           capacity or billing demand, the tariff does state: "A new contract will not be required for  
7           existing customers who increase their demand requirements after initiating service, *unless*  
8           *new or additional facilities are required or service provisions deem it necessary.*"<sup>5</sup> A key  
9           difference between the Company's proposal for data center customers and the existing  
10          tariff is the ability to deny increases in contracted capacity under certain circumstances.  
11          Existing GPD customers can already increase their contracted capacity (i.e. demand  
12          requirements), but it may require a new contract with the Company if the circumstances  
13          require it.

14                 The remaining proposals concerning the project proposal fee, exit fee, financial  
15          security requirements, and annual reporting are all novel compared to the existing  
16          language for Rate GPD.

**Financial Security**

19    Q.     How does the Company's proposed tariff amendment address financial security?

20    A.     The Company's application describes financial security as the ability of the Customer to

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<sup>5</sup> Company Rate Book, Sheet D-69.00, emphasis added.

**QUALIFICATIONS AND DIRECT TESTIMONY OF  
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1 be “economically viable to pay the costs” of the investment required to meet their service  
2 needs.<sup>6</sup> The Company intends to ensure that data center customers are economically  
3 viable by including a provision in its proposed tariff amendment to authorize the  
4 Company, at its discretion, to require additional financial security (i.e., proof of economic  
5 viability) *including collateral up to the full projected cost of providing services for the*  
6 *term of the rate contract.* The provision further authorizes the Company to not be limited  
7 by the Company’s other authority to impose financial security requirements from the  
8 customer. The Company did not elaborate on the latter sentiment as to what those other  
9 financial security requirements may be.

10 Q. What are stranded assets and what risk do they pose to customers and the Company?

11 A. Stranded assets are those which are retired or no longer used and useful before the end of  
12 their useful life. For example, if a electric generation plant is retired before the end of its  
13 useful life, it is deemed a stranded asset. Customers are at risk of continuing to pay the  
14 undepreciated cost of the stranded asset in base rates when the asset is no longer used to  
15 provide service at the originally intended level. The utility is at risk if assets become  
16 stranded and its regulator deems the undepreciated costs are imprudent to remain in rates,  
17 so the utility shareholders must carry those costs.

18 Relevant to the instant case: stranded assets may occur if a large load customer  
19 such as a data center exits service before the assets used to serve them are fully  
20 depreciated and also go unused by the Company or other customers. Unlike a stranded  
21 asset deriving from a retired electric generation plant, which was likely used to serve the

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<sup>6</sup> Company Application p 5.

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1 many if not all power supply customers, a stranded asset resulting from a customer with  
2 demand over 100 MW leaving service early (i.e., with remaining undepreciated costs)  
3 may never have benefited other customers. So not only would the now stranded asset no  
4 longer be used and useful, but it may never have been used and useful to the remaining  
5 customer base. This is not to say that load growth from large load customers is always  
6 detrimental just because other customers do not cause those costs. If the large load  
7 customer continues to remain in service long enough, then their revenue contributions  
8 will make all customers no worse off.

9 Assets may become stranded through no fault of the Company nor the remaining  
10 customers. While this is possible to occur for a customer of *any* size, those customers  
11 contemplated by the Company in its filing would have an enormous impact on the  
12 customers, the Company, or both if they cause assets to become stranded. The Company  
13 mentions the risk of stranded assets throughout its application and direct testimony, and  
14 proposed provisions such as the exit fee and increased minimum billing demand in order  
15 to mitigate those risks.<sup>7</sup> Staff agrees that customers with demands greater than or equal to  
16 100 MW pose a unique and significant risk and that additional protections in the tariff are  
17 warranted to address the risk of stranded assets.

18 Q. What financial security measures are currently in place and how do they compare to what  
19 was proposed by the Company?

20 A. There are no specific financial security measures provisions currently in the tariff for  
21 Rate GPD, which the Company identified as the most competitive rate available for large

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<sup>7</sup> Company Application p 2. Direct testimony of Company witness Laura Connolly, p 11, lines 3-5.

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1 load customers and data centers. In the Extraordinary Facilities Requirements and  
2 Charges section of the Company's rate book it states that:

3 "The Company reserves the right to make special contractual arrangements as to  
4 the provision of necessary Service Facilities, duration of contract, minimum bills,  
5 require upfront deposit and other service conditions, including, but not limited to,  
6 when the customer's load requirements are of a short-term duration, temporary or  
7 a transient nature, or if in the opinion of the Company, the customer does not have  
8 acceptable credit history or represents an unacceptable credit risk or other reasons  
9 within the sound discretion of the Company."

10  
11 The Company's tariff amendment proposal, which allows the Company to require  
12 collateral for up to the entirety of the projected cost of providing service for the term of  
13 the rate contract, represents the maximum amount of financial security needed to offset  
14 potential stranded assets. This means that all other customers would never be at risk of  
15 paying for a stranded asset, because said asset has already had funds set aside to cover its  
16 costs. Again, the Company's proposed tariff authorizes collateral up that amount, but  
17 allows complete discretion to the Company in how much collateral it will require for each  
18 individual large load customer.

19 Q. How should the Commission approach its decisions to approve various tariff provisions  
20 related to financial security?

21 A. The Commission is likely to see proposals, including from Staff, between the extremes of  
22 the currently approved tariffs and the authority requested by the Company's proposed  
23 tariff amendment. Staff notes that the Commission may approve whatever tariff  
24 provisions it deems appropriate to provide a reasonable level of financial security while  
25 balancing against the risk of a creating stranded asset. Those provisions may take the  
26 form of collateral requirements, but may also require the large load customer to regularly

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1 prove its financial security in other ways, such as via letters of credit or audited financial  
2 reports. Provisions to address financial security may put some burden on large load  
3 customers to ensure their solvency but those provisions are reasonable in order to protect  
4 the Company and other customers from the significant potential cost of stranded assets.  
5 Staff also urges the Commission to consider that, even after it determines appropriate  
6 tariff provisions to ensure financial security of large load customers (e.g., the customer  
7 shows an adequate level of revenue on its balance sheet), market conditions may result in  
8 these customers exiting service before the end of the useful life of assets needed to serve  
9 them. For example, if the market for artificial intelligence in products and services never  
10 matures into a viable, sustainable business model, then a data center customer may exit  
11 service and create a stranded asset due to forces beyond the large load customer, the  
12 Company, and especially all other customers.

13 Q. Could giving the Company complete authority to determine the financial security and  
14 thus collateral or other requirements to ensure that security lead to complications later?

15 A. Yes. As previously explained, the Company's proposed tariff amendment would give the  
16 Company total authority to require additional financial security up to the total cost to  
17 serve the individual large load customer. This implies that the Company is solely  
18 responsible for determining the risk that a large load customer would pose to all other  
19 customers should the large load customer result in a stranded asset. As discussed later in  
20 this direct testimony, the Commission, via its broad ratemaking authority, determines the  
21 effects of setting rates or approving tariffs that would affect the rates of other customers.  
22 By its ratemaking authority the Commission may also find that the Company's

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1 determination of financial security was imprudent and thus the Company is not eligible to  
2 recover stranded asset costs should they materialize. In other words, under the  
3 Company's proposal it likely desires to both be assured that the new large load customer  
4 will not create a stranded asset and that if it does that the Commission will allow its  
5 recovery. The Company must therefore balance the risk of creating a stranded asset with  
6 the Commission's likelihood of determining that risk to be prudent. This results in the  
7 Company confronting uncertainty on two fronts: whether or not the customer will create  
8 a stranded asset despite guarantees of financial security and whether or not the  
9 Commission will allow recovery of the stranded asset.

10 Q. How else can the Commission consider the spectrum of risk associated with guaranteeing  
11 financial security and the risk of a stranded asset?

12 A. To restate my previous discussion: the current Rate GPD tariff represents a minimal  
13 amount of financial security and maximal risk for creating a stranded asset. On the other  
14 hand, the Company's proposed tariff allows for a maximal amount of financial security  
15 and minimal risk to create a stranded asset that would affect consumers, *but only at the*  
16 *discretion of the Company*. Any determination by the Company that some amount less  
17 than the full cost to serve the customer should be required as collateral would likely result  
18 in the Company requesting to be allowed to recover that portion of the stranded asset  
19 from other customers.

20 Q. If the Commission determines that the Company should be authorized to require  
21 additional financial security and be allowed to require collateral up to the project cost of  
22 providing service to the large load customer, then how should current customers be

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1           assured that the Company will make prudent decisions?

2    A.     As previously discussed, under the Company's current tariff amendment proposal it must  
3           balance the two distinct uncertainties of the how likely a stranded asset will be created  
4           and the likelihood of the Commission allowing recovery of that stranded asset. Staff  
5           proposes to simplify the Company's calculation in exchange for the authority requested in  
6           its tariff amendment: Staff recommends that the Commission not allow any recovery of  
7           stranded assets resulting from a customer's exit from service under the data center<sup>8</sup> tariff.  
8           The Company would be free to set an appropriate financial security requirement on the  
9           customer while knowing full well that any downside risk of the customer's exit from  
10          service will not be recoverable in regulated rates.

11   Q.     What does Staff recommend?

12   A.     Staff recommends that if the Commission approves the Company's requested authority to  
13          determine the methods of financial security of potential large load customers (rather than  
14          Staff's alternative discussed later in this testimony), that such authority be conditional on  
15          the Company taking complete cost responsibility for any resulting stranded assets. This is  
16          appropriate because in return the Company would be given its requested broad authority  
17          to implement to ensure financial security with complete knowledge that it would take on  
18          all of the risk associated with determining its own financial security preferences. Second,  
19          other customers not served under this provision are in no way responsible for the risk of  
20          creating a stranded asset because they are independent of the decisions made by the  
21          Company and large load customer. It is through no fault of non-large load customers for

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<sup>8</sup> Or any alternative name the tariff provision is given at the conclusion of this case.

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1 any potential failures of large load customers to estimate the future of their business  
2 prospects in Michigan, nor the Company's potential underestimation that the large load  
3 customer will remain in service long enough to pay its costs. As explained in this direct  
4 testimony, the likelihood and the potential impact of stranded assets is unique to large  
5 load customers. As an alternative, the Commission could warn the Company that any  
6 such impact will be subject to a presumption of imprudence if requested, notifying the  
7 Company of the increased burden it would impose on requests for collection of such costs  
8 from other customers that only exist as a result of the Company's decisions. Staff's  
9 proposals to modify the Company's tariff amendment, discussed later in this direct  
10 testimony, will provide alternatives that will balance risks among existing customers,  
11 future large load customers, and the Company, while also allowing some flexibility in  
12 mitigating the risk for all parties. Namely, Staff's modifications will clearly define  
13 collateral responsibility and methods for providing that collateral, which the Company's  
14 proposed tariff amendment does not.

**Other States**

17 Q. Are other jurisdictions addressing adding data center load to their service territories?

18 A. Yes, there are many ongoing regulatory proceedings and conversations occurring across  
19 the country on the topic. Many of the Commission's peers at other state-level public  
20 utility regulator offices are currently considering tariff amendments and contract  
21 provisions for serving data center load. Those cases contain similar proposals to those  
22 made by the Company, and Staff relied in-part on the records in those cases to develop its

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1 proposals in the instant case. Like in Michigan, the majority of the data center tariff cases  
2 are currently on-going and have yet to be decided by regulators. However, Staff identified  
3 some examples of final orders or decisions made by out-of-state regulators. Staff Exhibit  
4 S-2 is a policy brief produced by Lawrence Berkeley National Lab (LBNL) titled  
5 “Electricity Rate Designs for Large Loads: Evolving Practices and Opportunities” which  
6 outlines the regulatory activities concerning data center and other large load customer  
7 tariffs across the country.<sup>9</sup> This short document provides specific examples of tariff and  
8 contract provisions being considered by regulators to address the unique concerns posed  
9 by serving large load customers such as data centers. Notably, two of the examples  
10 highlighted by LBNL are from the neighboring states of Ohio and Indiana. The relevant  
11 case in Ohio still pending before its Commission, but Indiana regulators recently  
12 approved a large load customer tariff.

13 Staff would like to focus on the Indiana Utility Regulatory Commission’s  
14 approval of a settlement agreement concerning Indiana Michigan Power Company’s  
15 Industrial Power Tariff on February 19, 2025 (Indiana Settlement).<sup>10</sup> The Indiana  
16 Settlement is a reasonable point of comparison because it is similar to the Company’s  
17 proposal in many respects, is for a neighboring jurisdiction, and applies to a utility that  
18 the MPSC also has jurisdiction over for its Michigan service territory. The Indiana Utility  
19 Regulatory Commission’s order and approved settlement agreement are provided as Staff  
20 Exhibit S-3. Note that the LBNL policy brief was published in January 2025. The Indiana

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<sup>9</sup> <https://emp.lbl.gov/publications/electricity-rate-designs-large-loads>

<sup>10</sup> <https://iurc.portal.in.gov/docketed-case-details/?id=b8cd5780-0546-cf11-8409-001dd803817e>

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1 Settlement is listed as “pending approval” in that document because it was approved  
2 shortly after the policy brief’s publication.

3 Q. Please summarize the Indiana Settlement and how it compares to the Company’s  
4 proposals.

5 A. Unlike the Company’s proposal, the Indiana Settlement does not limit the new provisions  
6 specifically to data centers. Instead, the new provisions of the Indiana Settlement would  
7 apply to *any* large load customers with a contract capacity greater than or equal to 70MW  
8 at a single site or 150 MW in aggregate. The Company’s proposed tariff amendment  
9 would apply to data centers with demand of 100 MW or greater, neatly within the  
10 minimums set in the Indiana Settlement. The Indiana Settlement requires a contract term  
11 of 12 years, whereas the Company proposes 15 years to better coincide with typical  
12 purchase power agreements of 15 to 25 years.<sup>11</sup> Regarding the minimum billing demand,  
13 the Indiana Settlement and the Company’s proposal are both set to 80% of contract  
14 capacity. Both the Company’s proposal and the Indiana Settlement require an exit fee  
15 consisting of the minimum bill amount for the remainder of the customer’s contract. The  
16 Indiana Settlement allows the customer to terminate the contract or reduce its contract  
17 capacity by up to 20% after the first 5 years of the contract term, however, and thus  
18 reduce its exit fee by a maximum of 20%. In this scenario the customer must notify the  
19 utility at least 42 months prior to the beginning of the PJM planning year when the  
20 contract would be terminated. Finally, both the Indiana Settlement and the Company’s  
21 proposal allow for up to a 5 year ramp up period for customers to use while commencing

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<sup>11</sup> Direct Testimony of Company witness Laura Connolly, p 6, line 6.

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1           their new service.

2                     One major difference from the Indiana Settlement and the proposal made by the  
3           Company is the customer’s collateral obligation. The Indiana Settlement requires the  
4           customer to provide 2 years-worth of revenue equal to the customers non-fuel bill, which  
5           is recalculated annually. The tariff from the Indiana Settlement allows for exemptions to  
6           the collateral requirement if the customer meets specific credit worthiness measures also  
7           explicitly described in the tariff. The Company’s proposed tariff authorizes the Company  
8           to “require additional financial security from Data Center customers... including other  
9           collateral in amounts up to the projected cost of providing service under the term of the  
10          rate contract.”<sup>12</sup> This, in effect, gives the Company near complete autonomy on how to  
11          determine the creditworthiness of and collateral requirements for potential customers, as  
12          previously discussed.

13   Q.     Does the Indiana Settlement include other items not reflected in the approved tariff for  
14          Indiana Michigan Power Company?

15   A.     Yes, several. The Indiana Settlement, like the Company’s proposal, includes annual  
16          reporting requirements. There are additional components of the Indiana Settlement that  
17          are ancillary to the approved tariff and specific to the discussions occurring in Indiana.  
18          Therefore, Staff will leave out those additional items from this discussion for the sake of  
19          brevity.

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<sup>12</sup> Company Exhibit A-1, page 3.

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**Staff's Modifications**

1  
2 Q. What does Staff recommend regarding the Company's proposed tariff amendment?

3 A. Staff proposes the following revisions to the Company's proposed amendments to the  
4 tariff for Rate GPD, which I will explain in the remainder of my direct testimony:

- 5 1. Remove the definition of "Data Center" from the tariff and update the availability  
6 of the new provision to apply to all new large load customers with a load of  
7 greater than or equal to 100 MW.
- 8 2. Include a more detailed, transparent definition of the collateral requirement and  
9 acceptable forms of payment. Define the collateral amount to be equal to the exit  
10 fee.
- 11 3. In the event of a large load customer's request to increase or decrease its  
12 contracted capacity, require the Company to make an ex parte showing of no harm  
13 to other customers.
- 14 4. Require the Company to make every effort to reduce the exit fee with offsetting  
15 revenue.
- 16 5. Require the large load customer to notify the Company at least 3 years prior to an  
17 expected capacity reduction or exit from service.
- 18 6. Do not allow the customer to reassign its capacity obligation to another entity  
19 without approval by the Company.
- 20 7. At the conclusion of the large load customer's contract term require the contract  
21 to be extended for 3 years, recurring at every completion of the previous contract  
22 term, with all the tariff provisions remaining in effect, absent action by the

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1 customer.

2 8. Require the Company to reconcile the project proposal fee to actual costs after  
3 they have been incurred and to return or collect any difference by the end of the  
4 ramp-up period.

5 9. Require the exit fee to apply during the ramp-up period.

6 Staff provides its recommended tariff in Exhibit S-1.

7 Q. Is it appropriate to identify data center customers specifically?

8 A. No. The Company argues that data centers represent a unique load due to their size and  
9 also lower relative barriers to entry and exit from service. The Company theorizes that it  
10 would be easier for a data center customer to exit service compared to traditional large  
11 load customers in industries such as manufacturing because data centers do not rely on  
12 extensive supplier networks nor do they employ many workers despite their reliance on  
13 significant energy resources.<sup>13</sup> Typically, rates or tariff provisions are not targeted to  
14 specific customer end-uses, unless that end-use results in a unique nature of service from  
15 the system, such as for metal melting or electric vehicle charging. The Company correctly  
16 notes, as does this direct testimony, that data centers can be unique in their sheer scale  
17 compared to other load. In this instance it is the size of the customer, rather than the  
18 customer's product or service produced, that is a unique factor and thus Staff  
19 recommends removing the definition of data centers in the availability section of the  
20 Company's tariff amendment. Staff agrees that the 100 MW threshold is appropriate,  
21 considering the Company's direct testimony regarding the inquiries received for data

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<sup>13</sup> Direct Testimony of Company witness Laura Connolly, p 9, line 21 through p 10, line 12.

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1 center service. Staff prefers the term used in the Indiana Settlement of “large load  
2 customers” in place of the Company’s use of “Data Center customers.” In the end, *any*  
3 unexpected exit from service of a customer with 100 MW or more of demand could be  
4 detrimental enough to existing customer rates that the protections and provisions  
5 recommended by Staff (or those the Company proposed with which Staff agrees) should  
6 be applied.

7 Q. Is the Company’s proposed language regarding financial security appropriate?

8 A. No. As I discussed previously the Company would be solely responsible for determining  
9 the amount of collateral and creditworthiness of the customer. That is unfair to both the  
10 large load customer, who would not have an obvious recourse to argue against any such  
11 collateral obligation made by the Company, and to the Company, who would bear the  
12 entire responsibility of guaranteeing that a large load customer had the financial resources  
13 to pay its bills or the exit fee. Staff understands that the Company currently performs  
14 financial analysis of the creditworthiness of many customers, but again, the size of  
15 potential large load customers necessitates further scrutiny because of their potential  
16 impact on rates. Staff recommends that certain language used in the Indiana Settlement  
17 for collateral requirements be used in place of the Company’s second paragraph of the  
18 availability section of its tariff amendment proposal.

19 Specifically, what must be determined are the collateral amount and acceptable  
20 forms payment of the collateral. Staff recommends that the collateral amount should be  
21 equal to the exit fee. The exit fee as proposed by the Company is the minimum billing  
22 demand (80% of contract capacity) times the remaining months of the customer’s

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1 contract. As the customer progresses through the term of their contract the exit fee, and  
2 thus Staff's proposed collateral amount, will decrease. Under the Company's proposal it  
3 may choose to require up to the entire cost to serve the customer over the rate contract  
4 term or any lower amount in collateral. Tying the collateral requirement to a known value  
5 obviates the need for the Company to independently determine the financial security of  
6 each customer in order to determine a collateral amount. Setting the collateral  
7 requirement to less than the full expected value of the rate contract term also recognizes  
8 that it is an actual burden born by large load customers in providing the collateral, which  
9 would be unique among GPD customers. Finally, matching the collateral requirement to  
10 the exit fee would match what the customer would already actually pay should they leave  
11 service prematurely, which also represents the minimum amount they would be  
12 responsible for as a continuing customer. Under the Company's proposal the large load  
13 customer could be required to submit *more* collateral than they would pay via the exit fee  
14 or continuing as a customer under the minimum requirements of the proposed tariff.

15 According to the LBNL policy brief a pending settlement agreement for Ohio  
16 Power's Data Center Tariff requires collateral equal to 50% of the total minimum charges  
17 if the customer does not meet a certain level of credit rating or cannot show an audited  
18 balance sheet greater than 10 times the collateral requirement.<sup>14</sup> This represents a  
19 compromise position between parties in that out-of-state case, which may appeal to the  
20 Commission as an option for consideration. Therefore, in the alternative, the Commission  
21 may find that a collateral requirement of *half* the remaining exit fee (i.e., 7.5 years at the

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<sup>14</sup> Exhibit S-2, p 5.

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1 beginning of the initial contract term) to be a reasonable compromise between financial  
2 security and impediment to a customer taking service on the proposed Large Load  
3 Customer Provision.

4 Staff's recommended collateral requirement would be recalculated annually as it  
5 declines over the term of the contract, with annual repayment to the customer when  
6 appropriate if they choose to pay the collateral in cash. This should make creating the  
7 financial instruments necessary to provide collateral to the Company easier to create  
8 because they would simply follow a schedule predetermined by the rate contract.

9 Regarding the method of providing the collateral requirement Staff recommends  
10 the following language from the Indiana Settlement be added to the Company's proposed  
11 tariff amendment:

12 "The Collateral Requirement must be provided in one or more of the following  
13 forms:

14  
15 a. A guarantee from the ultimate parent or a corporate affiliate of the Large Load  
16 Customer for the full Collateral Requirement, so long as the guarantor has both  
17 (a) a credit rating of at least A- from S&P and A3 from Moody's and (b) liquidity  
18 greater than ten times the Collateral Requirement; or

19  
20 b. A standby irrevocable letter of credit ("Letter of Credit") for the full Collateral  
21 Requirement. The Letter of Credit must be issued by a U.S. bank or the U.S.  
22 branch of a foreign bank, which is not affiliated with the Large Load Customer or  
23 its guarantor, with a Credit Rating of at least A- from S&P and A3 from Moody's.  
24 Such security must be issued for a minimum term of 360 days. The Large Load  
25 Customer must cause the renewal or extension of the security for additional  
26 consecutive terms of 360 days or more no later than 30 days prior to each  
27 expiration date of the security. If the security is not renewed or extended as  
28 required herein, the Company will have the right to draw immediately upon the  
29 Letter of Credit and be entitled to hold the amounts so drawn as security. The  
30 Letter of Credit must be in a format acceptable to and approved by the Company;  
31 or  
32

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1 c. Cash for the full Collateral Requirement.”<sup>15</sup>

2  
3 Q. How does the language from the Indiana Settlement provide the Company and large load  
4 customer greater transparency than the Company’s proposal?

5 A. Relying on the Indiana Settlement language for methods to meet the collateral  
6 requirement gives the customer three options that are explicit in the tariff, and thus not  
7 solely determined by the Company. Option B from the Indiana Settlement has the added  
8 protection of relying on the further scrutiny of the banking system to determine the  
9 creditworthiness of large load customers, a process with which that industry is quite  
10 familiar. The Indiana Settlement, and other large load customer tariff proceedings across  
11 the country, includes some exemptions from the collateral requirement for customers that  
12 can show sufficient revenues or have specific credit ratings themselves. Staff does not  
13 recommend including collateral exemptions such as these because they are less firm  
14 forms of guarantee considering the amount of collateral expected, and would require  
15 additional auditing requirements that could be burdensome to the Company and customer.  
16 Exemptions from collateral obligations also would not treat all large load customers  
17 equally depending on the industry, corporate make-up, or other organizational  
18 dissimilarities. Requiring collateral from all customers under the same metrics proposed  
19 by Staff will reasonably apply the same level of financial security for all large load  
20 customers.

21 Q. Is it appropriate for the Company to have sole discretion to determine when other  
22 customers would be affected by change in a large load customers contracted capacity?

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<sup>15</sup> Staff Exhibit S-3, page 73.

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1 A. No. It is the prerogative of the Commission to make such a determination. Therefore,  
2 Staff recommends that the Company be required to submit an ex parte filing to the  
3 Commission seeking approval to amend a large load customer's contracted capacity. The  
4 Commission is solely responsible for determining the prudence of utility spending, or in  
5 this case a reduction in revenue, in regard to the effect on customer rates. Any approved  
6 change to contract capacity would also necessarily affect the exit fee and collateral  
7 requirement. Further, the instant case began as an ex parte filing which the Commission  
8 subsequently converted to a fully contested case. Any future ex parte filing regarding  
9 changes to contract capacity of large load customers would likewise be reviewable by  
10 intervenors, who could petition the Commission for conversion to a contested case.

11 Q. What additional information should be included in the ex parte showing no harm to other  
12 customers when a large load customer reduces its contract capacity or exit service?

13 A. The ex parte filing should confirm that other customers will not be made to pay for any  
14 negative effects the reduction in load has on transmission expense. If a large load  
15 customer reduces its contract capacity or exits service, then other customers should not be  
16 burdened with paying for transmission service for the missing load. Staff is not only  
17 concerned about remaining customers having to pay for stranded assets of the retail  
18 utility, but also how stranded investment in the transmission system may be allocated to  
19 the Company or other customers.

20 Q. Should the Company be required to attempt to mitigate the exit fee as much as prudently  
21 possible?

22 A. Yes. While imposing an exit fee and collateral requirement on large load customers will

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1 work to protect against the possibility of stranded assets or other unrecoverable costs,  
2 there may be ways that the Company can reduce the exit fee by generating offsetting  
3 revenue. For example, if the Company purchased capacity on the wholesale market to  
4 supply the large load customer and that customer exits service, then the Company may be  
5 able to sell that now unused capacity back on the market or use it to serve other new or  
6 existing customers in need of capacity. This would generate revenue that the former large  
7 load customer would not need to contribute and keep existing customers rates unaffected.  
8 When combined with Staff's next recommendation, the Company should have adequate  
9 time to find potential offsetting revenues to reduce the exit fee.

10 Q. Why should large load customers be required to notify the Company at least 3 years prior  
11 to a capacity reduction or exit from service?

12 A. Because of the large size of the customer, as described variously throughout this direct  
13 testimony, the Company may require significant time to incorporate such large changes to  
14 its load. For example, the Company will have to work to reduce the exit fee for the large  
15 load customer, as well as incorporate the reduction in load into its Integrated Resource  
16 Plan, which is evaluated by the Commission at least every 5 years. Should the Company  
17 recommend or agree to a shorter notification period for reductions in contract capacity  
18 then Staff would consider the Company's position on a reasonably appropriate timeframe.

19 Q. Why should a large load customer not be allowed to defer its contract capacity to another  
20 entity without approval by the Company?

21 A. Reassigning contract capacity by large load customers to, for example, a subsidiary  
22 company or business partner, could potentially negate the protections offered by the

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1 collateral and exit fee provisions of the proposed tariff. Staff recommends that if the  
2 Company is notified and allows for reassigning a large load customers contract capacity  
3 that all the same provisions in the proposed tariff amendment continue to apply to the  
4 new entity, and that the contract provisions be required to be reexamined for  
5 appropriateness and applicability to the new assignee, with changes allowed for as  
6 necessary.

7 Q. Why should the large load customer's contract be extended for 3 years at its conclusion  
8 and every 3 years after absent customer action?

9 A. This is to ensure that the provisions detailed in Staff's proposed modifications of the  
10 Company's proposed tariff amendment continue to provide protections to other  
11 customers. At the conclusion of the large load customer's initial 15 year contract any  
12 change to contract capacity of the size contemplated by the tariff amendment would still  
13 create significant effects on the Company's planning process. The 3-year extension would  
14 keep in place the aforementioned notification requirement. The truncated contract term  
15 would also maintain a lower exit fee and collateral requirement for the customer (i.e.  
16 maximum 3 years of the minimum bill for the exit fee and collateral requirement.)  
17 Given that the exit fee and collateral requirement would otherwise expire by the terms of  
18 the initial contract, and theoretically the initial costs of serving the customer would be  
19 covered thereby, the Commission may consider the relative reasonableness of requiring  
20 collateral and exit fees for evergreen contract extensions in that context.

21 Q. Why should the Company be required to reconcile the project proposal fee to actual  
22 costs?

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1 A. By the Company's admission, the project proposal fee is intended to allow the Company  
2 to "focus on those prospective customers that are most serious about investing in  
3 Michigan."<sup>16</sup> Given the number and type of requests received by the Company  
4 concerning new data center load it is appropriate to create a minor barrier to entry in  
5 order to filter down the pool of applications. Also given the Company's testimony that the  
6 project proposal fee would be based on *estimated* costs it is appropriate to reconcile to  
7 actual costs when they become known. Staff's recommendation ensures that the  
8 Company, and thus its existing customers, do not pay for speculative work that would not  
9 reasonably lead to actual customers taking service, but also that those eventual customers  
10 are charged appropriately for the work they commissioned from the Company. Because  
11 the project proposal fee is at least in part intended to deter spurious requests it is  
12 reasonable to only allow the reconciliation to take place for large load customers that  
13 eventually take service from the Company. For this reason Staff recommends that the  
14 reconciliation of the project proposal fee to actual costs should take place after the large  
15 load customer has signed its contract with the Company.

16 Q. Why should the exit fee apply during the ramp up period?

17 A. The Company's proposed tariff amendment does not clarify whether the exit fee would  
18 apply during the ramp up period. However, during the ramp up period the Company will  
19 make investments necessary to serve the customer when the contract term begins. The  
20 purpose of the exit fee is to shelter other customers from outlays made by the Company  
21 for load that does not materialize, so it stands to reason that the exit fee should apply any

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<sup>16</sup> Direct Testimony of Company witness Laura Connolly, p 8, lines 18-19.

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1 time the Company is investing to serve the large load customer in the future. If Staff's  
2 recommendation to require the Company to mitigate the exit fee as much as possible is  
3 approved, then applying the exit fee to the ramp up period could prevent it from  
4 becoming onerous to the large load customer.

5  
6 **Recommendations Summary**

7 Q. Please summarize your recommendations.

8 A. Staff recommends the Commission approve Staff's modifications to the Company's Rate  
9 GPD tariff amendment as explained in this direct testimony and found in Staff Exhibit S-  
10 1. If the Commission rejects Staff's modifications regarding collateral requirements and  
11 approves the Company's provision authorizing the Company to require collateral in  
12 amounts up to the projected total cost of providing service to the customer for the term of  
13 the rate contract, then Staff recommends that the Company also be required to agree that  
14 any stranded costs resulting from large load customers exiting service shall not be  
15 requested to be recovered from other customers in rates, or strongly caution the Company  
16 would need to overcome a presumption of imprudence to recover the costs.

17 Q. Why are Staff's recommendations appropriate?

18 A. Staff's modifications to the Company's proposed tariff amendment for Rate GPD would  
19 increase the certainty of generating sufficient revenue from large load customers to keep  
20 other customers unaffected by any potential loss of load. Many of the changes to the tariff  
21 are simply more stringent standards than already exist, such as higher minimum billing  
22 demand. It is important to remember that large load customers that continue to remain in

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1 service will not actually pay higher costs than their peers on Rate GPD due to these  
2 proposed provisions. Rather, because those customers represent a higher level of risk and  
3 impact on Company costs, it is appropriate to require more certainty of their revenue.  
4 Requiring a long contract term, collateral, and exit fee would give extra assurance that the  
5 Company could recover enough revenue to mitigate rate impacts for other customers.  
6 Creating notification requirements allows the Company to plan for changes in service.  
7 Allowing the large load customer to meet collateral requirements in multiple ways and  
8 requiring the Company to keep the exit fee low provides a reasonable amount of  
9 flexibility in taking service under the new provision.

10 Q. Does this conclude your direct testimony?

11 A. Yes, it does.

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

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Case No. U-21859

In the matter of the application of  
**CONSUMERS ENERGY COMPANY**  
for Ex Parte Approval of Certain Amendments  
for Rate GPD.

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REBUTTAL TESTIMONY OF  
DAVID W. ISAKSON  
MICHIGAN PUBLIC SERVICE COMMISSION

July 9, 2025

**REBUTTAL TESTIMONY OF  
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1 Q. Are you the same David W. Isakson that filed direct testimony on behalf of the Michigan  
2 Public Service Commission (MPSC) Staff (Staff) in the instant case?

3 A. Yes, I am.

4 Q. What is the purpose of your rebuttal testimony?

5 A. My rebuttal testimony will address certain proposals made by the Data Center Coalition  
6 (DCC), (MNSC), and the Attorney General (AG). In the following discussion I will refer  
7 to the Company's proposed Data Center provision, and the intervenors' recommendations  
8 about said provision, as the large load customer (LLC) provision, which I described in  
9 my direct testimony.

10 Q. What is Staff's response to DCC witness Justin Bieber's analysis of transmission revenue  
11 and transmission revenue requirement?<sup>1</sup>

12 A. Staff appreciates that DCC took the time to analyze how revenue from customers may go  
13 towards offsetting that individual customer's costs by focusing on transmission.  
14 However, like with customers on any rate it is difficult to impossible to directly tie one  
15 customer with their specific cost to serve. The whole point of the cost of service study  
16 exercise is to allocate system costs to customer classes, and not to individual customers.  
17 Imprecise rates (i.e. not tailored to the individual) are a *good* thing, because it causes  
18 rates to change gradually over time. This saves the customer from financing each and  
19 every upgrade, replacement, or change to their specific service as they occur. Customers  
20 making contributions in aid of construction (CIAC) must pay directly for their costs for  
21 line extensions, but that is only after an allowance is applied. That allowance is also

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<sup>1</sup> Direct Testimony of DCC witness Bieber, p 23, line 10 through p 32, line 4.

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1           imprecise because it essentially assumes that it will take some close-enough amount of  
2           time for the customer to generate revenue to be on-par with similar customers already  
3           paying base rates. Staff’s discussion here is to highlight that DCC’s analysis does not  
4           imply that there is a right answer for how much revenue certainty should be required  
5           from LLCs, but rather that there is a scale on which the Commission should judge the  
6           riskiness of customers requiring so much investment with how much revenue they should  
7           be guaranteed to provide. Rather than quibble with the details of DCC’s analysis, Staff  
8           instead reminds the Commission that there are many levers on which it can lean to  
9           increase or decrease the amount of risk faced by existing customers if LLC load fails to  
10          remain in service. In fact, DCC witness Bieber agrees that it is not necessary for the  
11          Company to recover the entire cost of incremental investment through minimum billing  
12          demand.<sup>2</sup> Instead the Commission’s focus should be weighing the risk of load loss with a  
13          reasonable amount of revenue guarantee.

14   Q.    Is it appropriate to limit the LLC provision based on load factor?

15   A.    No. AG witness Michael Deupree<sup>3</sup> and MNSC witness Caroline Palmer<sup>4</sup> both propose to  
16          limit the availability of the Company’s proposed tariff amendment to customers with a  
17          load factor of at least 80% and 75%, respectively. As explained by Staff in my direct  
18          testimony, the new tariff provision should be aimed at customers with very large, new  
19          load, which is what makes them unique customers.<sup>5</sup> While a data center customer may

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<sup>2</sup> Direct Testimony of DCC witness Bieber, p 32, lines 5-9.

<sup>3</sup> Direct Testimony of AG witness Deupree, p 12, line 16 through p 13, line 2.

<sup>4</sup> Direct Testimony of MNSC witness Palmer, p 9, lines 7-13.

<sup>5</sup> Direct Testimony of Staff witness Isakson, p 20, line 8 through p 21, line 6.

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1 generally have a higher load factor, it is not necessarily what sets them apart as a type of  
2 customer that requires greater financial scrutiny and revenue security. MNSC witness  
3 Palmer was confused as to why the Company proposed a minimum billing demand of  
4 80% but also not require a minimum load factor for the LLC provision.<sup>6</sup> The purpose of  
5 the higher minimum billing demand is to guarantee extra revenue certainty from the LLC,  
6 and not necessarily to match the customer's actual load factor. Indeed, if the LLC's load  
7 factor is expected to be 90%<sup>7</sup>, then adding a minimum requirement to the provision is not  
8 necessary and may disqualify LLCs that *should* take service on the provision, thus  
9 enabling the customer protections desired by the Company, Staff, and intervenors. For  
10 this reason, the availability of the Company's proposed tariff provision should not be  
11 limited by load factor.

12 Q. AG witness Deupree recommends that the Company define its proposed ramp up period  
13 and to include in that definition that the ramp up period conclude "when the data center  
14 customer in question's monthly peak demand equals or is greater than the minimum  
15 billing demand under its contract with the Company."<sup>8</sup> How may this proposal become  
16 problematic?

17 A. If the LLC's demand never fully reaches its initial contract capacity, then the customer  
18 could remain in the ramp up period indefinitely. If the LLC never reaches its minimum  
19 billing demand then it will never be subject to the various safeguards for other customers  
20 advocated for by the Company, Staff, and the AG. In this hypothetical that means that the

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<sup>6</sup> Direct Testimony of MNSC witness Palmer, p 12, lines 8-10.

<sup>7</sup> Direct Testimony of MNSC witness Palmer, p 12, lines 10-12.

<sup>8</sup> Direct Testimony of AG witness Deupree, p 14, lines 4-6.

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1           initial request for contract capacity was incorrect and should therefore be adjusted in  
2           order for the Company to be able to adequately plan for the correct amount of load. For  
3           this reason, the Commission should reject the AG’s proposal regarding the ramp-up  
4           period and instead approve the Company’s proposal to negotiate the ramp-up period with  
5           the customer via its rate contract for a maximum of 5 years. Staff does not take issue with  
6           the AG’s recommendation to further define the term “ramp up period” as long as its  
7           conclusion is not defined according to the AG’s other recommendation.

8    Q.     Does this conclude your rebuttal testimony?

9    A.     Yes, it does.

1 JUDGE TALBOT: I guess, let's start with  
2 the attorney general.

3 Go ahead, Mr. Wollenzien.

4 MR. WOLLENZIEN: Thank you, your Honor.  
5 That sounded great to me. Thank you.

6 CROSS-EXAMINATION

7 BY MR. WOLLENZIEN:

8 Q. Good morning, Mr. Isakson.

9 A. Good morning.

10 Q. Nice to meet you. So I wanted to start off just  
11 talking a little bit briefly about your background.

12 You worked with the Michigan Public Service  
13 Commission, correct?

14 A. Yes.

15 Q. And about how long have you been working there?

16 A. Beginning the 2011, so about 14 years.

17 Q. Okay, 14 years. And from your résumé it looks like  
18 you worked on a number of Consumers Energies' electric  
19 rate cases, right?

20 A. That's correct.

21 Q. And your role in those cases has at times involved  
22 electric rate design, correct?

23 A. Yes.

24 Q. And it's fair to say, I'm assuming from that  
25 experience, that you have a good degree of familiarity

1 with contours of Consumers Energy's customer classes;  
2 is that fair to say?

3 A. Yes.

4 Q. And I'm also assuming that you have a good baseline  
5 understanding of how accounting and allocation works  
6 in the context of rate cases, right?

7 A. I would say I have a basic understanding, but I'm not  
8 the staff usual cost -- electric cost of service  
9 witness.

10 Q. Okay. That's good to know. But you have some idea of  
11 how the rate base is calculated, correct?

12 A. Yes.

13 Q. And some understanding of how a revenue requirement,  
14 as it's referred to, is calculated, right?

15 A. Yes.

16 Q. And do you have some understanding of, for example,  
17 the cost of capital considerations involved in  
18 calculating rate base?

19 A. Yes, I do. Again, I'm not the usual staff cost of  
20 capital witness, but I do have a familiarity with the  
21 topic.

22 Q. You have the ability to look at the exhibits in  
23 electric rate case and basically understand how a rate  
24 base calculation fits together; is that fair to say?

25 A. Yes.

1 Q. Great, thank you. And you have -- you have two  
2 degrees in economics, right?

3 A. That's correct.

4 Q. What degrees do you have any economics?

5 A. I have an undergraduate degree which is a bachelor of  
6 science in business administration in economics and a  
7 master of arts in economics.

8 Q. And when did -- when did you get your masters in  
9 economics?

10 A. 2011.

11 Q. 2011, okay. And I'm assuming you've reviewed a  
12 substantial portion of the testimony and exhibits  
13 filed in this case to date; is that fair to say?

14 A. Yes.

15 Q. Okay, great. You have access to the SharePoint for  
16 this hearing in front of you?

17 A. Yes, I do.

18 Q. At this time, could you open that up and go to --  
19 well, first of all, do you see the subfolder labeled  
20 "attorney general"?

21 A. I do.

22 Q. And in there, there's a subfolder labeled "Isakson  
23 hearing materials"; are you seeing that?

24 A. Yes, I do.

25 Q. Okay, great. As you click into that, you'll see some

1 material; do you see an item labeled Exhibit AG 1-20?

2 A. Yes, I do.

3 Q. Great. Okay. Could you open that up for me real  
4 quick?

5 A. Yes, one moment, please. Okay, I have it open.

6 Q. And if you scroll down, this is -- the first set of --  
7 well, strike that.

8 This is the set of staff discovery  
9 responses, the attorney general's first set of  
10 discovery requests to staff. Is this looking familiar  
11 to you?

12 A. Yes, it is.

13 Q. And you're listed as the respondent, I believe, on all  
14 of these responses; is that -- or the responding  
15 witness on all these 0 responses; is that accurate?

16 A. Yes, I am.

17 Q. Okay. And to your knowledge and understanding, do you  
18 have any different responses on these requests than  
19 were included in this document?

20 A. No, I do not.

21 Q. Okay.

22 MR. WOLLENZIEN: At this time, I'd like to  
23 move to admit the documents we're looking at here,  
24 labeled Exhibit AG 1.20, MPSC staff's first discovery  
25 response to AG.

1 JUDGE TALBOT: Sorry. Any objection to the  
2 admission of AG 1.20?

3 All right, hearing none, it's admitted.

4 EXHIBIT AG 1.20 ADMITTED

5 9:16 a.m.

6 JUDGE TALBOT: Go ahead.

7 MR. WOLLENZIEN: Okay, great. I'd like to  
8 move on, if you go back to the Isakson hearing  
9 subfolder is a document entitled AG-1.21; are you  
10 seeing that.

11 A. Yes, I am.

12 Q. Okay, can you click on that for me?

13 A. Sure.

14 Q. And this is a document -- this is staff's responses to  
15 the attorney general's second set of discovery  
16 requests to staff. Is this looking familiar to you?

17 A. Yes, it is.

18 Q. And for part of these responses, you are listed as the  
19 responding witness; is that correct?

20 A. Yes, for a portion of the responses.

21 Q. Okay. And I would ask -- and a portion of these  
22 responses Mr. Nicholas Revere was listed as the  
23 responding witness; is that correct?

24 A. Yes.

25 MR. WOLLENZIEN: And I would ask the staff

1 counsel to stipulate as discussed, that it was  
2 agreed Mr. Revere's discovery responses could be  
3 admitted in lieu of me taking -- or in lieu of the  
4 attorney general taking Mr. Revere's cross today; is  
5 that accurate to say?

6 MR. SINGH: That is accurate.

7 MR. WOLLENZIEN: Great, thank you.

8 At this time I would like to move to admit  
9 this document labeled Exhibit AG 1.21, MPSC staff's  
10 second discovery response to AG.

11 JUDGE TALBOT: All right, any objection to  
12 the admission of Exhibit 1.21 -- I should say AG 1.21?

13 All right, hearing none, it's admitted.

14 Thank you.

15 EXHIBIT AG 1.21 ADMITTED

16 9:18 a.m.

17 MR. WOLLENZIEN: Okay, thank you, your  
18 Honor.

19 BY MR. WOLLENZIEN:

20 Q. In addition to reviewing the testimony of other  
21 witnesses in this matter, Isakson, did you also review  
22 some tariff provisions from other jurisdictions  
23 related to large load customers and data centers?

24 A. Yes, I did.

25 Q. And I believe you referenced in your testimony a

1 tariff provision or tariff provisions affective for  
2 Indiana Michigan Power Company; does that sound  
3 familiar?

4 A. Yes.

5 Q. And so did you review the terms included in that, in  
6 those tariff provisions?

7 A. Yes, I did.

8 Q. Okay. And your testimony also includes some  
9 discussion at the time pending, Ohio Power Company  
10 tariff related to data centers; is that correct?

11 A. Yes, that's correct.

12 Q. And since filing your direct and rebuttal testimony,  
13 have you since reviewed the effective version of Ohio  
14 Power Company's data center tariff provisions?

15 A. I have not.

16 Q. Okay. So were you present for the cross-exam of  
17 Company Witness Connolly on Tuesday?

18 A. Yes, I was.

19 Q. And one of the topics that was discussed by  
20 Ms. Connolly was the size of customers currently  
21 taking service on a Rate GPD; do you recall that?

22 A. Yes, I do.

23 Q. And it was discussed that most Rate GPD customers  
24 represent load sizes of under 1 megawatt. Is that  
25 your understanding of the size of those customers?

1 A. Yes, it is.

2 Q. And also to my understanding, the largest customers of  
3 Rate GPD currently are typically smaller than 30  
4 megawatts; does that sound about right?

5 A. Yes.

6 Q. Okay. And one of the topics in consideration in this  
7 case is megawatt threshold for new customers taking  
8 service under Rate GPD, right?

9 A. Correct.

10 Q. And just for reference, what is Rate GPD?

11 A. Rate GPD is the Company's primary rate for usually the  
12 largest customers.

13 Q. And just to be clear, do large customers also take  
14 service under rate LED?

15 A. Yes, that's also true.

16 Q. Okay. And you reviewed the Company's application  
17 material in this case, correct?

18 A. Yes.

19 Q. And so their initial application material, the  
20 Company's initial application material, proposed a  
21 100-megawatt floor for customers who'd be eligible for  
22 its proposed rate amendments; is that correct?

23 A. Yes.

24 Q. And it's been discussed in this case that some  
25 expected data center customers would present load

1 sizes significantly higher than 100 megawatts, right?

2 A. Yes.

3 Q. And to be clear, I'm representing data center  
4 customers -- the Company's initial application  
5 referred to data center customers; is that accurate to  
6 say?

7 A. Yes, they do.

8 Q. Great. And so I know I just asked you a second ago  
9 but some of the customers that have been proposed that  
10 might take service here, they exceed 100 megawatts,  
11 right?

12 A. Yes, that's my understanding.

13 Q. And you're aware of some modeling performed by the  
14 party DCC in this case, correct?

15 A. Yes, that's correct.

16 Q. And that would be, for example, in the direct  
17 testimony of UCC Witness Bieber; are you familiar with  
18 that?

19 A. Yes, I am.

20 Q. Okay. And so in some of ECC's modeling they make  
21 reference to 500 megawatt-sized customers, correct?

22 A. I don't have their testimony open, but that's what I  
23 recall, yes.

24 Q. Okay. I believe it's in the SharePoint, if you want  
25 to pull it up?

1 A. Is it in the SharePoint folder "Isakson hearing  
2 material"?

3 Q. Maybe -- oh, maybe not. I'll drop it in right now. I  
4 apologize for that, that's my mistake.

5 A. Okay.

6 Q. Okay. I just dropped it in. If you refresh the page  
7 it should show up at the top.

8 A. Yes, I just got it.

9 Q. Very good. And I believe you referenced some of  
10 Witness Bieber's modeling in your rebuttal testimony;  
11 does that sound familiar?

12 A. Yes, that's correct.

13 Q. Okay. So to your understanding some of DCC's modeling  
14 makes reference to 500-megawatt customers; is that  
15 correct?

16 A. Yes.

17 Q. Thank you. And so based on what my understanding is  
18 of the current typical customer sizes on Rate GPD, 500  
19 megawatts would be more than ten times the current  
20 largest customers taking service on Rate GPD; is that  
21 fair to say?

22 A. Yes.

23 Q. Okay. And to your knowledge, would a 500 megawatt  
24 customer also be larger than Consumers current largest  
25 industrial or commercial customer?

1 A. Yes.

2 Q. Okay. And in your experience, have you ever been  
3 aware of a 500 megawatt customer coming online to a  
4 consumer service territory?

5 A. Sorry, not to my knowledge no.

6 Q. Okay. So we're talking about unprecedented addition  
7 to their grid, right?

8 A. Yes.

9 Q. Okay. And the Company has provided a list of  
10 inquiries from potential customers in discovery in  
11 this case, right? That would take service under the  
12 amended rate they're discussing?

13 A. Yes, that's correct.

14 Q. Okay. And that inquiry list, to your recollection and  
15 understanding, includes customers with expected loads  
16 of one gigawatt or larger, correct?

17 A. Yes, I recall that.

18 Q. Would you expect a single customer, other than a data  
19 center, to add a gigawatt of load to Consumers service  
20 territory over the next five years?

21 A. I don't know, sorry.

22 Q. Okay. And so we're talking about these additions to  
23 the grid. The Company would presumably seek to build  
24 out generation resources to meet some substantial  
25 portion of that demand, right?

1 A. That's a possibility, but I can't say for certain.

2 Q. Do you think the Company wouldn't seek to build out  
3 generation resources to accommodate new large-load  
4 customers?

5 A. I don't know what the Company's plans would be to  
6 accommodate the customers, exactly.

7 Q. So if they brought a gigawatt customer you think they  
8 wouldn't try to build generation resources to meet  
9 some of that demand?

10 MR. SINGH: Your Honor, I'm going to object  
11 this has been asked and answered.

12 MR. WOLLENZIEN: Okay.

13 MR. SINGH: The witness says he doesn't  
14 know.

15 JUDGE TALBOT: Response?

16 MR. WOLLENZIEN: That's fine.

17 JUDGE TALBOT: All right, so you're  
18 withdrawing? Moving on?

19 MR. WOLLENZIEN: I'll withdraw that  
20 question. Your Honor.

21 JUDGE TALBOT: Okay, thank you.

22 BY MR. WOLLENZIEN:

23 Q. Witness Isakson, are you willing to entertain for the  
24 sake of theory at least, the implications of the  
25 Company building out generation to meet some portion

1 of this addition we've been discussing to their grid?

2 Are you willing to discuss what it would  
3 look like if Consumers sought to build out some  
4 generation to meet the unprecedented loads we're  
5 talking about coming onto their service territory?

6 MR. SINGH: Your Honor, I'm concerned here  
7 as well. The question seems to be asking if my  
8 witness is willing to speculate. And we don't know  
9 how far afield my witness is going to be asked to  
10 speculate. I'm not sure what the guardrails are here.

11 JUDGE TALBOT: It is a little speculative,  
12 and maybe I could just reframe it a little bit.  
13 Assuming that the Company had to build out generation,  
14 would you be able to maybe address what that might  
15 look like? If not, say so.

16 A. Like my attorney just said, I think it depends on how  
17 far we get into the weeds. I think I can, but just be  
18 prepared for me to say I don't know if and when that  
19 comes up. So the answer is --

20 JUDGE TALBOT: All right.

21 THE WITNESS: Yes.

22 JUDGE TALBOT: Okay, if we monitor it,  
23 Mr. Singh, do you have -- object to proceeding?

24 MR. SINGH: No, your Honor. So long as  
25 it's monitored.

1 JUDGE TALBOT: All right. Well I'm right  
2 here.

3 Go ahead, Mr. Wollenzien.

4 BY MR. WOLLENZIEN:

5 Q. Yeah. And let me -- let me just -- well, a couple  
6 questions. There may be a simpler way to frame this  
7 up.

8 First of all, in your experience do  
9 electric utilities build generation resources to  
10 accommodate expected demands?

11 A. Yes.

12 Q. Okay. And in the context of a rate case, building out  
13 generation resources is accounted, at least in part,  
14 as an inclusion of capital expenditures as part of  
15 rate base, correct?

16 A. Yes.

17 Q. Okay. And with that inclusion of capital expenditures  
18 is also included an expected return on capital related  
19 to that capital expenditure, correct?

20 A. Yes.

21 Q. And so with a greater amount of capital expenditure  
22 you would expect the Company to also request, or you  
23 would expect a Company to also request a greater  
24 return on equity to its investors; is that correct?

25 A. No.

1 Q. Why?

2 A. So your question was, with more capital investment in  
3 generation resources, say, would I expect the Company  
4 to request a higher rate of equity?

5 Q. No. And I'll reframe this.

6 With a higher amount of capital  
7 expenditures included in rate base you would also  
8 expect a greater amount overall to be requested to  
9 return to investors; is that correct?

10 A. Yes.

11 Q. Okay. To the extent that Consumers Energy has other  
12 customers representing notably large loads, some of  
13 those customers take service under special contracts;  
14 am I understanding that correctly?

15 A. I'm not entirely sure. I haven't processed or seen a  
16 special contract for Consumers Energy specifically.  
17 Although that doesn't mean that they don't. I'm just  
18 not aware.

19 Q. Okay. We're talking about -- well, we talked a minute  
20 ago about a potential 500-megawatt customer being  
21 added to Consumers Energy's service territory, right?

22 A. Yes, correct.

23 Q. And so for a bit of reference here, do you know what  
24 the expected power demand of a 500-megawatt customer  
25 would look like compared to, say, the total retail

1 demand of a metropolitan area?

2 A. Are you asking if a 500-megawatt customer is  
3 equivalent to like a small city?

4 Q. Yes.

5 A. I think that's reasonable to say, yes.

6 Q. Okay. Well, can you go to the SharePoint back into  
7 the Isakson hearing materials folder?

8 A. Yes.

9 Q. And there's included there in Exhibits AG-1.22; do you  
10 see that?

11 A. Yes, I do.

12 Q. Okay. And you know what, also, I will drop the link  
13 to this in the chat so it's clear you can access it  
14 from a URL, so give me just one second.

15 Are you seeing this in the chat,

16 Mr. Isakson?

17 A. One moment, please. I have the Exhibit open, as well,  
18 and yes, I see the link you sent.

19 Q. Okay. And if you'd also just click on that link to  
20 make sure it actually connects you to the article  
21 you're looking at in the exhibit.

22 A. Yes, that appears to be the same.

23 Q. Okay, great. So if we're looking at this article and  
24 we scroll down, you can come in after the search, if  
25 you'd like. There's a point in this article where it

1 says, "A gigawatt-sized data center using 85 percent  
2 of its peak demand over the course of a year will  
3 consume nearly as much energy as over 700,000 U.S.  
4 households or 1.8 million people; are you seeing that?

5 A. Yes, I see that.

6 Q. If you go down a couple paragraphs it says, "A  
7 gigawatt-sized data center campus running at even the  
8 lower end of peak demand is still roughly comparable  
9 to about 330,000 households" -- oh, I'm sorry. I'm  
10 sorry.

11 If you scroll down a couple paragraphs from  
12 the section I just read, it says, "A gigawatt-size  
13 data center campus running at even the lower end of  
14 peak demand is still roughly comparable to about  
15 330,000 household, or a city of about 800,000 people,  
16 about the population of San Francisco"; do you see  
17 that as well?

18 A. Yes, I do.

19 Q. So for reference, to my understanding the population  
20 of the City of Detroit is something like 650,000  
21 people; does that sound about right?

22 A. Yes, it does.

23 Q. Okay. And Grand Rapids, my understanding that's the  
24 second-largest city in the State of Michigan; is that  
25 correct?

1 A. I don't know for certain.

2 Q. Okay, sure. Sorry. I'm sorry, if you don't know all  
3 the exact population numbers for all the cities in the  
4 state, maybe that's too much to assume. So thank you  
5 for that.

6 By it's my understanding that the City of  
7 Grand Rapids is about 200,000 people, is that  
8 something you're familiar with by any chance?

9 A. That sounds like a reasonable estimate, yes.

10 Q. So the addition of just one or two of these large  
11 customers that we're talking about would eclipse the  
12 power demand of the state's largest cities; am I  
13 understanding that correctly?

14 A. Yes, I think that's reasonable.

15 Q. So the Company, as well as several intervenors in this  
16 case, have discussed aspects of data center operations  
17 that distinguish them from traditional industrial or  
18 commercial customers, right?

19 A. Yes.

20 Q. Okay. And once again, you were present for the  
21 cross-examination of Witness Connolly on Tuesday,  
22 right?

23 A. Yes, I was.

24 Q. And there was this -- some discussion with Witness  
25 Connolly concerning the fact that data center

1 customers do not provide for economic development in  
2 the way that traditional industrial customers do; do  
3 you recall that?

4 A. Yes, I do.

5 Q. And this was also mentioned to some degree -- you know  
6 what, strike that.

7 Give me one second. Just want to make sure  
8 I have this reference up so I don't misstate anything  
9 here.

10 You have, for example, in the hearing  
11 folder is the application and direct testimony of  
12 Witness Connolly. Can you open that up for a second,  
13 if you don't mind?

14 A. Yes, I have it open.

15 Q. Do you have it open?

16 A. Yes, I do.

17 Q. Okay, I just want to make sure I get the reference  
18 here correct. So if you go to page 4 of her  
19 testimony, line 12, Witness Connolly states in direct,  
20 "They bring initial job growth in the development  
21 stage while employing a smaller" -- strike that.

22 Sorry. I'll start from the top here.

23 She says at page 4, line 12, "They bring  
24 initial job growth in the development stage while  
25 employing a small number of permanent long-term

1 employees as compared to a similarly-sized industrial  
2 customer"; do you see that?

3 A. Yes, I do.

4 Q. And is that correct?

5 JUDGE TALBOT: Hold on one second. Would  
6 you identify that again, Mr. Wollenzien? The document  
7 you just read from.

8 MR. WOLLENZIEN: Absolutely. This is the  
9 Company's application and direct testimony of Witness  
10 Connolly. And it's page --

11 JUDGE TALBOT: Got it.

12 MR. WOLLENZIEN: And I'm sorry, your Honor,  
13 for speaking over you, but it's page 4, line 12  
14 through 14.

15 JUDGE TALBOT: Thank you.

16 BY MR. WOLLENZIEN:

17 Q. So Witness Isakson, and I apologize if I'm asking you  
18 the same question twice, I just don't quite remember.  
19 Is that quote I just read correct to your  
20 understanding?

21 A. Yes, it is.

22 Q. Okay, great. And I mentioned this a minute ago, but  
23 this was also a subject of discussion during  
24 Mrs. Connolly's cross-examination on Tuesday, right?

25 A. Yes, I believe so.

1 Q. Okay. And there was also discussion on Tuesday  
2 concerning the fact that the Company's rate LED  
3 prohibited service on that rate for new data center  
4 customers; are you familiar with that?

5 A. Yes, I am.

6 Q. And what is rate LED?

7 A. That's the Company's large economic development rate.

8 Q. Okay. To your understanding is the prohibition on new  
9 data center customers under rate LED consistent with  
10 the fact that such customers aren't seen as bringing  
11 in the same type of economic development as other  
12 customers who are eligible for rate LED?

13 A. I don't know the answer to that question. I am not  
14 completely familiar with the reason why data centers  
15 aren't allowed on that rate. I just know the  
16 Commission made that decision sometime last year.

17 Q. Okay. And there's also been some testimony -- well,  
18 actually let's look right here. If you still have  
19 open Ms. Connolly's direct testimony, are you looking  
20 at that?

21 A. Yes, I am.

22 Q. Okay. So right above line 12 -- lines 11 through 12  
23 on page 4 she testified that, "Data centers require a  
24 high level of demand, 24 hours a day, 7 days a week,  
25 365 days a year"; do you see that?

1 A. Yes, I do.

2 Q. And is that correct to your understanding?

3 A. From my -- from my general understanding of how data  
4 centers operate, I'd like to say that I'm not an  
5 operator of a data center per se, but yes, that sounds  
6 reasonable.

7 Q. And does that operation distinguish them from  
8 traditional industrial or commercial customers?

9 A. I don't know the answer to that.

10 Q. Okay. Is it correct to say that one effect of  
11 around-the-clock operation for data center customers  
12 is that they tend to exhibit a particularly high load  
13 factor?

14 A. Yes.

15 Q. And what is load factor?

16 A. Load factor is -- I believe it's average demand  
17 divided by peak demand. So it's a measure of a  
18 customer's average use compared to their maximum use.

19 Q. Okay. And load factor can be presented in a  
20 percentage figure, correct?

21 A. Yes.

22 Q. So when we talk about data centers operating around  
23 the clock, to your understanding does that translate  
24 into data center customers exhibiting load factors  
25 that commonly exceed 80 percent?

1 A. I don't know specifically for data centers. Like I  
2 said, I'm not a data center operator. But if one  
3 assumes that a data center's operating near its peak  
4 every day of the year, then yes, they would typically  
5 have a high load factor.

6 Q. Thank you. And I'm assuming that -- well, strike  
7 that.

8 Do you consider these sort of operational  
9 questions to be important in assessing appropriate  
10 terms of service for a customer?

11 A. Are you speaking broadly for any type of customer?

12 Q. Well, if we're talking about, for example, whether a  
13 customer uses energy all the time versus only  
14 sporadically or only during work days, for example?

15 A. And you're asking whether that would contribute to  
16 what exactly? I'm sorry, can you rephrase the  
17 question? Or repeat it?

18 Q. Yeah, so my question was -- and we can revisit this or  
19 figure out another way to discuss this. But my  
20 question was, do you consider the sort of operational  
21 questions such as a commercial customer operating all  
22 the time as opposed to just on weekdays to be an  
23 important component in assessing terms of service with  
24 the customer?

25 A. I believe there are certain rates that might be more

1 appropriate or less appropriate, depending on the  
2 customer's load factor. So that is to say yes, the  
3 operational characteristics of a customer can  
4 contribute to the most appropriate rate that takes it  
5 up.

6 Q. Thank you. What do you know about the purposes for  
7 which businesses operate data centers?

8 A. I know, from my review for my preparation for this  
9 case, broadly speaking what a data center does.

10 Q. What do --

11 A. Such as -- I believe they store data and they -- I  
12 think there's some computational operations that they  
13 perform. That's about the limit of my understanding.

14 Q. What types of industry are we talking about here?

15 A. What type of data center industries?

16 Q. Sure.

17 A. I -- are you asking --

18 MR. SINGH: Your Honor, I think I'm going  
19 to object. I think the witness has explained what  
20 the -- what he understand data centers to be. I think  
21 this is asking him to speculate on -- I think this  
22 question is quite speculative.

23 JUDGE TALBOT: Response?

24 MR. WOLLENZIEN: I'm might need to strike  
25 the question. And I think I can frame this in a way

1           that's maybe more pointed.  If the witness doesn't  
2           have an understanding or thoughts on it I'll skip --  
3           move on past those questions.  But I think I can  
4           reformulate them in a way that might be amenable.

5                         JUDGE TALBOT:  Perfect, go ahead.

6  BY MR. WOLLENZIEN:

7  Q.   Mr. Isakson, do you understand that one of the -- to  
8       your understanding, is one of the purposes for  
9       operating data centers to facilitate cloud computing  
10      services?

11  A.   Yes.

12  Q.   Okay.  And another purpose for which -- is it correct,  
13      to you understanding, that another purpose which  
14      businesses operate data centers is to support what's  
15      commonly referred to as artificial intelligence  
16      software?

17  A.   Yes.

18  Q.   And I believe you actually reference artificial  
19      intelligence software in the direct testimony; is that  
20      correct?

21  A.   One moment, please.  I believe I did.

22  Q.   I can -- I think I can give you a citation if  
23      you're --

24  A.   Yes, that would be helpful.

25  Q.   One second.  For some reason the SharePoint is not

1           letting me control-F these documents. So if you can  
2           just bear with me one second while I pull these up.  
3           Okay, so I'm looking at page 12 of your direct  
4           testimony starting at line 9.

5       A.    Yes, I see that. Would you like me to read it?

6       Q.    Yeah, you can read the last sentence there, if you  
7           don't mind.

8       A.    Sure, this is from -- this is from my direct  
9           testimony, page 12, starting at line 9. "For example,  
10          if the market for artificial intelligence in products  
11          and services never matures into a viable sustainable  
12          business model, then the data center customer may exit  
13          service and create a stranded asset due to portions  
14          beyond a large load customer, the Company, and  
15          especially all other customers."

16                   MR. WOLLENZIEN: Thank you. And I mean, is  
17           that your understanding today what you wrote there.

18       A.    Yes.

19       Q.    Okay, great. Are you aware -- strike that.

20                   Do you have any understanding of whether AI  
21           data centers categorically tend to operate differently  
22           than traditional cloud services data centers?

23       A.    From my general reading and understanding of the  
24           industry in my preparation of this case, yes, I  
25           believe that's true. Although I would like to say,

1           again, I'm not an operator of a data center, nor am I  
2           an expert in artificial intelligence software. That's  
3           just my general understanding.

4       Q.    Okay, thank you. And if you look in the SharePoint  
5           there, there is a document titled -- well, I've named  
6           the document "IBM article."

7       A.    Yes, I see it.

8       Q.    Okay. And I'll also -- if it's clunky to read because  
9           of the way the pdf works out, I also have a URL, if  
10          that'd be helpful. I don't plan to offer it as an  
11          exhibit, but just if for some reason something is cut  
12          off, let me know and I can shoot you a URL in the  
13          chat.

14                            But would you mind opening the pdf for me?

15      A.    Yes. And if you're going to refer to any specific  
16          language in this pdf, it would be more helpful to use  
17          a link.

18      Q.    Yeah, I just opened it up and I saw the same thing.  
19          There was some sort of ad loading while I -- when I  
20          was pulling this page up. So I just dropped the link  
21          in the chat there.

22      A.    This is the CNBC article?

23      Q.    Below that -- oh, you know what, I didn't hit send. I  
24          didn't hit the little arrow there, okay, sorry. It's  
25          right there now.

1 A. I see it. It seems this is an article from IBM.com.

2 Yes, I see it and I have it in front of me.

3 Q. Give me just one second. I'm going to open the link,

4 as well.

5 Okay, so if you scroll down where it says  
6 "AI data centers versus traditional data centers"; do  
7 you see that?

8 A. Yes, I do.

9 Q. In the second paragraph below that subheading it says,  
10 "The differences between these two kinds of data  
11 centers stem from the extraordinary demands of  
12 high-intensity AI workloads. In contrast to AI data  
13 centers, typical data centers contain infrastructure  
14 that would quickly be overwhelmed by AI workloads.  
15 AI-ready structure is specially designed for the  
16 cloud, AI, and machine-learning tasks"; do you see  
17 that?

18 A. Yes, I do.

19 Q. Okay. And in also next paragraph down there discusses  
20 the distinction between central processing units and  
21 graphics processing units; are you seeing that?

22 A. Yes, I am.

23 Q. And it says that --

24 JUDGE TALBOT: Slow down a little.

25 MR. WOLLENZIEN: Oh, yes, I'm sorry.

1 BY MR. WOLLENZIEN:

2 Q. Well, let me just ask, is this -- what you're looking  
3 at in these two paragraphs here, does this track with  
4 your understanding of the distinction between AI data  
5 centers and what's referred to here as traditional  
6 data centers, Mr. Isakson?

7 A. Want to preface, once again, my response because I'm  
8 not a data center operator, I'm not an expert in data  
9 centers or AI, but from my understanding and from what  
10 I'm reading here on IBM.com, yes.

11 MR. SINGH: Your Honor, this speaks to  
12 foundation here. My witness has repeatedly said that  
13 he is not an expert in data center operation,  
14 artificial intelligence data center operations. I  
15 mean, to the extent that he's being asked that does  
16 this article say what it says, that's fine, I guess.  
17 But I think Mr. Isakson has repeatedly stated that  
18 this is not his area of expertise.

19 JUDGE TALBOT: Response?

20 MR. WOLLENZIEN: I mean, I would say what  
21 we're talking about here, to the extent that the  
22 witness has acknowledged some understanding of a  
23 distinction between AI data centers and traditional  
24 data centers, I feel like that is fair game.

25 I think that being said, I'm probably

1 comfortable moving on here. I think I can move on  
2 from this line of questioning.

3 JUDGE TALBOT: Okay.

4 MR. WOLLENZIEN: At least as to distinction  
5 between the operating characteristics. I would like  
6 to ask further about what industries are driving data  
7 center investment. I can move on for the operational  
8 specificities of AI data centers, if that's helpful  
9 for counsel.

10 MR. SINGH: Appreciate that.

11 JUDGE TALBOT: All right, Mr. Singh was  
12 nodding for the record.

13 I think that's appropriate too. However, I  
14 am going to go off the record for a minute.

15 Off the record.

16 (Off the record at 9:51 a.m.)

17 (Recess taken at 10:01 a.m.)

18 (On the record at 10:14 a.m.)

19 JUDGE TALBOT: Back on the record in  
20 Michigan Public Service case No. U-21859. We are in  
21 the cross-examination of Mr. Isakson by  
22 Mr. Wollenzien.

23 Go ahead.

24 MR. WOLLENZIEN: Thank you, your Honor.

25 BY MR. WOLLENZIEN:

1 Q. Witness Isakson, we discussed a minute ago that your  
2 direct testimony does include some reference to the  
3 artificial intelligence industry, right?

4 A. Yes, it does.

5 Q. Okay. To your understanding, is the -- strike that.

6 To your understanding, is the proliferation  
7 of AI software technology a driver in the growth of  
8 data center investments presently?

9 A. Yes.

10 Q. Okay. Would you -- to your understanding and  
11 knowledge, is the AI industry a key driver in the  
12 growth of data center investments presently?

13 A. I don't know.

14 Q. Okay. Now, Consumers in their direct testimony, I  
15 believe forecasted 15 gigawatts of data center growth  
16 in their economic development pipeline; does that  
17 sound familiar?

18 A. Yes, it does.

19 Q. Okay. To your knowledge and understanding, would you  
20 expect some portion of that data center investment to  
21 be for AI data centers in Consumers service territory?

22 A. I can't say for certain.

23 Q. Okay. All right, so let's now move back to some other  
24 material discussed in post-rebuttal discovery. One  
25 second. Strike that.

1                   I know I've asked this a couple times, but  
2                   you were present Tuesday for Ms. -- for Witness  
3                   Connolly's cross, correct?

4           A.    Yes, I was.

5           Q.    And do you recall a discussion of the kind of default  
6                   contract term under existing Rate GPD?

7           A.    Yes.

8           Q.    And the Company's application in this case I believe  
9                   proposed a longer contract term than what is currently  
10                  the default under Rate GPD; is that right?

11          A.    Yes, that's correct.

12          Q.    Did you discuss that destination in your direct  
13                  testimony as well?

14          A.    Yes, I provided a brief overview of the Company's  
15                  application in my direct testimony.  And I believe I  
16                  covered that part.

17          Q.    Okay.  And several parties in this case have also  
18                  proposed an exit fee provision that might apply as an  
19                  amendment to Rate GPD, correct?

20          A.    Yes, that's correct.

21          Q.    Am I correct to understand that all of those exit fee  
22                  provisions provide additional protection to other rate  
23                  payers than what is currently existing in Rate GPD?

24          A.    Yes, that's the purpose of the proposed exit fee.

25          Q.    Okay.  And both the Company and staff have proposed or

1 recommended in testimony here a higher minimum billing  
2 demand than what currently exists under Rate GPD; is  
3 that right?

4 A. Yes.

5 Q. Okay. And did staff propose other protections or  
6 recommended the protections that, to your  
7 understanding, would be in excess or would in addition  
8 to what currently exists under Rate GPD as far as  
9 protections to other ratepayers?

10 A. Yes.

11 Q. Okay. And I'm guessing that staff made  
12 recommendations because they believed those  
13 protections would be reasonable and prudent in  
14 consideration of the new load we're discussing in this  
15 case; is that correct?

16 A. Yes, that's correct.

17 Q. Okay. Bear one second, I'm pulling up your testimony.  
18 So on page 4, line 3 of your testimony you address the  
19 importance of these protections to some degree. Do  
20 you have your testimony up and in front of you here?

21 A. Yes, I do.

22 Q. Okay, so page 4 line 3 you state, "Staff agrees that  
23 customers with such a large load pose a unique risk if  
24 that load is prepared for by the Company but not  
25 served for a period of time long enough to adequately

1           recoup costs from that customer," correct?

2       A.    Yes.

3       Q.    Okay, and so I'm assuming also that to the extent  
4           staff's recommendations on these points overlap with  
5           the recommendations made by Consumers Energy, that  
6           staff would consider those recommendations of  
7           Consumers Energy to be reasonable and prudent in  
8           consideration of the customers we're talking about in  
9           this case, right?  The potential customers?

10      A.    So as far as my testimony and staff's position and  
11           recommendations in the case, unless otherwise noted in  
12           my testimony, staff -- let me put this another way.  
13           Staff --

14      Q.    Yeah, I'm sorry.  Strike the question.

15                    I'm not asking if you necessarily agree 100  
16           percent with what Consumers is recommending in this  
17           case.  You know what, strike the whole line of  
18           questioning.  And I'll ask what I asked before just to  
19           kind of make this clear.

20                    I'm assuming that recommendations you've  
21           made as far as protections to ratepayers, staff  
22           considers them to be reasonable and prudent in light  
23           of the new large loads we're talking about here,  
24           right?

25      A.    Yes.

1 Q. Without additional protections added to Rate GPD,  
2 would it be reasonable and prudent for the Company to  
3 offer service to those customers under Rate GPD?

4 A. I -- hmm. Yes, because the customers currently  
5 qualify for service under Rate GPD. I think you said  
6 that it's reasonable and prudent that they can take  
7 service under that rate.

8 Q. So you're saying that eligibility for a rate is, in  
9 and itself, a determinant of whether service would be  
10 reasonable and prudent?

11 A. Yes, I am.

12 Q. All right, let's go to your rebuttal testimony.  
13 That's included in the SharePoint as well. I  
14 apologize. If you go to the SharePoint, you can open  
15 that up.

16 A. I have it open already.

17 Q. Oh, great. Okay, I'm going to open it up too. Give  
18 me just one second.

19 A. Okay.

20 Q. Okay, so I am looking at page 1, starting with the  
21 question on line 10 -- so are you seeing this?

22 A. I'm sorry, page 1, line 10. Yes, I see it.

23 Q. The question says, "What is staff's response to DCC  
24 Witness Justine Bieber's analysis of transmission  
25 revenue and transmission revenue requirement?" Are

1           you seeing that?

2       A.    Yes, I am.

3       Q.    Okay.  And I believe also included in the SharePoint  
4           is Witness Bieber's direct testimony.

5       A.    Yes, and I have that pulled up from our review of the  
6           discussion.

7       Q.    Awesome.  I'm going to pull it up too in a pdf so I  
8           can quickly get to where I want to go.

9                        Okay, so in witness Bieber's testimony in  
10           the range you reference in your rebuttal, there are  
11           some tables Witness Bieber includes providing some  
12           revenue modeling; is that correct?

13      A.    Yes.

14      Q.    Okay.  So if you look down at page 30 of his  
15           testimony.

16      A.    Okay.

17      Q.    You'll see a table JB2; are you seeing that?

18      A.    Yes, I am.

19      Q.    Okay.  Give me just one second.

20                        Okay, so in this table, JB2, there's  
21           included a line "estimated capital costs 755 million";  
22           are you seeing that?

23      A.    Yes, I am.

24      Q.    Okay.  And to your understanding, this number -- I'll  
25           say too, there's a little superscript 3 in that line,

1 as well; are you seeing that?

2 A. Yes, I am.

3 Q. And if you go down where that's he referenced, it  
4 says, "Estimated capital costs equal to the middle of  
5 the transmission owner's estimated capital costs,"  
6 right?

7 A. Yes.

8 Q. Okay. And you understand the source of that range?

9 A. I believe it's from a discovery request from one of  
10 the intervening parties.

11 Q. Yes. I want to make sure I have it in the SharePoint  
12 just so we can get a reference on this. Give me just  
13 one second, I do not think I included it. Give me  
14 just one second -- one second.

15 Well, you were present for the cross  
16 testimony of Mrs. Connolly on Tuesday, right?

17 A. Yes, I was.

18 Q. And do you understand that that range of transmission  
19 costs as discussed in Mr. Bieber's modeling, that that  
20 refers only to transmission costs related to  
21 interconnecting customers?

22 A. I believe so. I'm looking at the AG's fifth discovery  
23 request to the Company. This was in my SharePoint  
24 folder. It would be response 21859-AG-CE-0140.

25 Q. It's very possible that it's referenced in here. I

1           just don't have the exact thing in front of me amongst  
2           all the files I have open here, so...

3       A.    Yeah, actually the discovery request I just referenced  
4           is referencing another discovery response.  But yes,  
5           from what I recall from your discussion with the  
6           Company's witness, that is only for the transmission  
7           interconnection, that cost estimate.

8       Q.    Okay.  So if we're looking at table UV2, this  
9           estimated capital cost, that doesn't include any  
10          generation cost estimate, right?

11      A.    As far as I know, yes.

12      Q.    Okay.  And it wouldn't, to your understanding, include  
13          any transmission expense related to generation  
14          build-out, right?

15      A.    From what early from your discussion previously and  
16          subject to check, yes, that sounds correct.

17      Q.    And now, here for instance, it says transmission costs  
18          in his testimony -- Mr. Bieber, correct?

19      A.    I'm sorry, can you repeat that question, please?

20      Q.    Mr. Bieber refers to this figure as transmission  
21          correct.

22      A.    Yes, correct.

23      Q.    So to your knowledge and based on everything else  
24          we've discussed here, this figure does not include any  
25          distribution expense, right?

1 A. Yes, as far as I can tell.

2 Q. Okay. Does DCC purport to include any other cost  
3 figures in this modeling?

4 A. Cost figures?

5 Q. So strike that.

6 So we're looking at estimated capital  
7 costs, and it lists 755 million in there, right?

8 A. Yes, that's correct.

9 Q. And reviewed this table in preparation for your  
10 rebuttal testimony, right?

11 A. Yes, I did. Although I will say, as I said in my  
12 rebuttal testimony, "Staff appreciates that DCC took  
13 the time to analyze how revenue from customers may go  
14 towards offsetting individual customers' costs by  
15 focusing on transmission. However" --

16 I'm sorry, and staff -- yeah, this is a  
17 better quote. This is from page 2 of my rebuttal  
18 testimony starting on line 7, "Rather than quibble  
19 with the details of DCC's analysis, staff instead  
20 reminds the Commission that there are many levers on  
21 which it can lean to increase or decrease the amount  
22 of risk based by existing customers LLC" -- which  
23 stands for large load customers -- "load fails to  
24 remain in service."

25 That is to say, yes, I reviewed the table

1 in the analysis, but I didn't dive into it deep enough  
2 to provide a very thorough response to my rebuttal.

3 Q. Well, I'll ask you about all that in a minute. But  
4 just to be clear, from your review and recollection of  
5 the modeling that you did look at, do you recall any  
6 other costs discussed in their modeling, other than  
7 that \$755 million figure?

8 A. No I --

9 MR. VIJAYKAR: Your Honor, I'll object at  
10 this time. Mr. Bieber's going to be on the stand on  
11 Monday. Mr. Isakson discusses Mr. Bieber modeling in  
12 his testimony, so questions about Mr. Isakson's  
13 testimony obviously are fair game. But  
14 Mr. Wollenzien's asking about Mr. Bieber's modeling.  
15 The witness who can address that will be on the stand  
16 on Monday.

17 JUDGE TALBOT: Response?

18 MR. WOLLENZIEN: We are talking about  
19 staff's understanding of revenue and cost modeling and  
20 how the costs that were expected from these customers  
21 are going to be accounted for in terms of the rate  
22 amendments. I would say this is eminently relevant.  
23 And Mr. Isakson has repeatedly acknowledged that he  
24 reviewed the testimony of Mr. Bieber. I think it's  
25 fair game to ask about it.

1 MR. BZDOK: Your Honor, may I be heard?

2 JUDGE TALBOT: Sure, Mr. Bzdok, go ahead.

3 MR. BZDOK: I didn't hear any recognized  
4 basis for the objection. I just heard, well, another  
5 witness can address this is not a -- that's -- I don't  
6 understand that objection. There was nothing improper  
7 about the question.

8 JUDGE TALBOT: Any response.

9 MR. VIJAYKAR: Your Honor, it's a relevance  
10 objection.

11 JUDGE TALBOT: All right, I do find that  
12 the testimony is inquiring about Mr. Isakson's  
13 understanding of Mr. Bieber's testimony, so I will  
14 allow that. However there has, again, been some  
15 indication that he doesn't know. So let's move on  
16 quickly when we get that indication.

17 Go ahead. I'm overruling the objection.

18 MR. WOLLENZIEN: Thank you, your Honor.

19 I just want to understand what staff's  
20 knowledge or perspective on any revenue or cost  
21 modeling in this case is. I'll move on right now,  
22 give me one second.

23 JUDGE TALBOT: You can ask about that, I  
24 think.

25 MR. WOLLENZIEN: Okay.

1 Q. Well, once again, Mr. Isakson, to your knowledge,  
2 we're only talking about -- as far as the modeling  
3 that you looked at, your understanding is that it only  
4 included transmission costs related to  
5 interconnection, right?

6 A. Correct, yes.

7 Q. So we're talking about one component of one category  
8 of all the costs that would be at play considering or  
9 evaluating incremental costs for these customers,  
10 right?

11 A. Yes, that's correct.

12 Q. So if you're looking at revenue modeling, you have no  
13 way of the revenue forecasted in the modeling is  
14 sufficient to cover incremental costs if you're only  
15 looking at one component and one category of those  
16 costs, right?

17 A. Yes, that's correct.

18 Q. Okay. And I believe you recommend in your testimony  
19 that you think -- or that staff thinks an appropriate  
20 exit fee under amended terms should be tied to  
21 remaining minimum billing demand or minimum billing  
22 amounts in a contract term; is that fair to say?

23 A. Yes, for the remainder of the contract term.

24 Q. So just as you have no way of knowing whether revenue,  
25 as modeled here, will be sufficient to cover

1 incremental costs, you also have no way of knowing  
2 whether an exit fee tied to the revenue would cover  
3 incremental costs, right?

4 A. Yes. We don't know whether the exit fee will  
5 completely cover incremental costs of serving the  
6 customer.

7 Q. Well, how much wouldn't be covered?

8 A. I don't know.

9 Q. Okay. Now, you read through a paragraph of your  
10 rebuttal there. We're going to go back to it right  
11 now.

12 And I apologize for herky-jerky pulling of  
13 these exhibits, but I was hoping that I could search  
14 easily in SharePoint, but it's not working that way.  
15 So I'm having to take a moment to pull up the things  
16 one at a time.

17 Okay, so you read this, but I'll read part  
18 of it too. So you said, "Staff appreciates the DCC  
19 took the time to analyze how revenue from customers  
20 may go towards offsetting that individual customer's  
21 costs by focusing on transmission."

22 (Reporter clarification.)

23 MR. WOLLENZIEN: And I will actually skip  
24 to the second sentence to avoid repetition.

25 BY MR. WOLLENZIEN:

1 Q. Starting at line 14, you say, "However, like with  
2 customers on any rate, it is difficult to impossible  
3 to directly tie one customer to their specific cost to  
4 serve," correct? You said that?

5 MR. SINGH: I believe Mr. Isakson's frozen.

6 JUDGE TALBOT: I'm sorry, I was muted.

7 Mr. Isakson?

8 MR. SINGH: I think he's frozen there. Let  
9 me see.

10 JUDGE TALBOT: Yeah, he is, but he might  
11 have been able to hear it.

12 All right, well, we'll go off the record  
13 for a minute and get Mr. Isakson back. We'll take ten  
14 minutes if people want to use the restroom or  
15 something. It might take five for him to get back.

16 MR. WOLLENZIEN: Your Honor, I'm having to  
17 do that, I would say at this rate I'll probably need  
18 to request, you know, some additional amount of time  
19 to the amount of time expected to cross Isakson; is  
20 that acceptable? I don't expect it to go --

21 JUDGE TALBOT: Yeah.

22 MR. WOLLENZIEN: -- longer than lunchtime,  
23 longer than noon. But I just wanted to give you a  
24 forecast on that, considering the breaks and pauses  
25 and things that have been happening thus far.

1 JUDGE TALBOT: Yeah. Well, actually --  
2 yeah, no problem. If anybody needs to go to the  
3 restroom, I won't go anywhere, but it sometimes takes  
4 a few minutes having issues myself once in a while.

5 (Recess taken at 10:36 a.m.)

6 (On the record at 10:43 a.m.)

7 JUDGE TALBOT: So we're pack back on the  
8 record in Michigan Public Service case 21859.  
9 Mr. Isakson is back, so we're going to continue with  
10 cross-examination.

11 Go ahead, Mr. Wollenzien.

12 MR. WOLLENZIEN: Thank you, your Honor.

13 BY MR. WOLLENZIEN:

14 Q. Do you have the hearing document subfolder open in  
15 front of you, Mr. Isakson?

16 A. Yes, I do.

17 Q. Okay, great. Could you pull up AG-1.15 for me that is  
18 included there?

19 A. Yes, I have it open.

20 Q. Okay. So this is a discovery request from MNSC and  
21 response that was discussed on Tuesday; do you recall  
22 this?

23 A. Yes, I do.

24 Q. Okay. And in the request, MNSC asks for an  
25 explanation of the basis of the Company's estimated

1 range for interconnection costs; are you seeing that?

2 A. Yes, I am.

3 Q. In response A here, the Company discusses distribution  
4 asset estimates, right?

5 A. Yes, they do.

6 Q. And they talk about looking at average cost of  
7 transformer and then taking the average cost and  
8 calculating the number of transformers required at  
9 each voltage to serve 100 megawatts, right?

10 A. Yes.

11 Q. Do you have any idea of whether the number of  
12 transformers and resulting distribution  
13 interconnection costs -- well, strike that.

14 Does this sound accurate, to your  
15 understanding, of how interconnection costs would work  
16 for the customers we're talking about?

17 A. How the costs would work? Yes. My understanding is  
18 that the Company would have to invest some amount of  
19 money to interconnect the customer, and that some of  
20 it would be for distribution purposes.

21 Q. Would you expect or -- strike that.

22 To your knowledge and understanding and  
23 experience working with the Commission, would  
24 interconnection costs scale up with the size of the  
25 customer?

1 A. Like the Company's witness, I believe mentioned in  
2 your -- in your similar discussion it varies quite a  
3 bit -- from my understanding, it can vary quite a bit  
4 based on the customer, the load, and the location of  
5 the load, whether or not there's existing  
6 infrastructure, that sort of thing.

7 Q. Okay. And I won't hit on this too many times, but I  
8 just -- would you expect, for example, a 500-megawatt  
9 customer to have larger interconnection costs than a  
10 100-hundred megawatt customer?

11 A. Yes, if you assume away a lot of variables. Say, it's  
12 a brand new customer in an undeveloped location, then  
13 I think that's a reasonable assessment.

14 Q. Okay, thank you. Can you go back to the hearing room  
15 exhibits for your cross and open up Exhibit AG-1.21?

16 A. That would be staff's second discovery response to the  
17 AG, correct?

18 Q. That's correct.

19 A. Okay. Yes, I have it open.

20 Q. And so question 6 you can scroll down, 6(a) asked to  
21 provide all calculations and analyses as expected  
22 costs for adding any portion of the new data center  
23 load considered in this proceeding, along with  
24 calculations and other considerations, right?

25 A. Yes, that's right.

1 Q. And you were listed as the responding witness for this  
2 discovery response, right?

3 A. Correct.

4 Q. And your answer here -- or staff's answer here is,  
5 "Staff did not perform such an analysis," correct?

6 A. Yes, correct.

7 Q. Okay. So let's go back to rebuttal testimony. Kind  
8 of jumping around here, I apologize, but I wanted to  
9 make sure I got a couple things that I think I'd  
10 missed before the break. Go back to your rebuttal  
11 testimony here on page 1.

12 A. Okay.

13 Q. And at line 14, again, your testimony states, "However  
14 like with customers on any rate, it is difficult to  
15 impossible to directly tie one customer with their  
16 specific cost to serve"; are you seeing that?

17 A. Yes, I am.

18 Q. Okay. Now, can you go back -- let me open multiple  
19 tabs here myself. Can you go back to the hearing room  
20 exhibits and open Exhibit AG-1.13?

21 A. Yes, one moment. 1.13. Yes, I have it open.

22 Q. Okay. Great. And if you scroll down to response  
23 labeled U-21859-AG-CE-0143. Are you there?

24 A. Yes, I see it.

25 Q. Great, okay. And the AG n asks in question B --

1 subquestion B here, "Please explain which portions of  
2 the interconnection costs described in Consumers  
3 Energy's discovery response ending 0035 Consumers  
4 believes are directly attributable to the data center  
5 customer being interconnected"; are you seeing that?

6 A. Yes, I am.

7 Q. And are you familiar with the interconnection cost  
8 range that's referenced there for that discovery  
9 response ending 35?

10 A. Yes, I'm familiar with it. I couldn't tell you what  
11 it is right now, but yes, I'm familiar.

12 Q. And your understanding of that is the estimate that  
13 Consumers provided for in a 100-megawatt potential  
14 load, right?

15 A. Yes, I believe so.

16 Q. Okay. Okay, so now scrolling down to the Company's  
17 answer here, response subpart B, they state, "All of  
18 the costs estimated in discovery response ending 0035  
19 are directly attributable to the hypothetical  
20 100-megawatt load addition," right?

21 A. Yes.

22 Q. So in the context of this cost estimate I'm looking  
23 at, your statement about -- in your rebuttal testimony  
24 about difficulty or impossibility to directly  
25 attribute costs is not applicable, correct?

1 A. Not -- not applicable to what? To this response from  
2 the Company?

3 Q. Yes. To these specific costs to the Company. In this  
4 discovery response they're saying a set of costs are  
5 directly attributable, right?

6 A. Yes, that's what they're saying, yes.

7 Q. So in this case it's not difficult or impossible to  
8 tie them directly to the customer, right?

9 A. The only reason that this response is not difficult to  
10 impossible to tie costs is because they're  
11 hypothetical.

12 Q. And how do you know that? How do you know --

13 A. Because -- because the Company -- I'm sorry. Because  
14 when you make a hypothetical addition to load like  
15 we're talking about, or like the discovery responses  
16 are talking about, you can assume away basically any  
17 other assumptions for how the load will be connected  
18 to the system. In reality when a customer is  
19 interconnected with the system, a new one, like the  
20 Company discussed before, it depends on location,  
21 depends on size, it depends on existing  
22 infrastructure.

23 So hypothetically you can assume all that  
24 away and that way you can sort of narrowly define what  
25 the customer's costs are and directly attribute them

1 to a single customer. When the customer joins the  
2 system they are literally joining a system with  
3 thousands of other customers where they share  
4 different costs. They might share infrastructure.  
5 And so it's -- that's why it's difficult to impossible  
6 to narrowly define the exact costs that one customer  
7 requires to interconnect.

8 Q. Are transmission investments at a customer's site used  
9 only by that customer attributable to any other  
10 customers?

11 A. I don't know, even in the hypothetical, because  
12 transmission costs are allocated by the transmission  
13 company to the utility which are then passed to the  
14 customers via base rates. And I believe, as you  
15 discussed earlier with the Company witness, some  
16 portion through the PSCR process.

17 That's all to say that because they're  
18 allocated, maybe not entirely 100 percent, that I  
19 don't think it's fair to say that a transmission line  
20 only connecting one single customer can still be only  
21 attributed to one -- to that one single customer.

22 Q. I'm sorry, I believe I -- maybe I misspoke. I thought  
23 I was asking about transformer investments, which is  
24 part of the Company's estimation for distribution  
25 costs, correct?

1 A. I'm sorry, perhaps I misheard and just assumed you  
2 meant transmission costs.

3 Q. Well, maybe one of us is wrong -- it's not  
4 significant. But the question would be for  
5 transformer investments on a site used by a single  
6 customer, are those directly attributable to any other  
7 customers than that one customer?

8 A. I will say they can be an attributable to a single  
9 customer. For example, that's why customers can build  
10 their own transformers and then they receive a credit  
11 from the Company to recognize that the customer  
12 brought their own transformer.

13 Q. Okay. How do those interconnection costs get  
14 accounted for or collected?

15 A. Transmission -- I'm sorry, transformer costs --

16 Q. Strike that. Strike that. I'm going to make this  
17 more general.

18 What are the mechanisms for recovering  
19 incremental costs from these customers?

20 A. Incremental costs? Through base rates?

21 Q. So we're talking about revenue. But, I mean, how do  
22 we recover the costs for the additional load to the  
23 system? Is it through revenue from the Company -- or  
24 from a customer?

25 A. You recover the costs to serve the customers through

1 the cost of service process and the rate design  
2 process. And then the customer pays rates, the  
3 revenue goes to the Company, the Company serves the  
4 customer.

5 Q. Okay. Let me ask you this, their -- to my  
6 understanding there has been discussion of this case  
7 of amendments to Rate GPD that would prevent from  
8 cost-shifting or subsidization of these new customers  
9 from other existing Consumers Energy customers,  
10 correct?

11 A. No.

12 Q. That's not correct?

13 A. You're asking -- it might be helpful if you repeat the  
14 question.

15 Q. Sure. And I can probably pull the reference here too,  
16 if that would be helpful. I can probably pull them up  
17 from the application, give me one second.

18 Okay, so for example -- and I -- you know,  
19 this is just -- this is kind of a snapshot of one --  
20 of one piece of language that discussed cost shifting.  
21 So if you go to the application testimony, page 7.

22 A. 7 of Laura Connolly's direct testimony?

23 Q. Yeah.

24 A. Okay --

25 Q. Line 16.

1 A. Yes.

2 Q. And this is just for example. I'm talking about this  
3 out of context. We'll just say it's referring to  
4 reduction in contract capacity; do you see that?

5 A. Yes.

6 Q. Okay. And so there's language included here that says  
7 "Company would honor the [reduction] request if doing  
8 so does not create a stranded asset related to  
9 investment made to serve the customer's load requests  
10 or otherwise cause costs to be shifted to other  
11 customers," right?

12 A. Yes, correct.

13 Q. So what is that cost shifting referring to?

14 A. That cost shifting is referring to what would happen  
15 if the large load customer or data center customer  
16 leaves service and causes stranded assets.

17 So in reference to your earlier question,  
18 why I said no, it's -- I think it's best to go back to  
19 my direct testimony at the very beginning. So this  
20 starts on page 3, line 21, I say, "The fees of  
21 statement for the Company's proposed amendment can be  
22 found in direct testimony of Company witness Laura  
23 Connolly, 'The Company must put tariff provisions in  
24 place for data centers to protect other customers from  
25 stranded assets and increased costs should the data

1 center load not materialize after resources are  
2 committed to serve them or the load is not in place  
3 for as long as expected.'"

4 So when staff was discussing cost shifting,  
5 if we use that phrase specifically, what we're  
6 referring to is what would happen if the customer --  
7 if the new data center customers referred to in this  
8 case, what happens if they leave.

9 Q. Okay.

10 A. Not necessarily what happens when they become  
11 interconnected with the system and how that might  
12 affect costs.

13 Q. So what are the mechanisms for minimizing the  
14 potential for increased costs to other customers if  
15 those new large customers don't materialize or exit  
16 service prematurely?

17 A. So those provisions are basically what we're talking  
18 about in this case. And so those would be -- that  
19 part we characterize them as the enhancing revenue  
20 collection. That means like staff in the Company's  
21 proposals to create an exit fee or staff's proposal to  
22 make a collateral requirement that equals the exit  
23 fee.

24 What those two provisions specifically do  
25 is they create sort of a guarantee for the Company to

1 collect revenue -- or to have a more secure collection  
2 of revenue in case the customer does exit service.  
3 That revenue could then be used to offset any stranded  
4 asset costs if they are -- if they do materialize.

5 Q. Thank you, and you consider the CIAC provisions of  
6 Consumers tariff sheets to be another such mechanism  
7 for potentially mitigating stranded asset costs?

8 A. Yes.

9 Q. Okay. Are there any other mechanisms, other than exit  
10 fee, collateral as you described it, and CIAC?

11 A. There are several provisions that staff and the  
12 Company are recommending. Oh, for example, another  
13 one is increasing the -- the minimum load -- or sorry,  
14 the minimum billing demand requirement to 80 percent  
15 rather than 60 percent. That's another way of  
16 enhancing the revenue guarantee from the customer that  
17 could be used to offset future stranded costs.

18 Q. Okay. So we got a revenue guarantee component. And  
19 in your testimony we discussed before, that's tied to  
20 the exit fee, as well, right?

21 A. That's staff's proposal, yes.

22 Q. And you've also discussed here collateral terms that  
23 will provide some guarantee of payment for payment  
24 obligations; am I understanding that correctly?

25 A. Yes, correct.

1 Q. And then you're also referring to the CIAC provision,  
2 right?

3 A. Yes.

4 Q. Okay. And for one second, so you know, correct me if  
5 I'm wrong, maybe I'm misremembering this. My  
6 understanding is that staff's recommendation on  
7 collateral was to tie that amount to -- well, strike  
8 that.

9 What is staff's recommendation on a  
10 collateral provision?

11 A. One moment, please.

12 Yes, so I'm referencing here page 19 of my  
13 direct testimony beginning on line 8. These are  
14 staff's proposed modifications to the Company's  
15 proposal. And this is No. 2 and it's included a more  
16 detailed transparent definition of the collateral  
17 requirement and acceptable forms of payment and to  
18 define the collateral amount equal to the exit fee.

19 Q. Okay. So equal to the exit fee is the calculation for  
20 collateral and your recommendation, right?

21 A. Yes, that's correct.

22 Q. Okay. So let's talk a little bit about the CIAC. And  
23 let's go back to the exhibits, the hearing room for  
24 this, one second, and open up, again, AG-1.13.  
25 Exhibit AG-1.13.

1 A. 1-3, yes, I have it open.

2 Q. Okay. So you go all the way down to the last question  
3 included there, or the last two questions, 1.43  
4 subquestion E; are you seeing that?

5 A. Yes, I am.

6 Q. Okay. And it says -- it asks, "Confirm that the CIAC  
7 provisions do not present a strict requirement that a  
8 customer pay for the portions of interconnection costs  
9 identified in response to subquestion 21.D above; do  
10 you see that?

11 A. Yes, I do.

12 Q. And if you scroll down to Consumers answer on that  
13 they say "confirmed."

14 A. Yes, they do.

15 Q. Is that correct, to your understanding?

16 A. Yes, it is.

17 Q. Okay. And if we go down to 1.43 subquestion F, AG  
18 asks, "Confirm that the CIAC provisions do not  
19 strictly require a customer to pay the entirety of its  
20 interconnection costs identified in response to" --  
21 well, strike that.

22 It asks to confirm that "...the CIAC  
23 provisions do not strictly require a customer to pay  
24 the entirety of their interconnection costs even if  
25 the Company asks the customer to pay some portion of

1           those costs"; are you seeing that?

2       A.    Yes, I am.

3       Q.    Okay, and if you scroll down to the answer on that,  
4           that's subanswer F, it says "confirmed," right?

5       A.    Yes, it does.

6       Q.    Is that correct, to your understanding?

7       A.    Yes.

8       Q.    And to your understanding, if a -- if a customer were  
9           to be engaged under CIAC terms and they were to back  
10          out, say after a year, or let's say they were to back  
11          out before paying -- well, strike that.

12                   A customer can back out of a CIAC provision  
13          at any time without an obligation to future payment,  
14          right?

15       A.    I don't know for certain.

16       Q.    Okay.

17       A.    I'm sorry, I don't know -- I don't know for certain  
18          what the terms specifically are for pulling out of a  
19          CIAC arrangement early.

20       Q.    Okay.  So to kind of recap here, there's no strict  
21          obligation that a CIAC provision will even apply to  
22          these customers, right?

23       A.    Yes, that's correct.

24       Q.    And there's nothing in the CIAC that would require a  
25          full payment of interconnection costs, right?

1 A. Yes. As worded in the discovery response, it's not  
2 strictly required.

3 Q. Well, is that your understanding, too?

4 A. Yes, it is.

5 Q. Okay.

6 A. So the CIAC provisions in the tariffs, I believe they  
7 use pretty deliberate language that says the Company  
8 may require CIAC payments. And in reference to these  
9 questions I take that to mean that they also may not,  
10 which is why the Company's answer and -- the AG asked  
11 very similar questions to staff in discovery, and we  
12 also had the same response. We confirmed that it is  
13 not strictly required and that's -- and the reason why  
14 we didn't write it necessarily in our response, but  
15 I'll tell you now, the reason why is because of the  
16 language in the tariff says the Company "may" require  
17 a customer to pay these CIAC charges.

18 Q. Okay. And you're not aware of whether it's possible  
19 for a customer to just back out of their CIAC and not  
20 be obligated to any terms once they leave, right? You  
21 said that a minute ago?

22 A. Yes, I'm not certain, but if -- it would likely be in  
23 the -- in the contract that the customer signed with  
24 the Company, that I believe was referenced several  
25 times in the cross-exam of the Company witness.

1           Although I'm not certain of that, I would just think  
2           it would be reasonable.

3       Q.     Give me one second, I'm sorry.

4                         So am I correct in understanding that all  
5           this is to say that you don't know how much of any  
6           portion of one of these customer's interconnection  
7           costs or other costs could necessarily be collected  
8           through the CIAC provisions?

9       A.     Yes.

10      Q.     Okay.  So just to be clear here, so you don't know  
11           whether a revenue guarantee, an exit fee, or  
12           collateral would necessarily recover the costs for  
13           bringing on one of these customers, right?

14      A.     Yes, correct.

15      Q.     And you also don't know whether the CIAC would cover  
16           any particular portion of the costs incurred in  
17           bringing on one of these customers, correct?

18      A.     I think the distinction here is whether it would cover  
19           the entirety of the costs.  So if they do apply, then  
20           they would cover some portion of the interconnection  
21           costs.  But I take your point to mean that they  
22           don't -- they might not necessarily, specifically with  
23           the CIAC provisions.

24      Q.     I mean we -- I believe it was discussed that we don't  
25           know your -- stop it, strike that.  Sorry.

1                   You don't know whether the CIAC would  
2                   recover any portion of even the cost CIAC is intended  
3                   to, at least in theory, collect, right?

4       A.       That would be the case if the Company didn't require  
5                   any CIAC.  And like I said before on the tariff, it is  
6                   up to the Company's discretion.  So I can't say for  
7                   certain whether or not any CIAC payment would be  
8                   collected.

9       Q.       Okay.  Well, let's go back to your rebuttal testimony  
10                  here just to kind of get back on track.  And we've  
11                  been quoting from this back and forth a little bit,  
12                  but let's go to page 2 starting at line 7.  And this  
13                  is in reference to the DCC's analysis; are you seeing  
14                  that?

15      A.       Yes, I am.

16      Q.       And that analysis I'm referring to is the revenue  
17                  modeling we talked about a short while ago, right?

18      A.       Yes.

19      Q.       And you would take that revenue modeling, I'm  
20                  guessing, but correct me if I'm wrong, to be in  
21                  reference to a revenue guarantee as we discussed a  
22                  minute ago, right?

23      A.       Yes.

24      Q.       Okay.  So you say here, "Rather than quibble with the  
25                  details of DCC's analysis, staff instead reminds the

1 Commission that there are many levers on which it can  
2 lean to increase or decrease the amount of risk faced  
3 by existing customers if LLC, that is to say, large  
4 load customers, fails to remain in service"; do you  
5 see that?

6 A. Yes, I do.

7 Q. But from our discussion here, do you -- it sounds like  
8 you're kind of talking about a scenario which these  
9 levers simply don't work or they break, right? Strike  
10 that. Strike that.

11 If you have it modeled properly for cost  
12 and cost exceeds revenue and a Company leaves  
13 prematurely, what happens to those costs that aren't  
14 covered by an exit fee?

15 A. What would happen is the Company would, at their  
16 discretion, they could request recovery of the  
17 stranded -- of the cost of the stranded assets from  
18 other customers through base rates. And then it would  
19 be up to the Commission whether or not to approve that  
20 request or not, or some portion of it. It would be up  
21 to the Commission's discretion.

22 Q. Okay.

23 A. And the Company's discretion to request those costs in  
24 the first place.

25 Q. Okay, let's go back to page -- let's go back to your

1 direct testimony which is included in the SharePoint.

2 A. Yes, I have it pulled up.

3 Q. Okay, great. On page 6.

4 A. Okay, I'm on page 6.

5 Q. Okay, great. So this is line 21 on page 6 going on to  
6 page 7, you say, "On the other hand, if interest  
7 investment in artificial intelligence, for example,  
8 evaporates after the necessary infrastructure has been  
9 expanded to serve energy to data centers, and there is  
10 no obvious way in which other new customers would  
11 appear to require the new capacity"; do you see that?

12 A. Yes, I do.

13 Q. Oh, and let's go on here. It says, "This would leave  
14 existing customers and/or the utility with a  
15 tremendous amount of capacity that is no longer used  
16 and useful. So not only do large load customers  
17 expose the Company's system to greater costs, but also  
18 have a higher risk of straining those costs than the  
19 existing customer base through their uniquely high  
20 level of demand"; do you see that?

21 A. Yes, I do.

22 Q. Okay. So when you refer here to the interests in  
23 investment of artificial intelligence, for example,  
24 evaporating, what do you mean by that?

25 A. What I was getting at with this quote in particular,

1 and the context within which this quote is made, I was  
2 using an example of a reason -- or sorry, the  
3 evaporation of investment in artificial intelligence  
4 could be a reason why load -- or -- yeah, data center  
5 load might no longer be on the system. And --

6 Q. Okay, and -- go ahead.

7 A. And I believe elsewhere in my testimony, I say it's --  
8 it exposes the Company's greater costs and have a  
9 higher risk of straining these costs. Specifically  
10 because the load is so large it might be difficult to  
11 find new customers to come in and take over the  
12 additional capacity the Company acquired to serve the  
13 previous customer that's no longer there. Compared  
14 to, say, smaller customers or customers within a more  
15 diverse, you know, pool of businesses, you could say.

16 I go on to talk about how load growth,  
17 natural load growth, can sort of smooth over the  
18 effect of customers leaving. Because one can assume  
19 over time more customers will come on to take their  
20 place. With customers contemplated in this case,  
21 large load customers, it might be more difficult  
22 because of the size of the customer.

23 Q. Okay. That's good to know.

24 MR. WOLLENZIEN: Your Honor, I would like  
25 to take a ten-minute break. I think I'm getting close

1 to the end of my questioning so -- and maybe that's  
2 not the case. Maybe there will be another 15, 20,  
3 max, half hour. I should be done by noon. But it  
4 would be helpful for me to have ten minutes to kind of  
5 figure out exactly where I'm at and try to figure out  
6 an off ramp to the end of my questioning here.

7 JUDGE TALBOT: All right, we'll go off the  
8 record for ten minutes. Let's be back at -- roughly  
9 11:25. Yeah, that's a 6, 11:26. See you all in a  
10 few.

11 MR. WOLLENZIEN: Thank you, your Honor.

12 (Recess taken at 11:16 a.m.)

13 (On the record at 11:26 a.m.)

14 JUDGE TALBOT: All right, we're back on the  
15 record in Michigan Public Service case No. U-21859.  
16 We are continuing cross-examination of Mr. Isakson.  
17 Go ahead.

18 MR. WOLLENZIEN: Thank you, your Honor.

19 BY MR. WOLLENZIEN:

20 Q. So Witness Isakson, in Consumers' initial application  
21 in this case, they discuss coming back in at some  
22 point in the future for a standalone rate for these  
23 large customers, right?

24 A. I believe so.

25 Q. Okay. Would you like me to -- would it be helpful for

1 me to pull a reference for you?

2 A. Yes, please.

3 Q. Okay. Give me one second. I apologize -- I don't  
4 have this at my fingertips, but give me just one  
5 moment, I'll pull it up for you.

6 Okay, so thank you for your patience.

7 Page 5 of Witness Connolly's direct testimony at  
8 line 10.

9 A. Yes, I see it.

10 Q. "Once large scale data centers start to come online,  
11 the Company expects to use the load data to analyze  
12 putting data centers in their own cost of service  
13 column in developing a rate specific to data centers";  
14 do you see that?

15 A. Yes, I do.

16 Q. Okay. And in the interim, or as of right now, we  
17 discussed, you're not aware of any cost modeling that  
18 shows what a necessary revenue guarantee would be to  
19 meet the costs from those customers being brought onto  
20 the grid, right?

21 A. Yes.

22 Q. Okay. Given that uncertainty and the sheer size of  
23 these customers, wouldn't you want to err on the side  
24 of caution in the near term, as far as establishing a  
25 minimum revenue guarantee?

1 A. I believe that's what we're doing with our proposal,  
2 is erring on the side of caution. Because we're -- by  
3 that, I mean the staff and in part the Company, are  
4 approaching more strict guarantees of revenue from  
5 these customers.

6 Q. How do you know that 80 percent minimum billing demand  
7 ensures a sufficient revenue guarantee?

8 A. I don't know exactly. It's staff's opinion that it is  
9 a reasonable amount, because we don't know the  
10 specific costs involved with certain new customers  
11 eventually, because the customers don't exist yet.

12 Q. But one way of increasing revenue guarantee would be  
13 increasing the minimum billing number, correct?

14 A. Yes, correct.

15 Q. Are you aware of other jurisdictions that have a  
16 higher minimum billing demand for these types of  
17 customers?

18 A. Not off of the top of my head. I don't remember the  
19 exact amounts of minimum billing demand from -- for  
20 example, Indiana or Ohio, although it might be in my  
21 direct testimony.

22 Q. Well, for example, I can reference did you review --  
23 did you review MNSC Witness Palmer's direct testimony  
24 in this case in preparation for your testimony today?

25 A. Yes, I did.

1 Q. Okay. I can drop that in the chat for reference.  
2 I'll put it in the SharePoint for reference. I'm  
3 showing uploaded. If you refresh now, it should be at  
4 the top.

5 A. Yeah, I see it. I'm opening it.

6 Q. So if you go down to page 13 of her testimony.

7 A. Okay.

8 Q. On line 19, she says, "The Kentucky PSC, Public  
9 Service Commission, approved a 90 percent minimum  
10 monthly billing demand for Kentucky Power's large load  
11 tariff"; do you see that?

12 A. You said page -- yes, I see it.

13 Q. Yeah. And then she also references the next line, "AP  
14 Ohio's proposed settlement, it's an 85 percent minimum  
15 billing demand for loads above 116 megawatts"; do you  
16 see that?

17 A. Yes, I do.

18 Q. Okay. So setting a higher minimum billing demand  
19 would entail a larger revenue guarantee, correct?

20 A. Yes, it would.

21 Q. Okay. And another way to increase revenue guarantee,  
22 would be to have -- strike that.

23 Staff's current recommendation for exit fee  
24 is tied to remaining revenue guarantee over the life  
25 span of the contract term, right?

1 A. Yes, specifically to the 80 percent minimum billing  
2 demand for the remaining years, yeah.

3 Q. Okay. So in other words -- strike that.

4 So then another way you could increase a  
5 revenue guarantee would be by extending life span of  
6 the contract, correct?

7 A. Yes, that's correct.

8 Q. Okay. In fact if you go back to in Ms. Palmer's  
9 testimony here, page 12 to 13. Do you --

10 A. Yes, I see it, sorry.

11 Q. She describes the Kentucky case as well, that the  
12 Public Service Commission there approving a 20-year  
13 minimum contract term; are you seeing that?

14 A. Yes, I am.

15 Q. Okay. Would you see value to either increasing the  
16 minimum billing demand recommendation or increasing  
17 the contract term recommendation of staff in order to  
18 better assure a minimization or mitigation of stranded  
19 asset risks for the purposes of the present case?

20 A. Yes, there would be value insofar as it guarantees  
21 more revenue collected in the form of collateral  
22 upfront and/or paid via the exit fee, should it ever  
23 be levied. Best case is built on the fact that there  
24 are -- that these are variables that the Commission  
25 can choose them. Obviously the other parties

1 recommended higher thresholds.

2 So the point of staff's case was to give  
3 the Commission a broad array of options to choose  
4 from. Because picking out the number for minimum  
5 billing demand, as I say in my rebuttal testimony,  
6 staff's discussion is to highlight that there is no  
7 right answer, per se, except for the one that the  
8 Commission picks. And staff's recommendation is 80  
9 percent of minimum billing demand and the 15-year  
10 contract term.

11 Q. So for example, you would not consider -- and if I'm  
12 understanding you correctly, and correct me if I'm  
13 wrong, you would consider, for example, 85 percent  
14 minimum billing demand to be reasonable just not  
15 specifically what staff is recommending here; is that  
16 what you're saying?

17 A. Yes, that is what I'm saying. Well, staff's  
18 recommendation of 80 percent, you'll notice in my  
19 direct -- or sorry, in my rebuttal testimony of  
20 witness Palmer, I don't make a staff recommendation to  
21 reject that proposal. So staff doesn't take a  
22 position on whether or not that's reasonable.

23 Q. That's very helpful, actually, witness Isakson. I'd  
24 ask the same about Ms. Palmer's recommendation on  
25 contract length. Is staff of a similar mind as to her

1 recommendation on contract length?

2 A. Yes. Again, the same answer applies. You'll notice  
3 that staff didn't put any testimony in recommending  
4 the Commission reject those. Like I said, this is to  
5 build a broad record for the Commission to choose  
6 from.

7 Q. That's helpful.

8 I think I'm about wrapped up here, but give  
9 me just one more second to look at my notes and make  
10 sure I'm not missing anything. And thank you for your  
11 patience and your time today, Mr. Isakson.

12 A. You're welcome.

13 MR. WOLLENZIEN: Okay, I think I'm finished  
14 with my questioning, your Honor. I do reserve, you  
15 know, as I discussed off the record, I guess, the  
16 ability to ask some sort of recross on questions asked  
17 by other intervenors, as well as potentially recross  
18 asked on redirect by staff's counsel, to the extent  
19 that it happens.

20 JUDGE TALBOT: All right, thank you.

21 Let's go off the record for a couple of  
22 minutes.

23 (Off the record at 11:38 a.m.)

24 (On the record at 11:39 a.m.)

25 JUDGE TALBOT: All right. Let's go back on

1 the record. Mr. Vijaykar, I know I killed your name,  
2 I'm sorry, on behalf The Data Center, go ahead.

3 MR. VIJAYKAR: That's okay, your Honor.  
4 It's Mr. Vijaykar just for the record.

5 JUDGE TALBOT: Go ahead.

6 CROSS-EXAMINATION

7 BY MR. VIJAYKAR:

8 Q. Good morning, Mr. Isakson. My name is Nikhil  
9 Vijaykar. I'm counsel for DCC. How are you?

10 A. Very well, thank you.

11 Q. I'll be very brief. I just have a couple questions  
12 for you to follow up on some questions that counsel  
13 for the AG asked you this morning.

14 Mr. Isakson, do you recall a line of  
15 questioning from Mr. Wollenzien related to staff's  
16 recommendation with respect to the exit fee provision  
17 at issue in this proceeding?

18 A. Yes.

19 Q. And as I understand it, your recommendation -- or  
20 staff's recommendation is that an exit fee be set  
21 equal to -- sorry, that a collateral amount for Rate  
22 GPD customers that constitute large load customers  
23 would be set equal to the exit fee provision in Rate  
24 GPD; is that correct?

25 A. Yes, correct.

1 Q. And the exit fee at issue here is equivalent to the  
2 length of the contract, at least as it's stated in  
3 Consumers application which is 15 years, correct?

4 A. Yes, that's correct.

5 Q. Okay. Now, it's your position that the exit fee  
6 should be mitigated to the extent possible, correct?

7 A. Mitigated by the Company to the extent possible by the  
8 Company.

9 Q. Thank you for that clarification. The collateral  
10 amount that you proposed would not reflect any  
11 potential for mitigation, would it?

12 A. Yes, it would if it's set equal to the exit fee. If  
13 the exit fee has been mitigated in some part or in  
14 whole by the Company, then under staff's proposal the  
15 collateral requirement would also be mitigated by the  
16 same amount.

17 Q. But just so I'm clear on the mechanics, to the extent  
18 that the exit fee is mitigated, that would occur after  
19 the customer has posted collateral and after the  
20 customer has, in fact, exited; isn't that correct?

21 A. Yes, that's correct.

22 Q. Okay. Returning to the amount of the exit fee, at the  
23 beginning of the contract, the customer were post  
24 collateral equal to 15 years of minimum demand charges  
25 under your proposal, correct?

1 A. Yes, correct.

2 Q. And are you aware of any other jurisdiction or utility  
3 service territory in which the collateral amount for  
4 large load customers or data center customers has been  
5 set equivalent to 15 years of minimum charges?

6 A. I'm not aware of that being proposed or approved in  
7 other jurisdictions.

8 Q. Are you -- strike that.

9 Did you, as a part of your preparation of  
10 testimony in this proceeding, calculate the dollar  
11 amount or the dollar per megawatt amount that 15 years  
12 of minimum charges would translate to?

13 A. No, I did not.

14 Q. Just a couple more questions, Mr. Isakson. You've  
15 proposed a set of protections in your testimony. A  
16 set of -- let's call them a set of provisions in your  
17 testimony, correct?

18 A. Yes, I did.

19 Q. Maybe more appropriately stated, you proposed a set of  
20 revisions to what Consumers Energy put into its  
21 application, correct?

22 A. Yes, that's correct.

23 Q. Are you aware of any other tariff in the Company's  
24 tariff book that includes an equivalent set of  
25 aggregate protections?

1 A. No, not equivalent. Sorry, the answer to your  
2 question is no.

3 Q. Now, I understand in your role you're also familiar,  
4 generally, with DTE, DTE Electric Company's tariffs,  
5 as well; is that correct?

6 A. Yes, that's correct.

7 Q. Are you aware -- and this is the same question that I  
8 just asked you a minute ago, are you aware of any  
9 other tariff in DTE Electric's tariff book that  
10 includes an equivalent set of tariff protections?

11 A. No. But subject to -- I don't have their tariffs in  
12 front of me, but as far as I know today right here,  
13 no, they do not.

14 Q. Okay. Thank you, Mr. Isakson. Just one more question  
15 or one more quick line of questions.

16 You recall towards the end of  
17 Mr. Wollenzien's cross he asked you a couple questions  
18 about the minimum demand levels that Ms. Palmer  
19 recommends in her testimony, as well as the contract  
20 term Ms. Palmer recommends in her testimony?

21 A. Yes, I recall.

22 Q. Okay. Would you agree that, all else equal, a longer  
23 contract term would produce more revenues for the  
24 Company than a shorter contract term?

25 A. I can't say that for certain, because it depends on

1           how long the customer remains a customer following the  
2           end of the contract term.

3       Q.    Fair enough, Mr. Isakson.  I should put that  
4           differently.  Would you agree that a customer paying  
5           minimum charges for a longer contract term would  
6           produce more revenues than a customer paying minimum  
7           charges for a shorter contract term, all else equal?

8       A.   Yes.  All else equal.

9       Q.    Would a -- under those variables, would a 25-year  
10           contract produce more revenues than a 20-year  
11           contract?

12      A.    Again, all else equal, yes.  Pertains to like my first  
13           answer to this line of questioning, it depends on how  
14           long the customer otherwise would have stayed,  
15           renewing the customer at the end of their contract.

16      Q.    Okay.  With those variables controlled, would a  
17           50-year contract produce more revenues than a 25-year  
18           contract?

19      A.    Yes.  In the same way that a customer being in service  
20           for 50 years would produce more revenue than a  
21           customer being in service for 25 or any other number  
22           lower than 50.

23                   MR. VIJAYKAR:  Thank you, Mr. Isakson.  No  
24           further questions.

25                   JUDGE TALBOT:  All right, thank you.

1                   Any other cross for Mr. Isakson? Speak  
2 now.

3                   All right, it looks like -- oh, any  
4 redirect, Mr. Singh?

5                   MR. SINGH: Can we have five minutes,  
6 please, your Honor?

7                   JUDGE TALBOT: Sure. We're off the record.  
8 We'll be back in -- at 11:50.

9                   MR. SINGH: Thank you.

10                   (Recess taken at 11:46 a.m.)

11                   (On the record at 11:51 a.m.)

12                   JUDGE TALBOT: All right. We're back on  
13 the record in Michigan Public Service case  
14 No. U-21859.

15                   Mr. Singh, any redirect?

16                   MR. SINGH: We do not have redirect, your  
17 Honor.

18                   JUDGE TALBOT: All right, so any other  
19 examination of Mr. Isakson?

20                   All right, so we have the three exhibits.  
21 Any objection to the admission of staff's exhibits  
22 S-1, S-2, and S-3?

23                   All right, so hearing none, they're  
24 admitted.

25                   EXHIBITS STAFF S-1, S-2, and S-3

1 ADMITTED

2 11:52 a.m.

3 JUDGE TALBOT: Let's go back off the record  
4 for a minute.

5 (Off the record at 11:52 a.m.)

6 (On the record at 11:56 a.m.)

7 JUDGE TALBOT: All right, so we're back on  
8 the record in U-21859. We are going to break for  
9 lunch. However, everybody has indicated that  
10 examination of Mr. Isakson is finished, so you are  
11 excused. Thank you, Mr. Isakson.

12 All right, so now we're going to break for  
13 lunch. We'll be back here at exactly 1:00. Off the  
14 record. Oh, wait, Mr. Campbell, go ahead. You're  
15 muted.

16 MR. CAMPBELL: We can handle this off the  
17 record if you'd like, your Honor.

18 JUDGE TALBOT: All right, go off the  
19 record.

20 (Off the record at 11:57 a.m.)

21 (On the record at 11:59 a.m.)

22 JUDGE TALBOT: Let's go back on the record.  
23 All right, so we're back on the record in U-21859. We  
24 are going to break for lunch. However, everybody has  
25 indicated that examination of Mr. Isakson is finished.

1                   So you are excused. Thank you,  
2                   Mr. Isakson.

3                   All right, so now we're going to break for  
4                   lunch. We'll be back here at exactly 1:00.

5                   Off the record -- oh wait, Mr. Campbell, go  
6                   ahead. You're muted.

7                   MR. CAMPBELL: We can handle this off the  
8                   record if you'd like, your Honor.

9                   JUDGE TALBOT: All right, go off the  
10                  record.

11                  (Off the record at 11:59 a.m.)

12                  (Recess taken at 12:00 p.m.)

13                  (Back on the record at 1:02 p.m.)

14                  JUDGE TALBOT: All right, let's go on the  
15                  record in Public Service Commission case No. U-21859.  
16                  This is a date set for cross-examination. We are set  
17                  to have cross-examination of Nicholas Revere.

18                  Let's start by swearing the witness,  
19                  please.

20                  NICHOLAS M. REVERE,  
21                  was thereupon called as a witness herein, and after  
22                  having first been duly sworn to testify to the truth,  
23                  the whole truth and nothing but the truth, was  
24                  examined and testified as follows:

25                  JUDGE TALBOT: Thank you.

1 All right, go ahead, Mr. Singh, sorry.

2 DIRECT EXAMINATION

3 BY MR. SINGH:

4 Q. Good afternoon, Mr. Revere.

5 A. Good afternoon.

6 Q. Would you please state your full name for the record?

7 A. My name is Nicholas M. Revere.

8 Q. Thank you. Would you also please state by whom you  
9 are employed and what capacity?

10 A. The Michigan Public Service Commission staff as the  
11 director of the energy operations division.

12 Q. Thank you. In this case, case U-21859, did you cause  
13 to be filed the qualifications and rebuttal testimony  
14 of Nicholas M. Revere, consisting of cover page and 12  
15 pages of questions and answers?

16 A. Yes.

17 Q. Okay. Do you have any changes to that rebuttal  
18 testimony?

19 A. I do not.

20 Q. Okay. If I ask you those same questions today, would  
21 your answers be the same?

22 A. Yes, they would.

23 Q. Were there any exhibits associated with this  
24 testimony?

25 A. No.

1 Q. Okay.

2 MR. SINGH: Your Honor, at this time, staff  
3 moves to bind in the qualifications and rebuttal  
4 testimony of its witness, Nicholas M. Revere. And  
5 after that, I would tender the witness for cross.

6 JUDGE TALBOT: Thank you.

7 Any objection to binding in the rebuttal  
8 testimony of Mr. Revere?

9 All right, hearing none, the testimony is  
10 bound in.

11 (Rebuttal testimony of Nicholas  
12 Revere is bound into the record.)

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**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

\* \* \* \*

**In the matter on the application of )**  
**CONSUMERS ENERGY COMPANY )**  
**for Ex Parte Approval of Certain Amendments )**  
**to Rate GPD. )**  

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**Case No. U-21859**

**QUALIFICATIONS AND REBUTTAL TESTIMONY OF**

**NICHOLAS M. REVERE**

**MICHIGAN PUBLIC SERVICE COMMISSION**

**July 9, 2025**

**QUALIFICATIONS OF NICHOLAS M. REVERE**  
**CASE NUMBER U-21859**  
**PART I**

1 Q. Please state your name and business address.

2 A. My name is Nicholas M. Revere. My business address is 7109 West Saginaw Hwy,  
3 Lansing, Michigan 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 Commission) as  
6 the Director of the Energy Operations Division.

7 Q. Would you briefly describe your academic background?

8 A. I earned a Bachelor of Arts degree in Political Science and a Bachelor of Arts degree in  
9 Economics from Michigan State University in 2006. In August of 2008 and 2009, I  
10 completed the annual National Association of Regulatory Utility Commissioners  
11 (NARUC) regulatory studies program at Michigan State University, which included  
12 courses on ratemaking, rate case auditing, regulatory policy, and other regulatory issues.  
13 In September of 2010, I completed the Institute for Public Utilities Advanced Regulatory  
14 Studies Program. In October 2012, I completed the Association of Edison Illuminating  
15 Companies' Advanced Course in Load Research.

16 Q. What are your current responsibilities at the MPSC?

17 A. As Director of the Energy Operations Division, I oversee the responsibilities of the  
18 division. The responsibilities of the division include, but are not limited to: enforcement  
19 of technical standards and service quality rules; review of certain electric distribution  
20 proposals, expenses, and expenditures; certain financial incentives and disincentives;  
21 emergency management and planning; cyber and physical security; monitoring of  
22 petroleum and propane fuel sectors; reviewing natural gas and electric power supply costs  
23 and plans under 1982 PA 304; review of certain electric generation costs; review of

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1 demand response proposals and costs; ensuring compliance with statutes regarding the  
 2 distributed generation program; interconnection rules and procedures; reviewing  
 3 renewable siting requests under 2023 PA 233, as well as monitoring of compliance for  
 4 approved siting requests. Prior to assuming my current role, I was manager of the Rates  
 5 and Tariffs section of the MPSC, with responsibilities including, but not limited to, cost-  
 6 of-service, rate design, and tariffs for utilities.

7 Q. Have you previously filed testimony in any cases before the Commission?

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

<u>Case</u>	<u>Company</u>	<u>Case Type</u>
U-15645	Consumers Energy Electric	Rate Case
U-15766	MichCon Gathering v. Highmount	Act 9 Complaint
U-15768	Detroit Edison/DTE Electric	Rate Case
U-15985	MichCon/DTE Gas	Rate Case
U-15986	Consumers Energy Gas	Rate Case
U-16169	SEMCO Energy Gas	Rate Case
U-16191	Consumers Energy Electric	Rate Case
U-16566	Consumers Energy Electric	RDM Recon
U-16568	Upper Peninsula Power Company	RDM Recon
U-16780	Detroit Edison/DTE Electric	RDM Recon
U-16830	Wisconsin Electric Power Company	Rate Case
U-16952	Detroit Edison/DTE Electric	ECIM Recon
U-16999	MichCon/DTE Gas	Rate Case
U-17643	Consumers Energy Gas	Rate Case

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1	U-17688	Consumers Energy Electric	Act 169
2	U-17689	Detroit Edison/DTE Electric	Act 169
3	U-17701	MichCon/ DTE Gas	IRM
4	U-17735	Consumers Energy Electric	Rate Case
5	U-17767	Detroit Edison/DTE Electric	Rate Case
6	U-17882	Consumers Energy Gas	Rate Case
7	U-17990	Consumers Energy Electric	Rate Case
8	U-18010	Consumers Energy Gas	Contract
9	U-18014	Detroit Edison/DTE Electric	Rate Case
10	U-18124	Consumers Energy Gas	Rate Case
11	U-18224	Upper Michigan Energy Resources Corporation	CON
12	U-18239	Consumers Energy Electric	SRM
13	U-18248	Detroit Edison/DTE Electric	SRM
14	U-18250	Consumers Energy Electric	Securitization
15	U-18253	Upper Michigan Energy Resources Corporation	SRM
16	U-18254	Upper Peninsula Power Company	SRM
17	U-18255	Detroit Edison/DTE Electric	Rate Case
18	U-18258	Cloverland Electric Cooperative	SRM
19	U-18322	Consumers Energy Electric	Rate Case
20	U-18370	Indiana Michigan Power Company	Rate Case
21	U-18999	DTE Gas	Rate Case
22	U-20111	Upper Peninsula Power Company	TCJA Credit A
23	U-20114	Michigan Gas Utilities	TCJA Credit A

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1	U-20130	Upper Michigan Energy Resources Corporation	SRM
2	U-20131	Upper Peninsula Power Company	SRM
3	U-20144	Cloverland Electric Cooperative	SRM
4	U-20162	DTE Electric	Rate Case
5	U-20189	DTE Gas	TCJA Credit B
6	U-20276	Upper Peninsula Power Company	Rate Case
7	U-20284	DTE Electric	TCJA Credit B
8	U-20298	DTE Gas	TCJA Calculation C
9	U-20309	Consumers Energy	TCJA Calculation C
10	U-20316	Indiana Michigan Power Company	TCJA Credit B
11	U-20317	Indiana Michigan Power Company	TCJA Calculation C
12	U-20322	Consumers Energy Gas	Rate Case
13	U-20233	Consumers Energy Gas	GCR Plan
14	U-20359	Indiana Michigan Power Company	Rate Case
15	U-20479	SEMCO Energy Gas	Rate Case
16	U-20561	DTE Electric	Rate Case
17	U-20642	DTE Gas	Rate Case
18	U-20650	Consumers Energy Gas	Rate Case
19	U-20150	CARE v. Upper Peninsula Power Company	Complaint
20	U-20697	Consumers Energy Electric	Rate Case
21	U-20889	Consumers Energy Electric	Securitization
22	U-20940	DTE Gas	Rate Case
23	U-20963	CE Electric	Rate Case

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1	U-21148	Consumers Energy Gas	Rate Case
2	U-20836	DTE Electric	Rate Case
3	U-21224	Consumers Energy Electric	Rate Case
4	U-21286	Upper Peninsula Power Company	Rate Case
5	U-21308	Consumers Energy Gas	Rate Case
6	U-21297	DTE Electric	Rate Case
7	U-21389	Consumers Energy Electric	Rate Case
8	U-21461	Indiana Michigan Power Company	Rate Case
9	U-21384	DTE Gas	Depreciation
10	U-21291	DTE Gas	Rate Case
11	U-21490	Consumers Energy Gas	Rate Case
12	U-21540	Michigan Gas Utilities	Rate Case
13	U-21555	Upper Peninsula Power Company	Rate Case
14	U-21534	DTE Electric	Rate Case
15	U-21585	CE Electric	Rate Case
16	U-21816	CE Electric	REP Case
17	U-21806	CE Gas	Rate Case

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1 Q. What is the purpose of your rebuttal testimony in this case?

2 A. The purpose of my testimony is to respond to certain claims made by several intervening  
3 parties about the appropriate way to account for the impact of data center load on various  
4 other programs and processes.

5 Q. Are you sponsoring any exhibits?

6 A. No.

7 **Impact of Data Center Load**

8 Q. Please summarize the various impacts of data center load identified by intervenors.

9 A. The Ecology Center, The Environmental Law & Policy Center, Union of Concerned  
10 Scientists, and Vote Solar (collectively the Clean Energy Organizations or CEO) witness  
11 Saad Siddique discusses how data center load could affect the ability of the Company to  
12 meet its clean and renewable energy goals under statute, claiming the load would make  
13 the current plan insufficient, and result in more cost and risk.<sup>1</sup> Michigan Energy  
14 Innovation Business Council, the Institute for Energy Innovation, and United  
15 (collectively MEIU) witness John D. Albers also discusses how data center load could  
16 affect the Company's obligations under various statutes, including those related to the  
17 Integrated Resource Plan (IRP) process and clean and renewable energy goals, and  
18 available tax exemptions.<sup>2</sup> Attorney General (AG) witness Michael W. Deupree  
19 discusses how data center load could affect the ability of the Company to meet its  
20 renewable energy goals under statute, as well as the availability of tax exemptions.<sup>3</sup>

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<sup>1</sup> CEO witness Siddique Direct Testimony, pp. 7-14.

<sup>2</sup> MEIU witness Albers Direct Testimony, pp. 5-7.

<sup>3</sup> AG witness Deupree Direct Testimony, pp. 22-25.

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1 Michigan Environmental Council, Natural Resources Defense Council, Sierra Club, and  
2 Citizens Utility Board of Michigan (collectively MNSC) witness Douglas B. Jester  
3 discusses the statutory requirements for data center tax exemptions and clean and  
4 renewable energy goals.<sup>4</sup>

5 Q. How do the intervenors propose these impacts should be dealt with?

6 A. In the main, the intervenors propose dealing with these impacts in the instant case  
7 through various means. CEO witness Saddique recommends that the Commission  
8 modify the data center provision to “require potential data center customers to develop  
9 clean energy sourcing plans as part of their applications for electric service” the  
10 information within which would be used by the Company to, in part, evaluate how the  
11 load would impact its RES compliance.<sup>5</sup> CEO witness Saddique also proposes the  
12 provision “should include a clear pathway for prospective data center customers to utilize  
13 Consumers’ Voluntary Large Customer Renewable Energy Program (or a similar  
14 program) to access new, incremental, time-matched, deliverable clean energy to help  
15 serve their new load requirement.”<sup>6</sup> MEIU witness Albers proposes a “clean transition  
16 tariff” that would “provide for the customer’s ability to choose the type of resources  
17 desired, such as generation, transmission, or distribution resources that are sourced or  
18 supported via utility procurements, bilateral or trilateral contracting, behind-the-meter  
19 and/or front-of-meter collocation arrangements.”<sup>7</sup> MEIU witness Albers also proposes  
20 that such a tariff would also provide options for the customer to “make incremental

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<sup>4</sup> MNSC witness Jester Direct Testimony, pp. 13-15.

<sup>5</sup> CEO witness Saddique Direct Testimony, p. 15.

<sup>6</sup> CEO witness Saddique Direct Testimony, p. 16.

<sup>7</sup> MEIU witness Albers Direct Testimony, pp. 9-10.

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1 monetary contributions to existing EWR, DR, VPP, and demand flexibility programs,”  
2 “implementation of dynamic transformer rating”, “deployment of grid enhancing  
3 technologies” as alternatives.<sup>8</sup> MEIU witness Albers also recommends duplicating the  
4 current “External Power Purchase Agreement” option under the Company’s Voluntary  
5 Green Pricing Program (VGP) outside of the VGP and including in the proposed tariff  
6 that the Company will issue requests for proposals (RFPs) for generation specific to  
7 serving particular customers’ needs.<sup>9</sup> MNSC witness Jester claims the tariff provision  
8 contemplated in the instant case should provide the options necessary to meet the tax  
9 exemption requirements through “bespoke resources that reasonably match the data  
10 center’s load” including that “Consumers Energy provide at least 60% renewable energy  
11 to data center customers as part of any bespoke resource portfolio.”<sup>10</sup> AG witness  
12 Deupree recommends “a requirement that the Company enter into a contract with the  
13 customer for the procurement of at least 60 percent of its load requirement from  
14 renewable sources located within MISO Zone 7.”<sup>11</sup>

15 Q. Does Staff agree with these proposals?

16 A. Not for the purposes of the instant case. It is worth reiterating that data center (or other  
17 large) customers currently have the ability to request service from the Company without  
18 any of the protections for other customers contemplated by the Company’s proposed  
19 GPD provision or proposed revisions thereto. Indeed, the schedule in this case is  
20 accelerated, at least in part, to ensure such protections are in place as quickly as possible.

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<sup>8</sup> MEIU witness Albers Direct Testimony, pp. 12-13.

<sup>9</sup> MEIU witness Albers Direct Testimony, pp. 15-16.

<sup>10</sup> MNSC witness Jester Direct Testimony, pp. 14-15.

<sup>11</sup> AG witness Deupree Direct Testimony, pp. 23-24.

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1 Many of the issues identified by the intervenors have existing processes through which  
2 they are considered as part of a holistic case, rather than only as they apply to customers  
3 under the provision, rendering the requested solutions duplicative, unnecessary, or  
4 inappropriately narrowed. The integrated resource planning (IRP), renewable energy  
5 planning (REP), and capacity demonstration processes set up by the Commission  
6 consistent with the prevailing statutes are the appropriate place to consider the resources  
7 and plans that are most appropriate to ensure compliance with those statutes. Considering  
8 such issues outside of the context of those established processes risks failing to consider  
9 everything appropriate in determining how best to comply with those statutes. There are  
10 other issues under the jurisdiction of the Commission (energy waste reduction, etc.) that  
11 also will be affected by the addition of load such as that contemplated by the proposed  
12 provision which also have existing processes by which that impact should be considered  
13 in the appropriate context. While Staff is not taking a position on the actions required of  
14 the Company to ensure compliance with the provisions of the statute related to data  
15 center tax exemptions in the instant case, it is Staff's opinion that the provision proposed  
16 by the Company should be modified to apply to any load above a certain size. For that  
17 reason, as well as the relative urgency of the protections contemplated by the proposed  
18 (as modified by Staff's proposals) provision resulting in a truncated proceeding in the  
19 instant case, any necessary tariff alterations necessary as a result of the data center tax  
20 exemption provision should be contemplated in another case. It is also unnecessary to  
21 duplicate an already existing VGP provision outside of the VGP or list anything related to  
22 VGP programs in the proposed provision; any prospective customer under the provision  
23 will be made aware of their options under the VGP as part of conversations with the

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1 Company regarding potentially being served by the Company, and there is no given  
2 reason why utilizing a particular provision of the VGP program would be undesirable to  
3 customers because it is presented as part of the VGP program. For all of the above  
4 reasons, the issues identified by the intervenors are best dealt with through the processes  
5 set up to deal with them, rather than on an ad-hoc basis in the instant case. Allowing a  
6 customer under the provision to “buy down” their contribution to the increased  
7 requirements under the various statutes by paying for other customers to effectively lower  
8 the load that is covered by it is also much better contemplated in a separate proceeding  
9 with a wider scope and the ability to consider such options in the context of alternatives;  
10 the same is true of technologies such as dynamic transformer ratings and grid-enhancing  
11 technologies. As described above, a number of intervenors also claim that serving  
12 customers under this provision is distinguishable from service provided to other  
13 customers to the point that they should be treated as if they are being served individually  
14 rather than as a part of the Company’s overall load. While Staff agrees that the sheer  
15 scale of the customers to be served under the proposed provision is unique, the Company  
16 will still serve them as part of their overall load and plan for their overall load including  
17 these customers, so such treatment is unjustified, inappropriate, and may be  
18 discriminatory as such options are not available to other customers.

19 Q. Does Staff have any other issues with the concept relied on by many intervenors that  
20 customers under the proposed provision should pay directly for resources that are used to  
21 “serve them directly”?

22 A. Yes, Staff has a number of issues with this concept. First, the intervenors seem to believe  
23 that any resources built to accommodate load under the provision would be more

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1 expensive than the resources that would otherwise be built to serve customers. This  
2 belief is not supported by any evidence provided in the instant case. In fact, it is entirely  
3 possible that the scale of the generation required to serve the load contemplated under the  
4 provision in addition to that already planned for could be less expensive than what would  
5 have otherwise been built. Second, as discussed previously, the Company plans its  
6 generation to serve the entirety of the load it is responsible for, not for individual  
7 customers. Therefore, under standard ratemaking, costs are allocated to customers based  
8 on measures of how they contribute to the load that needs to be served by the Company  
9 in total. While MNSC witness Jester identifies the long-term industrial load retention  
10 rate being based on a specific generating plant as an example of how the costs of certain  
11 plants may be assigned to individual customers<sup>12</sup>, that is more the exception that proves  
12 the rule as it required passage of legislation to enable something different than the  
13 standard. Third, it is almost axiomatic that a new generating plant will be more  
14 expensive than existing plants due to inflation of costs and depreciation of existing assets  
15 over time (outside of massive technological shifts), and that would be true whether the  
16 plants were built to serve new or existing load. Fourth, time-matching a specific plant(s)  
17 generation to a specific customer, particularly given the resources likely built under the  
18 statutory requirements, is unrealistic. For all of these reasons, the concept that customers  
19 under the provision should pay directly for plants that “serve them directly” should be  
20 rejected. In addition, these facts show that claiming “subsidization” by other customers  
21 is inaccurate if every customer pays the cost to serve their portion of the total requirement

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<sup>12</sup> MNSC witness Jester Direct Testimony, p. 17.

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1 | based on appropriate allocations of the total costs, leading to the necessity of rejecting  
2 | those claims.

3 | Q. Does this conclude your testimony?

4 | A. Yes, it does.

1 JUDGE TALBOT: And Mr. Bzdok, go ahead.

2 MR. BZDOK: Thank you, your Honor.

3 CROSS-EXAMINATION

4 BY MR. BZDOK:

5 Q. Good afternoon, Mr. Revere.

6 A. Good afternoon.

7 Q. Did you have any occasion to meet with Consumers in  
8 advance of the filing of this case to discuss the  
9 proposal?

10 A. We met with Consumers on this topic and the filing  
11 itself at least once, if not several times.

12 Q. Tell me about those meetings. What did the Company  
13 convey? What do you remember?

14 A. The ones that were more general, just about the amount  
15 data center load that they had in their pipeline. And  
16 the -- the worries they had with the size of some of  
17 that load, and the effects it might have on other  
18 customers if something wasn't done.

19 Q. What did they say about the amount of load in their  
20 pipeline?

21 A. I don't recall numbers, and I'm not sure I'd be  
22 allowed to share them, just that it was substantial,  
23 like approaching the levels of their current load.

24 Q. Did you sign some kind of an NDA?

25 A. I don't believe so.

1 Q. Okay. Why would you not be allowed to share?

2 A. I can't recall if any of the information that they  
3 showed us during any of those meetings was marked as  
4 confidential by Consumers.

5 Q. Did they indicate to you how imminent any of that load  
6 was?

7 A. I don't recall.

8 Q. What was the time frame of those meetings?

9 A. It would have been over the last year, maybe two.

10 Q. When was the most recent one?

11 A. I do not recall.

12 Q. Was the most recent one before the filing of the ex  
13 parte?

14 A. I can't say. I can't recall if we met after that or  
15 not.

16 Q. Okay. Are you allowed to meet with -- are they  
17 allowed to meet with you after?

18 A. I don't know that I understand the question.

19 Q. Okay. I'll strike it.

20 So you're not sure how long ago was the  
21 last meeting, and you're not sure if and to what  
22 extent they indicated any of this load was imminent?

23 A. That's correct.

24 Q. Okay. And were those -- did you have any further  
25 understanding of imminence when you prepared your

1           rebuttal testimony?

2           A.    Not that I can recall.

3           Q.    Okay.  And we have a SharePoint for you.  It's in the  
4           MNSC folder, and then it's in hearing exhibits, and  
5           then there's a folder that says Nick Revere; are you  
6           able to locate that?

7           A.    Yes.

8           Q.    Okay.  Would you look within that folder and you'll  
9           see some premarked hearing exhibits uploaded.

10          A.    I see them.

11          Q.    Okay.  If you would open first proposed Exhibit  
12          MEC-47?

13                       MR. BZDOK:  Your Honor, may I share my  
14          screen?

15                       JUDGE TALBOT:  Hold on a second.

16                       MR. BZDOK:  You might need to refresh.

17                       JUDGE TALBOT:  Yes.  I'm sorry, I was  
18          trying to get back into SharePoint real quick.  Yes,  
19          you may share your screen.

20                       MR. BZDOK:  Thank you.

21          BY MR. BZDOK:

22          Q.    Mr. Revere, can you see on my screen a presentation  
23          for the leading the clean energy transformation 2025  
24          second-quarter results and outlook, July 31, 2025, CMS  
25          Energy?

1 A. Yes.

2 Q. Okay. If you were able either to scroll down or to  
3 follow along on my screen to slide 4, there is a  
4 heading titled "expansive economic development  
5 efforts"; do you see that?

6 A. I do, I'm looking at it on your screen.

7 Q. Okay. And there's a reference in historical connected  
8 load to manufacturing data centers and other; do you  
9 see that?

10 A. I do.

11 Q. And then there's a reference to timely -- I can't get  
12 that AI assistant out of the way. Maybe I can hide  
13 that. Okay.

14 And then there's a reference for a  
15 five-year plan, '25 to '29, of 900 megawatts of  
16 additional load, manufacturing and data centers; do  
17 you see that?

18 A. I do.

19 Q. And then there's a reference in the third column to a  
20 new announcement; do you see that?

21 A. I do.

22 Q. And there's a bubble here that says "up to 1 gigawatt  
23 reached agreement with large data center"; do you see  
24 that?

25 A. I do.

1 Q. Were you aware when you submit -- prepared your  
2 rebuttal testimony, of an agreement between Consumers  
3 and a large data center for 1,000 megawatts of  
4 additional load?

5 A. I don't believe so, but I can't recall for certain.

6 Q. Okay. Let's take a look at MEC-46. Can you see that  
7 one on my screen?

8 A. I can.

9 Q. Okay. Here we have a news release dated yesterday; is  
10 that right?

11 A. Yes.

12 Q. Okay. "CMS Energy announces strong second quarter  
13 results, reaffirms 2025 adjusted EPS guidance."  
14 You've seen these kinds of communications and  
15 presentations over the years in your work at the MPSC?

16 A. I'm sure I have.

17 Q. Okay. So down -- if you scroll down in this  
18 announcement, there is a statement from the CEO of  
19 Consumers Energy, Mr. Rochow. I don't know if I'm  
20 saying that name right. I cross-examined him years  
21 ago, but I don't remember the pronunciation of his  
22 name.

23 And he talks about the team's strong  
24 performance, et cetera, et cetera, CEO stuff. And  
25 then he says, "I am also pleased to announce we have

1 reached an agreement with a new data center, which is  
2 expected to add up to 1 gigawatt of load growth in our  
3 service territory, along with additional economic  
4 benefits for Michigan." Do you see that?

5 A. I do see that.

6 Q. Same question as before, any awareness that this  
7 announcement either was coming or was about to be made  
8 at the time you prepared your rebuttal testimony?

9 A. I do not recall if I was aware of this.

10 Q. Has Consumers communicated with staff in any way in  
11 recent days regarding the recent or imminent signing  
12 of 1,000 megawatt new data center customer?

13 A. If they have, I am not aware of it.

14 Q. Okay.

15 MR. BZDOK: And I'm going to move at this  
16 time to admit proposed Exhibits MEC-47, which is the  
17 earnings call presentation from yesterday, and the  
18 Consumers Energy announcement of the signing of the  
19 new data center which is also dated yesterday.

20 JUDGE TALBOT: And the second one is  
21 MEC-46, right?

22 MR. BZDOK: Yes, thank you.

23 JUDGE TALBOT: No problem. I just -- all  
24 right, any objection to the admission of MEC-47 or  
25 MEC-46?

1                   MR. VIJAYKAR: Yes, your Honor, we object  
2 to the admission of both of those exhibits.

3                   JUDGE TALBOT: And go ahead, what's your  
4 objection?

5                   MR. VIJAYKAR: Well, our objection is  
6 counsel has not laid foundation for the entry of those  
7 exhibits.

8                   MR. BZDOK: May I respond?

9                   JUDGE TALBOT: Yes.

10                  MR. BZDOK: A couple things. So one, we  
11 have laid foundation in the sense that these are the  
12 type of documents that Mr. Revere has indicated he has  
13 looked at from time to time.

14                  Further under, you know, they're self  
15 authenticating in the sense that Consumers stores  
16 these documents on its investor relations website and  
17 communicates about these topics under very detailed  
18 SEC rules.

19                  The Michigan Public Service Commission has  
20 an administrative hearing rule and the Administrative  
21 Procedure Act also has a provision in which the rules  
22 of evidence are generally applied, but may -- the  
23 Commission may also admit and give probative evidence,  
24 probative effect to evidence of a type reasonably  
25 relied upon by prudent persons in the conduct of their

1           affairs. Certainly these qualify. The relevance is  
2           undeniable.

3                         And so for those reasons, these documents  
4           which did not exist until yesterday are relevant, are  
5           authentic, are what they claim to be, no reason to  
6           doubt that. And the relationship to Mr. Revere's  
7           testimony has also been established.

8                         JUDGE TALBOT: Any response?

9                         MR. VIJAYKAR: Yes, your Honor. My  
10          objection is not a relevance objection, to be clear,  
11          it's a foundation objection. And Mr. Revere didn't  
12          answer any questions to the effect that he wrote these  
13          documents or that he was involved in the preparation  
14          of these documents.

15                        What Mr. Revere testified and what counsel  
16          just argued is that he is familiar with these types of  
17          documents, not the documents themselves. As counsel  
18          just acknowledged, these documents didn't exist until  
19          yesterday, so I'm frankly having a hard time  
20          understanding how Mr. Revere would have the knowledge  
21          necessary to establish foundation of these documents  
22          since he has not testified, again, that he was  
23          involved in the preparation of these documents.

24                        As far as whether these documents are  
25          self-authenticating or not, there has been no witness

1 testimony that this -- the documents that the witness  
2 was shown are available anywhere, really. We don't  
3 know where these documents are coming from. We don't  
4 know that they are what they purport to be. All we  
5 have is witness testimony that the witness is familiar  
6 with these types of documents. And testimony  
7 answering questions related to the subject matter of  
8 the documents, which we did not object to.

9 MR. BZDOK: May I respond?

10 JUDGE TALBOT: Yes.

11 MR. BZDOK: So if it's necessary to satisfy  
12 counsel, we can go on a screenshare to the CMS  
13 investor relations website if he doubts my  
14 representations. And we can pull these documents up  
15 from their source. We can certainly do that on the  
16 record if that's going to be necessary. I don't think  
17 it is. But if my representations to how I obtained  
18 these 20 minutes ago are doubted, we can do that.

19 Mr. Revere doesn't need to have written the  
20 documents, you know, for these documents to come in.  
21 They are the type of documents that have a long  
22 history of coming in, in Commission cases. The  
23 utilities own communications to its investors, the  
24 utilities own representations on earnings calls and  
25 similar meetings have a long history of coming in.

1           Mr. Ros how, the CEO of Consumers Energy,  
2           is not available as a witness in this proceeding for  
3           his quote, but these are -- these are documents that  
4           come in under the catchall. This witness doesn't have  
5           to have written them for them to come in under the  
6           catchall. Documents come in under the catchall not  
7           written by those witnesses all the time if they're  
8           reasonably reliable and are relevant to the matters at  
9           hand, which they certainly are.

10           JUDGE TALBOT: All right, well, the  
11           objection is foundational, and so I'm going to start  
12           with MEC-46 which says it's a news release. And  
13           counsel says he just found it. If it just came out  
14           yesterday, that's certainly probable.

15           So I -- as a news release, I -- I don't see  
16           any foundational argument that that document shouldn't  
17           be admitted. And again, under the Administrative  
18           Procedures Act, admit -- I can allow evidence and  
19           allow for the trier of fact to give it the appropriate  
20           weight. I think the Commission, as the trier of fact,  
21           is more than capable of doing that.

22           The second document is this second quarter  
23           results and outlook. Again, I think that that's a  
24           public document. And again, counsel said that he just  
25           obtained it because it's dated yesterday.

1                   So I'm overruling the foundational  
2                   objection to both MEC-47 and -46 because I do think,  
3                   first of all, that they have some probative value, and  
4                   that the Commission is more than capable of  
5                   determining what value to give it.

6                   But I think they are both -- have -- I  
7                   don't want to say self-authenticating, but the  
8                   foundation has been established sufficiently in this  
9                   administrative procedure. So I'm overruling the  
10                  objection.

11                  Go ahead.

12                  MR. BZDOK: And you're admitting the  
13                  exhibits?

14                  JUDGE TALBOT: Yes, I'm sorry, the exhibits  
15                  are both admitted.

16                  EXHIBITS MEC-46 and MEC-47 ADMITTED

17                  1:18 p.m.

18                  MR. BZDOK: Thank you, your Honor.

19                  BY MR. BZDOK:

20                  Q. Mr. Revere, can you tell me what you did, the steps  
21                  you undertook to prepare your rebuttal in this case?  
22                  First just for context, you did not file direct, you  
23                  only filed rebuttal, right?

24                  A. That is correct.

25                  Q. Can you describe for me the steps you undertook to

1           prepare your rebuttal?

2       A.    I reviewed the direct filings of the intervening  
3           parties, had meetings with various other staff members  
4           to assist in developing the positions that I was going  
5           to take, and then prepared the testimony.

6       Q.    Did you -- did you review any discovery?

7       A.    I'm not sure that I did.

8       Q.    Doesn't that -- just so the record's clear, I'm not  
9           sure that I did mean -- you didn't or you don't  
10          remember whether you did or not or something else?

11      A.    If I did, I do not recall.

12      Q.    Thank you. Did you review any other dockets, any  
13          other MPSC dockets?

14      A.    Not that I can recall.

15      Q.    Did you review any terms of other data center-related  
16          tariffs, agreements, cases, adjudications in other  
17          public utility Commission jurisdictions?

18      A.    I can't recall if I did that directly as I was  
19          preparing my rebuttal, but I did review items of that  
20          nature during the pendency of this case.

21      Q.    Tell me about that.

22      A.    I believe there was a settlement in Indiana related to  
23          a data center or large customer tariff. And there  
24          were competing settlements in an Ohio case related to  
25          the same. Those are the two that I recall examining.

1 Q. Okay. Thank you. You said you had meetings with  
2 other staff members. And I don't want to hear about  
3 any conversations with any counsel, but can you tell  
4 me who else you met with on staff?

5 A. I -- it would have -- I don't know if this will be an  
6 exhaustive list, but Naomi Simpson, Paul Proudfoot,  
7 Roger Doherty, Jesse Harlow, Dave Isakson, Bill Stozik  
8 (phonetic). I'm sure there were more but that's all I  
9 can remember off the top of my head.

10 Q. You went kind of fast on that list. I'm going to tell  
11 you who I got, and tell me who I missed. I've got  
12 Naomi, Paul, Dave Isakson, Bill Stozik, Jesse Harlow.

13 A. Roger Doherty. I think that may have been the only  
14 one you missed --

15 Q. Okay.

16 A. -- but I'm not for sure.

17 Q. Okay. Thanks.

18 Okay, let's start looking at your rebuttal,  
19 if we can. I'm going to -- so on page 7 of your  
20 rebuttal, you have a -- well, let me back up, just to  
21 set some context. So on page 6, line 7 you have a  
22 heading "impact data center load," correct?

23 A. Yes.

24 Q. And then after a quick question, you describe for the  
25 rest of page 6 and the top of page 7 you describe -- I

1           guess, you state -- let me rephrase.

2                        You recap that certain intervenors,  
3           including the CEOs and MEIU and the attorney general  
4           and MNSC discuss various topics that you're going to  
5           respond to in your rebuttal, fair?

6   A.   I do believe that's a fair characterization.

7   Q.   Okay.  And then starting on page 7 at line 5, you have  
8           a question, how do the intervenors propose these  
9           impacts is should be dealt with correct?

10  A.   Yes.

11  Q.   And these impacts had to do with basically the size of  
12           loads that could be coming on to Consumers' system  
13           sooner or later as a result of data centers locating  
14           in Consumers' territory, fair?

15  A.   Amongst other things, yes.

16  Q.   Okay.  You then summarize for the rest of page 7 and a  
17           good portion of page 8, some of the proposals made by  
18           those parties that I've mentioned, right?

19  A.   That's correct.

20  Q.   And at this point, we're talking in your rebuttal  
21           about sort of the clean energy -- mainly about the  
22           clean energy-related or renewable-energy related  
23           issues; is that right?

24  A.   I would say it's fair to characterize that the bulk of  
25           it is about that, yes.

1 Q. Okay. And is your understanding, and I'm speaking  
2 generally and distilling somewhat here, recognizing  
3 I'm not going to catch every complexity or nuance,  
4 that one of the issues is if Consumers is adding a lot  
5 of load in a short period of time, the generation that  
6 is added to meet that load needs to keep up in some  
7 way with Consumers Energy's renewable and clean energy  
8 ramp-up requirements; is that a fair characterization?  
9 Of the --

10 A. I'm not sure -- sorry.

11 Q. Of the --

12 A. I'm not sure that I would --

13 Q. I'm going to stop talking. Go.

14 A. I'm not sure I would characterize it precisely that  
15 way. I mean, we're talking about your  
16 characterization of my characterization of the  
17 intervenor's proposals, and I wouldn't characterize it  
18 the way that you did.

19 Q. Okay. Okay. Let me ask you this, I mean, do you  
20 think that's a fair concern, the one that I've  
21 articulated?

22 A. Well, we are --

23 Q. Is it worth being concerned about? Let me ask it that  
24 way, is it worth being concerned about?

25 A. I'm not sure that I would use the term "concern." I

1 think it's important to consider how the addition of  
2 that much load in that time frame will affect how the  
3 utility serves their load under all of the relevant  
4 statutes that apply to how they do so.

5 Q. So I think you said it's fair to consider that; was  
6 that your phrasing?

7 A. I don't recall if that was my precise phrasing. I  
8 think it's important to consider that.

9 Q. Okay. Oh, important to consider that, I accept that  
10 answer.

11 Then you go on -- well, let me back up.  
12 Consumers -- so let's just maybe set the table a  
13 little bit. Consumers has an approved IRP, right?

14 A. I'm not deeply involved in IRPs, but that is my  
15 understanding.

16 Q. Okay. Approved in 2022 or 2023; does that sound  
17 right?

18 A. I'm not sure of the year.

19 Q. Okay. Approved at a time which would have predated  
20 the kinds of additional loads that Consumers has been  
21 discussing with staff in the meetings that you  
22 testified you attended, right?

23 A. I can't be certain of that. It would have been around  
24 the -- probably the cusp of the time when these sorts  
25 of things were starting to be considered.

1 Q. Okay. Give me a second.

2 MR. BZDOK: Can I share my screen for a  
3 second, your Honor?

4 JUDGE TALBOT: Yes.

5 BY MR. BZDOK:

6 Q. So Mr. Revere, I'm putting up on the screen now a  
7 Commission order from case 21090. This one right  
8 here, June 23, 2022, application of Consumers Energy  
9 for approval of its IRP order approving settlement  
10 agreement; do you see that?

11 A. I do see that.

12 Q. Does that refresh your recollection at all about the  
13 time frame in which the Consumers current IRP was  
14 approved?

15 A. Without having reviewed the document in its entirety,  
16 I would assume that this is the -- you're presenting  
17 this as the order that did approve the IRP.

18 Q. Yes. Do you recall if in the June 2022 time frame or  
19 if the -- in the mid 2022 time frame, if substantial  
20 additional loads from data centers and artificial  
21 intelligence and similar matters were a topic of high  
22 profile at the Commission?

23 A. I can't say for certain. I don't recall exactly when  
24 those types of conversations occurred or began  
25 occurring. So I can't say for certain whether or not

1           they were taking place in that time frame.

2       Q.    Okay.  Is it fair to say that Consumers' currently  
3           approved IRP doesn't make provision for large  
4           additional data center loads included within its plan?

5       A.    That is my understanding, though my understanding is  
6           admittedly limited.

7       Q.    And just because this will appear on the transcript  
8           and sometimes the transcript doesn't capture the  
9           context, when you say "that is my understanding,"  
10          you're agreeing with me that the current IRP does not  
11          have provision for those things?

12      A.    To the best of my knowledge, the IRP, the order you  
13          are referring to was approving did not consider the  
14          addition of large load of any kind, let alone data  
15          center load.

16      Q.    Okay.  Do you have knowledge of whether Consumers is  
17          going to file its next IRP in mid-year of next year,  
18          2026?

19      A.    I have no reason to doubt that that's the case.

20      Q.    Were you present for Ms. Connolly's exam a few days  
21          ago?

22      A.    I was only able to attend about an hour or two of it  
23          in the morning.

24      Q.    Okay.  Okay, okay.  If Consumers -- did you undertake  
25          in the process of -- I'm getting a little cart before

1 the horse here, so maybe I need to back up for a  
2 minute.

3 In your rebuttal testimony, page 8, line  
4 15, does staff agree with these proposals, is the  
5 question, right?

6 A. Yes.

7 Q. And then there's a long answer that takes the rest of  
8 page 8, all of page 9 and most of page 10, in which  
9 you describe the reasons for your opinion that issues  
10 having to do with resource procurement, generation  
11 resource procurement, should not be addressed in any  
12 way in this case, correct?

13 A. I think it addresses a couple other issues, too, but  
14 there is a large portion of it that is related to  
15 generation procurement to serve this load.

16 Q. Okay. You talk about IRP, you talk about REP, you  
17 talk about VGP, among other things; right?

18 A. That is correct.

19 Q. Okay. In offering that testimony that the resource  
20 procurement issue should be addressed in these other  
21 dockets or other proceedings, did you undertake to --  
22 did you obtain an understanding -- did you have an  
23 understanding or did you obtain an understanding  
24 regarding the timing and cadence of those cases, when  
25 they would occur and when they would be resolved?

1 A. I don't believe I did anything more than just rely on  
2 my general knowledge that IRPs take place every, what,  
3 two to five years? A lot of them have settlements  
4 that require them filing earlier than the law  
5 requires.

6 I believe VGP cases take place at lease  
7 every two years, sometimes annually. Capacity  
8 demonstration case, I believe occur annually. REP  
9 cases, I think are on a two-year cadence, but I'm not  
10 100 percent sure since the new law may have changed  
11 that, but that's my recollection of the way it worked  
12 previously.

13 Q. So in offering the opinion that procurement issues  
14 should be deferred to these other proceedings, IRP,  
15 REP, and VGP, you did not have a sense of when those  
16 decisions would get made, other than perhaps at the  
17 most general level?

18 A. I think that, yes, I had a general idea of the time  
19 frame in which those decisions would be made. The  
20 specific dates on which they would be made, no.

21 Q. Okay. Do you have reason to disagree that IRP will be  
22 decided in absence of some kind of a very quick  
23 settlement will be decided for Consumers in mid 2027?

24 A. I have no reason to doubt that that is the current  
25 timeline setup.

1 Q. Do you have any reason doubt to doubt, if indeed --  
2 are you aware Consumers has a pending REP?

3 A. I believe I was aware of that case, yes.

4 Q. Okay. And so if that case is decided this calendar  
5 year, based on what you said which I agree with, the  
6 next one will be filed two years from now, which would  
7 put it in fall of 2027; does that sound about right?

8 A. I'm not sure if it would be two years from the date of  
9 the filing of the pending case or two years from its  
10 completion, but I have no reason to doubt that it will  
11 be two years after the filing -- two years after the  
12 current case, some date involved therein.

13 Q. Okay, give me a second.

14 MR. BZDOK: Okay. I'm going to share  
15 screen again, Judge? Do you want me to check every  
16 time? Or I'm sorry, what's your protocol?

17 JUDGE TALBOT: Either way. Right now, go  
18 ahead and just do it, and if I have a problem I'll  
19 interrupt you:

20 MR. BZDOK: Okay.

21 JUDGE TALBOT: Thank you.

22 MR. BZDOK: I'm mindful of the amount of --  
23 we have still yet to try to do today, so I'm cutting  
24 corners a little bit, so I apologize if I seem  
25 hurried. Okay. It's just the dynamic I'm sensing

1 right now.

2 BY MR. BZDOK:

3 Q. Okay. So, Mr. Revere, just to refresh your  
4 recollection, the law you were speaking about that  
5 governs these matters is public Act 235 of 2023; does  
6 that sound right?

7 A. I have no reason to doubt that that's the case.

8 Q. Okay. Okay. So I'm looking at part 2, section 2022,  
9 "Within one year after the effective date of the  
10 amendatory act that added section 51, and within 2  
11 years after the Commission issues an order approving  
12 the electric provider's last amended renewable energy  
13 plan, the elected provider shall file an amended  
14 renewable energy plan"; do you see that?

15 A. I do.

16 Q. Does that help refresh your memory or otherwise  
17 clarify that the cadence is two years after approval  
18 of the order for REPs?

19 A. The way that this sentence is worded, I'm not sure  
20 that it refers to the regular cadence of those cases  
21 or the cadence of the cases that occur directly  
22 after -- only those that occur directly after the  
23 passage of this act.

24 Q. Got it, okay. I'm not trying to put you on the spot.

25 JUDGE TALBOT: Hold on a second, everybody

1 stop for a second. We're going to go off the record  
2 for a minute.

3 (Off the record at 1:38 p.m.)

4 (On the record at 1:42 p.m.)

5 JUDGE TALBOT: Back on the record in  
6 Michigan Public Service case U-21859.

7 Go ahead.

8 BY MR. BZDOK:

9 Q. So I guess, let me try to shortcut this a little bit,  
10 Mr. Revere. The general timelines that you testified  
11 you were aware of when you were offering testimony in  
12 rebuttal that these matters should be -- certain  
13 matters should be deferred from this case to those  
14 other cases, is it fair to say your general  
15 understanding was consistent with the idea of a next  
16 IRP being approved sometime in 2027 and a next REP  
17 being approved sometime in 2028?

18 A. For the Consumers -- or for the Consumers REP, you  
19 mean after the current one?

20 Q. Yeah.

21 A. Okay. That is consistent with my understanding of  
22 what the current timeline would be for those things.  
23 However, I think there are opportunities to speed that  
24 up, if necessary.

25 Q. Okay. We had some discovery on that, I think, and

1 we'll get into that.

2 Okay. Page 9 of your rebuttal,  
3 addresses -- this is a continued discussion of these  
4 various other proceedings. And then you have a  
5 statement about the tax credit statute. Starting in  
6 line 13, you state, "While staff is not taking a  
7 position on the actions required of the Company to  
8 ensure compliance with the provisions of the statute  
9 related to data center tax exemptions in the instant  
10 case, it is staff's opinion that the provision  
11 proposed by the Company should be modified to apply to  
12 any load above a certain size"; do you see that?

13 A. Yes.

14 Q. And staff's position is that the provision should be  
15 modified to apply to any load above 100 megawatts; is  
16 that right?

17 A. Without checking staff Witness David Isakson's  
18 testimony, I have no reason to disagree with that  
19 statement.

20 Q. Okay. Do you want to look at Exhibit S-1 where that's  
21 indicated or are you content to proceed based on  
22 100 megawatts?

23 A. I'm content to proceed.

24 Q. Okay. Okay. And then you say -- continuing that  
25 rebuttal, you say, "For that reason, as well as the

1 relative urgency of the protections contemplated,  
2 either proposed (as modified by staff's proposals)  
3 provision resulting in a truncated proceeding in the  
4 instant case, any necessary tariff alterations  
5 necessary as a result The Data Center tax exemption  
6 provision should be contemplated in another case,"  
7 correct?

8 A. Yes.

9 Q. When the "for that reason" part of that statement  
10 referred to staff's opinion that the tariff  
11 modifications should be all loads above 100 megawatts  
12 and not just data centers, that's what you referred to  
13 by "for that reason," right?

14 A. Yes, the "for that reason" refers to that last clause  
15 of the previous sentence.

16 Q. Okay. Consumers has no other customer now above  
17 100 megawatts; is that right?

18 A. I'm not 100 percent certain. I do understand from the  
19 information the Company has provided in this case,  
20 that there are no GPD customers of that size.

21 Q. Okay. Does Consumers have -- are you aware of any  
22 non-data center customer on the horizon above  
23 100 megawatts that's not a data center?

24 A. I am currently unaware of any such potential  
25 customers.

1 Q. So the "for that reason," is referencing, I guess, a  
2 hypothetical scenario which we, at present, have no  
3 knowledge is going to come to pass in any foreseeable  
4 future, right?

5 A. I don't agree with that statement.

6 Q. Why not?

7 A. Because it's not referring to a hypothetical, it's  
8 referring to staff's opinion that the provision  
9 proposed by the Company should be modified to apply to  
10 any load above a certain size. That is not  
11 hypothetical, that is staff's opinion.

12 Q. But in so modifying, it's broadening it to include a  
13 customer, the existence of which is at most  
14 theoretically possible. There's no evidence to  
15 believe such a customer's coming along, right?

16 A. I am not aware of, like I said previously, any  
17 non-data center customers of that size that are being  
18 contemplated to be served by the Company.

19 Q. Have you reviewed the data center tax exemption  
20 provisions in statute that you are talking about here  
21 in your rebuttal, talking about deferring to a future  
22 case?

23 A. I reviewed them briefly, it wasn't the main focus of  
24 my testimony in this case. I intend to go back to  
25 them at the some point to better understand them. And

1           that's part of the reason that I didn't make any, you  
2           know, further proposals related to that in this case.

3       Q.    Okay. I just want to show you one of them to see if  
4           you recall reviewing it. So I'm going to share again.  
5           Do you see public Act 207 of 2024 on my screen?

6       A.    I do.

7       Q.    Okay. So I'm going to bump down to sub 10, the  
8           legislature writes all these subparts, right? It's  
9           hard to navigate these statutes because the  
10          subparts -- there are so many subparts. Sub 10 is --  
11          okay, so sub 10 is here as used in this section, and  
12          then there are a bunch of subparts. And one of the  
13          subparts is X?

14                       Well, now I've lost it, I had it in my  
15                       outline but I've lost it. Give me a second.

16                       There it is. So they're this -- there's  
17                       this sub X. "The facility will not take electric  
18                       service under any of the following rates." And then  
19                       one of those rates -- one of those rates is LTILRR,  
20                       one of those rates is LED, and then one of those rates  
21                       is, "a rate that causes residential customers to  
22                       subsidize the costs incurred to provide electric  
23                       service to the facility"; do you see that?

24       A.    Yes.

25       Q.    I guess my question is, is there any reason to

1 believe -- do you have any reason to believe or any  
2 knowledge of like some kind of a lag time or a delay  
3 in the requirement to comply with that provision?

4 A. The provision merely states that a data center -- this  
5 is my understanding, at least.

6 Q. Mm-hmm?

7 A. That a data center which wishes to avail itself of the  
8 tax exemption described in this act would have this  
9 applied. So to the extent that there is no such  
10 customer, then any time between this -- like between  
11 this being determined to be the case or not the case  
12 is irrelevant.

13 Q. You said any time between -- what and what? Can you  
14 repeat that? What is irrelevant? Between what and  
15 what?

16 A. Between a customer actually seeking to avail  
17 themselves of the tax exemption provided for in the  
18 act, and a determination that a rate they may take  
19 service on would cause residential customers to  
20 subsidize them.

21 Q. Is irrelevant?

22 A. Yes.

23 Q. Why?

24 A. As I said, unless there is a customer actually trying  
25 avail themselves of it.

1 Q. So there's no need to address that requirement of the  
2 tax credit statute until when? When a tax credit is  
3 claimed? Or in the lead-up of some kind before a tax  
4 credit is claimed? Or what?

5 A. I couldn't be sure. As far as my reading, the statute  
6 isn't clear as to how that determination would be  
7 made. So I can't say what the statute may have  
8 contemplated for the process leading up to that.

9 Q. Okay. Are you familiar -- and again, I'm not asking  
10 you legal questions, I'm asking you questions in your  
11 position as a -- sort of your leadership position in  
12 regulatory and the understandings on which you've  
13 based your testimony. Are you aware of 460.11, the  
14 cost of service provision of the Public Utilities Act?

15 A. I am.

16 Q. Okay. And there is a -- there is a provision in that  
17 statute, and we certainly can look at it if you want  
18 to, but I expect you're pretty familiar with it, that  
19 says, "In establishing cost of service rates, the  
20 Commission shall ensure that each class or subclass is  
21 assessed for its fair and equitable use of the  
22 electric grid"; do you recall that --

23 A. Yes.

24 Q. -- provision? When in your opinion does that need to  
25 be sorted out relative to this coming data center

1 load, whether it's the 1,000-megawatt facility that  
2 apparently was just signed up, or the other facilities  
3 that Consumers was talking to staff about are on the  
4 way?

5 A. I don't necessarily see a connection between those two  
6 things.

7 Q. Which two things?

8 A. The requirement under the law that rates by class be  
9 cost-based, and the existence of potential data center  
10 load.

11 Q. So it's fair to say, is it not, that in the history of  
12 the Public Service Commission we've never seen such  
13 large loads coming in single additions or small  
14 tranches of additions?

15 A. I think the relative certainty of the potential load  
16 that we are discussing is unknown. I know there are  
17 relatively large customers that have come onto the  
18 system in the past. Whether or not they are of the  
19 size of the potential customers we are discussing, I  
20 am not certain.

21 Q. You've not undertaken, in any of the work you did to  
22 prepare your rebuttal testimony, to ascertain whether  
23 anything like this has happened before?

24 A. Well, nothing exactly like this has happened before.  
25 The Company has had large load additions occur in the

1 past. How long ago, I can't say necessarily. But  
2 again, because the certainty of the potential load is  
3 relatively low, right? -- these are just potential  
4 customers at this point -- it remains to be seen  
5 whether or not what gets added is commensurate with  
6 anything that has occurred in the past.

7 Q. Well, Consumers announced yesterday, apparently, the  
8 addition of 1,000 megawatts in a single customer,  
9 right?

10 A. My understanding is that Consumers announced that  
11 based on the information that you provided me earlier.  
12 Whether it actually comes to pass remains to be seen.

13 Q. Has staff ever seen an addition to Consumers' system  
14 anywhere on that scale?

15 A. Of approximately 1 gigawatt?

16 Q. Right.

17 A. Not that I can think of.

18 Q. If we're adding loads of that scale, isn't it going to  
19 be necessary to evaluate sooner rather than later  
20 whether and how to ensure that they're assessed for  
21 their fair and equitable use of the electric grid?

22 A. There's nothing in any law that requires customers of  
23 that size to be in their own class. Whether or not  
24 they would be is an open question.

25 And even if they were a member of another

1 class, the natural way that a rate case works and, you  
2 know, compliance with the law would ensure that by  
3 class, rates are based on the cost to serve that  
4 class.

5 Q. That law is not self-executing. That law has to be --  
6 evidence has to be put in a case and evaluated and  
7 argued over and adjudicated, right?

8 A. Exactly. That's --

9 Q. I mean, the law -- the existence -- sorry, go ahead.  
10 Go ahead.

11 A. Exactly. That's the point, I think, of a lot of my  
12 rebuttal testimony is that there are proceedings in  
13 which these things are adjudicated, and all the  
14 evidence is presented and properly considered.

15 Q. Let's look at some of your -- let me ask you this, if  
16 Consumers is signing up customers now, do you  
17 acknowledge any downside risk to relieving resolution  
18 of cost of service and procurement issues to some  
19 future cases on some unknown future timeline, some  
20 number of years from now?

21 A. I don't know that I would characterize it as a higher  
22 risk than attempting to do it in this case.

23 Q. I didn't ask you that. I asked you if you  
24 acknowledged any downside risk to deferring those  
25 issues for some number of years when Consumers is

1 signing up customers now. Do you acknowledge any  
2 downside risk to that approach?

3 A. I'm struggling to come up with an example of downside  
4 risk associated with that, as we sit here today.

5 Q. Do you believe that Consumers can enter into rate  
6 contracts with customers and then change the rates,  
7 charges, terms, and provisions of those contracts  
8 without limitation in the future?

9 A. While I'm not an expert on contract law, I know that a  
10 number of the contracts the companies have signed with  
11 customers in the past basically refer to the tariff  
12 books as part of their terms. So that as the tariff  
13 book, itself, changes, the contract automatically  
14 incorporates that into the service provided to the  
15 customer.

16 Q. Have you reviewed Consumers' proposed contract with  
17 data centers and satisfied yourself that that contract  
18 fits the bill?

19 A. I do not believe I have conducted that analysis.

20 Q. Are you aware that Ms. Connolly, a few days ago -- do  
21 you know whether Ms. Connolly, a few days ago,  
22 acknowledged some concern with the strength or not of  
23 the conditions of that contract?

24 A. I do not.

25 Q. Let's take a look at some of your discovery responses.

1 I'm going to try to -- I'm going to try to expedite  
2 the rest of your exam here to get you off so we can  
3 get Ms. Ramirez on as soon as we can. I'm going to  
4 take a few shortcuts here.

5 So in your folder, proposed Exhibit MEC-38,  
6 if you would open that one up.

7 A. I have it open.

8 Q. Okay. So this is a -- this is your response to the  
9 questions we asked you 1-A through --- through -F,  
10 correct?

11 A. Yes.

12 Q. Okay. In subpart B which is on page 4 of the exhibit,  
13 we asked you to "Describe in detail how the issues you  
14 claim should be addressed in the IRP case instead of  
15 this case can be addressed prior to Consumers making  
16 contractual commitments or investments for the first  
17 group of data center or new large load customers"; do  
18 you see that?

19 A. I do.

20 Q. You indicated that it's uncertain when those things  
21 will occur. And you indicate also, "It may be that no  
22 contractual commitments or investments are made prior  
23 to the regularly scheduled cadence of such cases,"  
24 correct?

25 A. That is correct.

1 Q. At the time you offered us this response you were  
2 unaware that Consumers was either about to make or had  
3 just made a large contractual commitment to one of  
4 these customers?

5 A. I'm not sure that I have enough knowledge from what  
6 you presented previously in my cross-examination to  
7 say what you showed me represents a contractual  
8 commitment or investment.

9 Q. Okay. I'm going to move -- I'd love to argue with you  
10 about this longer, but I'm going to try to keep this  
11 moving.

12 MR. BZDOK: And I'm going to move to admit  
13 Exhibit MEC-38.

14 JUDGE TALBOT: All right, any objection to  
15 the admission of MEC-38?

16 All right, hearing none, it's admitted.

17 EXHIBIT MEC-38 ADMITTED

18 2:04 p.m.

19 JUDGE TALBOT: Go ahead.

20 MR. BZDOK: Thank you.

21 BY MR. BZDOK:

22 Q. Also on this one, on the same answer before we leave  
23 it, you state -- I need to find it. Oh, I see. So  
24 it's sort of in the middle of that -- I'm in subpart B  
25 still -- in the middle of that response. "The Company

1           could agree or be required to file such cases earlier  
2           than currently assumed in order to ensure the issues  
3           are properly contemplated in the appropriate cases";  
4           do you see that?

5       A.    Yes.

6       Q.    Is there any plan to require the Company to file any  
7           of these cases we've been discussing early?

8       A.    Other than what might already exist as a result of  
9           previous Commission orders or settlement agreements  
10          approved by the Commission, I am unaware of any.

11      Q.    Oh, okay.

12                                Are you aware that Consumers, in its  
13           current electric rate case 21870, has not made any  
14           proposals relative to data centers or other large load  
15           customers in terms of cost of service, cost  
16           allocation, cost assignment, et cetera?

17      A.    I have not yet been able to review that case, but I  
18           have no reason to doubt that what you are saying is  
19           true.

20      Q.    You're familiar with the cadence of rate cases?

21      A.    Approximately annually, for Consumers Electric.

22      Q.    So the current one is going to get an order sometime  
23           second quarter of next year?

24      A.    I'm not certain when it was filed, but I'd have to  
25           reason to doubt that that's the case.

1 Q. So there's a -- roughly speaking then, there's a '25  
2 rate case that will get an order in '26, right?

3 A. It depends on when it's filed. I mean, they're  
4 ten-month cases. So if it's filed in January or  
5 February, it could come out in the same year.

6 Q. Okay. Give me a second?

7 MR. BZDOK: Can I share, your Honor?

8 JUDGE TALBOT: Yes.

9 BY MR. BZDOK:

10 Q. So Mr. Revere, can you see on my screen the e-docket  
11 for 21870?

12 A. I can.

13 Q. Can or cannot?

14 A. I can see it.

15 Q. Okay. Application, go to the application, does that  
16 refresh your memory as to whether it was filed  
17 June 2nd of this year?

18 A. If you scroll past the -- there we go. The document  
19 that you are showing me is dated June 2nd, 2025.

20 Q. So based on that cadence, we're looking at an order in  
21 the late spring of 2026, fair?

22 A. Early spring.

23 Q. Okay. And then the next case after that would be an  
24 order sometime in 2027; does that sound right?

25 A. Assuming that they file after the 12 months from their

1 filing from this year occurred? Yes.

2 Q. It can't be sooner than that, right?

3 A. Correct.

4 Q. So any -- so with no cost allocation, costs assignment  
5 costs of service, related proposals for data centers,  
6 or large load customers in the current rate case, the  
7 earliest timeline in which these issues would be  
8 addressed in a general electric rate case would be an  
9 order in 2027, right?

10 A. I can't agree with that, because -- you know, just  
11 because Consumers didn't propose anything doesn't say  
12 anything about what staff or other intervenors might  
13 propose in the case that the Commission would rule on.

14 Q. Does staff have a plan to propose anything relative to  
15 these issues in the pending electric rate case?

16 A. If staff has such a plan, I wasn't involved in  
17 discussing it or determining it.

18 Q. None of your testimony was based on any understanding  
19 in that regard, right?

20 A. That's correct.

21 Q. Let's look at MEC-39 real quick. This is your  
22 responses to question 2 and the subparts; is that  
23 right?

24 A. So long as A through C are the extent of the subparts,  
25 yes.

1 Q. Okay. I'll represent to you that they are.

2 A. Okay.

3 Q. Here, we asked about what case -- in what case should  
4 actions be required of Consumers to ensure compliance  
5 with the provisions of the statute related to data  
6 center tax exemptions? In what case should those be  
7 addressed and when would it occur?

8 And you -- there was an objection to the  
9 question, and there was a statement that staff  
10 declines to speculate in what case that would be  
11 addressed fully. And it could be addressed in a  
12 variety of possible cases, fair?

13 A. I do believe that's fair.

14 Q. So don't deal with them in this case, deal with them  
15 in some other cases to be determined on a timeline to  
16 be determined?

17 A. To the extent that they need to be dealt with at all.

18 MR. BZDOK: I'm going to move to admit 39.

19 JUDGE TALBOT: Any objection to the  
20 admission of MEC-39?

21 MR. SINGH: Yes, your Honor. The  
22 objection's the same as what's written there. In  
23 essence it's calling for speculation. Mr. Revere, as  
24 a staff witness, can't speculate as to what type of  
25 case reform the Commission would require the Company

1 to address, tax exempt data centers, tax exemption  
2 issues.

3 JUDGE TALBOT: Response?

4 MR. BZDOK: So I'm not sure what  
5 evidentiary rule is being relied on that would keep  
6 this out. I do understand the position which is both  
7 phrased as an objection and also phrased in the body  
8 of the response is we don't know and it's uncertain.  
9 And I think that has -- and that was also confirmed,  
10 then, in the life testimony.

11 And I think that it's relevant to this  
12 debate about, you know, Mr. Revere's position is,  
13 don't deal with these issues the interveners want to  
14 deal with in this case, deal with them in other  
15 proceedings. It's relevant to say we don't know what  
16 those other proceedings are going to be or when  
17 they're going to be.

18 So I agree they're saying they can't  
19 speculate that will be, but I think that's an answer  
20 and I think it's relevant.

21 JUDGE TALBOT: Any response?

22 MR. SINGH: I think staff will withdraw its  
23 objection.

24 JUDGE TALBOT: I'm sorry, did you say  
25 withdraw?

1 MR. SINGH: Withdraw its objection.

2 JUDGE TALBOT: Okay, well then, I'll allow  
3 the objection to be withdrawn.

4 Go ahead, Mr. Bzdok.

5 MR. BZDOK: Thanks, Amit.

6 BY MR. BZDOK:

7 Q. Let's look at MEC-40.

8 A. I have it up.

9 Q. So this relates to -- again, I'm taking shortcuts a  
10 little bit. Normally I would talk to you about what's  
11 in your rebuttal and then we'd go to the thing, but  
12 I'm just trying to go quickly here.

13 But let's turn back to your rebuttal, page  
14 10, lines 11 to 18, that this question is asking you  
15 about. In lines 11 to 18, you have this testimony  
16 that a number of interveners also claim that serving  
17 customers under this provision is distinguishable from  
18 service provided to other customers to the point that  
19 they should be treated as if they are being served  
20 individually rather than as a part of the Company's  
21 overall load, correct?

22 A. Yes.

23 Q. And then you state, "while staff agrees that the sheer  
24 scale of the customers to be served under the proposed  
25 revision is unique, the Company will still serve them

1 as part of their overall load plan for their overall  
2 load, including these customers. So such treatment is  
3 unjustified, inappropriate, and may be discriminatory  
4 as such options are not available to other customers,"  
5 correct?

6 A. That's what it says, yes.

7 Q. And then we asked you what was -- why is treating  
8 uniquely large loads of this scale as if they're being  
9 served individually unjustified? And you said in your  
10 answer that -- that you're not taking that position,  
11 but rather you're taking the position that it may be  
12 unjustified in some cases, fair?

13 A. I mean, it may be unjustified in any instance. I'm  
14 just -- it's a "may" as opposed to an "is."

15 Q. The response more or less changed your testimony from  
16 "is" to "may," I mean --

17 A. I think it clar -- I would describe it more as  
18 clarifying the testimony. The testimony is meant to  
19 apply to the record in the instant case as opposed to  
20 the staff's position entirely in all instances.

21 Q. Okay. So let's take, for example, a 1,000-megawatt  
22 load edition as a single customer. If there was ever  
23 an instance in which a customer of uniquely large  
24 scale may properly be considered in such a way that  
25 serving that customer is distinguishable from serving

1 other customers to the point they should be treated  
2 individually, I mean, is there any conceivable  
3 scenario where that would be more appropriate?

4 A. As it's uncertain whether or not it's appropriate at  
5 all, I don't think I can answer the question as posed  
6 to.

7 Q. Okay. You also state that it's most -- more  
8 appropriate to consider such issues in the context of  
9 the cases described in 1-A as -- and then you say, "As  
10 well as that certain allocation and direct assignment  
11 issues are more appropriately contemplated in rate  
12 cases where such issues can be fully examined in the  
13 appropriate context," right?

14 A. Yes.

15 Q. Are you involved at all in the rate case improvement  
16 docket?

17 A. Yes.

18 Q. Staff made a recommendation in that docket that cost  
19 allocation and cost of service issues should be broken  
20 out of general cases as a standalone proceeding; is  
21 that right?

22 A. No.

23 Q. Can you take a look at your -- in the SharePoint,  
24 proposed Exhibit MEC-43?

25 A. I have it open.

1 Q. These are staff's comments in the rate case  
2 improvement docket, staff's initial comments; is that  
3 right?

4 A. That's what the document is labeled as.

5 Q. Do you have reason to doubt that these are staff's  
6 initial comments?

7 A. I do not.

8 Q. Okay. Comment 4B, which is page -- starts on page 9  
9 of the exhibit, down towards the bottom?

10 A. I'm there.

11 Q. Has a comment "separate the revenue requirement  
12 deficiency (rev def) and the cost of service rate  
13 design costs (RD) into separate proceedings, "The rate  
14 case is a huge undertaking. And one way to reduce the  
15 size, scope, and volume while still resulting in  
16 reasonable rates would be to separate the two primary  
17 components of the rate case into two separate  
18 standalone proceedings."

19 Was your -- was your disagreement with my  
20 question about staff's position in the rate case  
21 improvement docket based on how I worded the question?  
22 Or were you unaware that staff had taken this  
23 position? Or something else?

24 A. I'm aware -- there's the problem there, I think. It's  
25 not a position, it's not a recommendation, it is a

1 comment that staff made, an option for the  
2 Commission's consideration, rather than a stance of  
3 staff or a recommendation of staff that it be done.

4 Q. So staff's comments are not recommendations?

5 A. This is -- I believe it says at a number of places in  
6 the document, that unless otherwise stated, these are  
7 not recommendations.

8 Q. Okay.

9 A. That's my recollection.

10 Q. Okay. The comment at least acknowledges or assumes or  
11 understands in some way that it is challenging in the  
12 rate cases to deal with both all the revenue  
13 requirement issues and all of the cost of service  
14 issues in the same proceeding; is that fair?

15 A. I'm not sure that I would characterize it that way.  
16 It's just a way that you could reduce the number of  
17 issues under consideration, reducing the volume of the  
18 case. I'm not sure that I would necessarily  
19 characterize it as saying that a rate case is  
20 challenging. Like yes, it is a big case.

21 And I believe elsewhere in this document or  
22 previous comments in this docket, staff said that we  
23 can do ten month rate cases. We've been doing it for  
24 years. We're a well-oiled machine at this point.

25 MR. BZDOK: I'm going to move to admit

1 MEC-43.

2 JUDGE TALBOT: All right. Any objection to  
3 the admission of MEC-43?

4 Hearing none, it's admitted.

5 EXHIBIT ME-43 ADMITTED

6 2:22 p.m.

7 JUDGE TALBOT: Did we admit 39?

8 MR. BZDOK: If not, I move to admit it.

9 JUDGE TALBOT: Any objection to MEC-39?

10 All right, so MEC-39 and 43 are both  
11 admitted.

12 EXHIBIT MEC-39 ADMITTED

13 2:22 p.m.

14 JUDGE TALBOT: I'm not sure either.

15 Go ahead, Mr. Bzdok.

16 MR. BZDOK: Thank you. I'm going to move  
17 to admit MEC -- Tasha tells me 39 was admitted, but  
18 now it's admitted -- it's doubly admitted.

19 I'm going to move to admit MEC-41, which is  
20 Mr. Revere's responses to questions 4A and B, and I'm  
21 going to do that without questions, just to keep this  
22 moving.

23 JUDGE TALBOT: Any objection to MEC-41?

24 Hearing none, it's admitted.

25 EXHIBIT MEC-41 ADMITTED

1 2:23 p.m.

2 JUDGE TALBOT: Go ahead.

3 MR. BZDOK: I'm going to ask for a  
4 five-minute -- I think we've been going without a  
5 break. I'm going to ask for a five-minute to confer  
6 with the brains of my operation --

7 JUDGE TALBOT: Why don't we --

8 MR. BZDOK: -- before I would close out on  
9 the witness.

10 JUDGE TALBOT: All right, why don't we take  
11 ten minutes and then everyone can use the restroom or  
12 get more coffee or whatever. All right, so we'll take  
13 ten minutes be back here at, let's see, 23, so 33,  
14 2:33. Thank you.

15 (Recess taken at 2:23 p.m.)

16 (On the record at 2:36 p.m.)

17 JUDGE TALBOT: All right, so we're back on  
18 the record in Michigan Public Service case U-21859.  
19 Mr. Bzdok was concluding his cross-examination.

20 Go ahead.

21 For the record, Mr. Bzdok indicated he's  
22 having trouble hearing.

23 All right, go ahead. Any further cross?

24 MR. BZDOK: Yeah, just a few things. So  
25 first I want to move to admit proposed Exhibit MEC-40,

1 which are Mr. Revere's responses to question 3.

2 JUDGE TALBOT: All right, any objection to  
3 the admission of MEC-40?

4 All right, hearing none, it's admitted.

5 EXHIBIT MEC-40 ADMITTED

6 2:38 p.m.

7 JUDGE TALBOT: Go ahead.

8 BY MR. BZDOK:

9 Q. Mr. Revere, are you aware of whether Consumers pending  
10 REP case includes large amounts of data center load in  
11 the forecast?

12 A. I am not certain, but I do not believe it does.

13 MR. BZDOK: Thank you, Mr. Revere, I don't  
14 have any further questions for you at this time.

15 MR. SINGH: Judge, you're muted.

16 JUDGE TALBOT: Yes, thank you.

17 All right, anybody else have any other  
18 cross for Mr. Revere?

19 MR. WOLLENZIEN: I see Ms. Uitvlugt --

20 JUDGE TALBOT: Oh, yes, I'm sorry, go  
21 ahead.

22 MS. UITVLUGT: I have just a couple of  
23 questions, your Honor.

24 JUDGE TALBOT: Everybody speak up.

25 Go ahead.

## CROSS-EXAMINATION

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BY MS. UITVLUGT:

Q. Can you hear me okay?

A. Yes.

Q. Fantastic, thank you, Mr. Revere.

Just a few minutes ago with your cross from Mr. Bzdok you provided testimony regarding the current timelines, or time frames, in which Consumers Energy files rate cases, IRPs, and renewable energy plans; is that accurate?

A. I believe that I did.

Q. To the best of your knowledge, could Consumers Energy amend its IRP filing at a different time than the time frame specified?

A. That is the -- like amend the current case? The pending one?

Q. Could Consumers Energy seek to amend an approved IRP?

A. My familiarity with the law regarding that doesn't cover that, so I -- I am actually not sure.

Q. Okay. Based on your familiarity and understanding, could Consumers Energy file an amendment sooner to its renewable energy plan?

A. I have no reason to believe that they could not.

MS. UITVLUGT: Thank you, your Honor.  
That's all I have.

1 JUDGE TALBOT: All right, thank you.  
2 Any other cross-examination for Mr. Revere?  
3 Go ahead, you can speak up. Go ahead.

4 MR. WOLLENZIEN: Thank you, your Honor.

5 CROSS-EXAMINATION

6 BY MR. WOLLENZIEN:

7 Q. First of all, to just follow up very briefly on what  
8 Consumers' counsel just asked you about, Mr. Revere,  
9 is --

10 JUDGE TALBOT: Okay, whoa, whoa. Just one  
11 second.

12 MR. WOLLENZIEN: Oh, sorry.

13 JUDGE TALBOT: I just want to clarify that  
14 the attorney general is -- it was just the Company,  
15 now it's the attorney general. Go ahead.

16 MR. WOLLENZIEN: I apologize, your Honor,  
17 I'm rushing in here.

18 Yes, Lucas Wollenzien on behalf of Attorney  
19 General Dana Nessel.

20 BY MR. WOLLENZIEN:

21 Q. And I apologize if Mr. Bzdok from MNSC already asked  
22 you about this, but in -- from the Company, the  
23 counsel with the Company just asked you a second ago,  
24 could Consumers come in for an amended renewable  
25 energy plan sooner than is provided for necessarily in

1 the statute. And you said yes; is that correct?

2 A. No.

3 Q. Sorry, how did you respond to her question about when  
4 the Company could (unintelligible) renewable energy  
5 plan?

6 A. I'm not certain that the question was in regards to  
7 REP or an IRP, first. And second, my response was --  
8 to the question, was I have no reason to believe that  
9 they could not.

10 Q. Okay. So you don't know, then? Is that the answer  
11 you're saying?

12 A. My initial response to the first -- or like the first  
13 question she asked me was I'm uncertain because I'm  
14 not familiar with that portion of the law. Now I'm  
15 doubting my own recollection if those questions, one  
16 of them was about the IRP and one of them was about  
17 the REP.

18 MR. WOLLENZIEN: Leisa, do you have -- can  
19 you read back to me the second question that  
20 Ms. Uitvlugt asked Mr. Revere?

21 (Record read.)

22 BY MR. WOLLENZIEN:

23 Q. Okay. Mr. Revere, as to that answer that Ms. Pastor  
24 just read off there, are you saying that you don't  
25 know when you say you've no reason they could not?

1 A. Similarly, to the answer to the first question, I am  
2 not familiar enough with the REP law to be certain,  
3 but I have no reason to believe they couldn't.

4 Q. But do you have any reason to believe that they could?

5 A. More than I have to believe that they couldn't.

6 Q. Why?

7 A. I believe that you're allowed to amend those plans,  
8 but I'm just not familiar enough with the law to be  
9 certain.

10 Q. Okay. To your knowledge, are the required to amend it  
11 sooner than what is currently set in the statute?

12 A. Now you're well beyond my ability to answer.

13 Q. Okay. All right, thank you.

14 I did have a separate line of follow-up,  
15 very brief here, questions that I was hoping to ask  
16 Witness Isakson about earlier today. Were you present  
17 during Mr. Isakson's testimony here this morning?

18 A. I was.

19 Q. Okay. And I had started asking him a little bit about  
20 special contracts; do you recall that?

21 A. I do.

22 Q. And I'll just ask you some of the same questions. To  
23 the extent that Consumers Energy has other customers  
24 representing large loads, do some of those other  
25 customers take service under special contracts?

1 A. How would you define large load?

2 Q. Greater than 50 megawatts for the purposes of our  
3 conversation here?

4 A. Okay. I'm not 100 percent certain that -- what the  
5 size of their largest customer is. I do not believe  
6 that they currently have any electric special  
7 contracts under which they are serving customers.

8 Q. What kind of considerations go into whether or not a  
9 customer takes service under a special contract?

10 A. In general, there's kind of two reasons that you might  
11 want to give a special contract. One is because a  
12 customer is so unique that having a rate schedule that  
13 only applies to them just makes other customers ask  
14 why they can't be on that rate schedule?

15 For example, there are a couple for smaller  
16 utilities where they have one relatively large  
17 compared to the rest of their customers, a customer  
18 that gets served under a special contract for that  
19 reason.

20 For the larger companies I can't speak to  
21 why a Company could determine a special contract could  
22 be appropriate. I do know that the rules under which  
23 the Commission has applied to evaluating whether or  
24 not any discount associated with a special contract  
25 should be collected from other customers, there are

1 basic -- you have to show that the customers' cost to  
2 serve differs so much from other customer classes that  
3 a special contract would be appropriate.

4           However, special contracts are at the  
5 Company's discretion to enter into. The Commission's  
6 authority -- they do have the authority to approve  
7 them. But I think more importantly in a rate case  
8 afterwards, is the determination of whether or not any  
9 discount associated with that special contract is  
10 collected from other customers. So entering into a  
11 special contract is somewhat of a risk on the  
12 Company's part.

13 Q. So you said that the relative size of the customer  
14 might be one component in considering whether a  
15 special contract should apply for any given customer,  
16 right?

17 A. Yes.

18 Q. And you also mentioned, I believe, a differential in  
19 cost to serve or a consideration of a potential  
20 differential in cost to serve; is that correct?

21 A. It can be a consideration that -- repeat the question,  
22 please.

23 Q. Certainly. Let me put it a different -- I'll put it a  
24 different way. Would the cost to serve a customer  
25 greater than 500 megawatts, or at 500 megawatts, vary

1           greatly from the customers currently on Consumers Rate  
2           GPD?

3       A.    Not on like a per megawatt or a per megawatt hour  
4           basis, I can't say for certain.  Usually the major  
5           determining factors of the cost to serve a customer  
6           has more to do with their load shape or the  
7           relationship between their demand and the time of  
8           their usage.  So I can't say whether or not that would  
9           be the case.

10       Q.   And do you know anything about how the load shape of  
11           data centers compares to customers that currently  
12           exist on Consumers Rate GPD?

13       A.    I'm not sure that -- are you asking about load -- data  
14           centers that are currently on GPD?

15       Q.    No.

16       A.    Maybe you should repeat the question.  I'm not sure  
17           that I heard it properly.

18       Q.    Absolutely, absolutely.  Well, let me put it this way,  
19           part of the discussion here has been the fact that  
20           data centers, at least as far as I understand it,  
21           operate differently than traditional industrial  
22           customers in the sense they operate, let's say,  
23           24/7/365; is that right?

24       A.    For certain types of data centers, I believe that to  
25           be the case.  I do not believe that is universally

1 applicable. I have seen some information, I'm not  
2 sure how much to rely on it, that AI data centers in  
3 particular, because of the nature of the training  
4 load, are actually more like a metal melter. Which is  
5 to a say a relatively poor load factor rather than a  
6 24/7 high load factor customer, like a more  
7 traditional data center might be considered to be.

8 Q. Okay. So we discussed a second ago some of the unique  
9 components you might look at, or a utility might look  
10 at, in assessing whether or not a special contract  
11 would be fitting for any particular I customer,  
12 correct?

13 A. We did.

14 Q. Okay. And when a utility decides that, do they  
15 require that customer to take some risks on a  
16 different rate before taking service on the special  
17 contract?

18 A. It would depend.

19 Q. Do you have any examples where that's the case?

20 A. If you were an already existing customer and you  
21 requested to negotiate a special contract with the  
22 Company and they agreed to do so, that would be a case  
23 in which they took service on another rate. Special  
24 contracts can also be written in such a way that the  
25 rate that applies to the special contract is actually

1 a tariffed rate, and that that tariffed rate applies  
2 even as that tariffed rate changes.

3 Q. In the context where a customer would be on a separate  
4 rate and then take service under a special contract,  
5 would they have been required to take that service  
6 under the special rate initially?

7 A. Well, I don't think I intended to say special rate,  
8 just another rate.

9 Q. Oh.

10 A. A rate other than the special contract.

11 Q. Strike that. I mixed up my terminology.

12 In the hypothetical you described where a  
13 customer was taking service on a separate rate and  
14 then shifting to a special contract. Would they have  
15 been required to take service on that separate rate  
16 before taking service on the special contract?

17 A. It's hard -- I mean, I wouldn't say generally they're  
18 required to take service on a rate before they get a  
19 special contract, as in it's not a condition of  
20 negotiating a special contract that you have to have  
21 already taken service on a different rate. And a new  
22 customer could attempt to negotiate a special contract  
23 with the utility.

24 But I mean, as far as which rate a customer  
25 takes service on, there are usually availability

1 parameters such that there are only a few rates that a  
2 customer could choose from, if they have any choice at  
3 all, of what rate they would take service under.

4 Q. When considering appropriate terms of service for a  
5 new customer, do you see any reason, generally, why a  
6 customer might necessitate rate on a -- service on a  
7 separate rate before taking service on a special  
8 contract?

9 A. Now, you keep saying "separate rate." You mean a rate  
10 other than taking service under a special contract?

11 Q. Correct.

12 A. So an existing rate?

13 Q. Yes.

14 A. I couldn't say. It's entirely possible that the  
15 utility might require a customer to take service under  
16 a rate that's already provided for if the nature of  
17 the attachment expenses are such that they basically  
18 have to enter into an extraordinary facilities  
19 agreement under the CIAC provision. They may -- the  
20 Company may prefer to have that customer be on a  
21 certain rate to -- and basically agree to pay a  
22 certain amount of demand regardless of their usage in  
23 order to ensure that the revenue was sufficient to  
24 cover those costs.

25 Q. Are you aware of any such examples like that?

1 A. Yes.

2 Q. What's that?

3 A. The Company has -- well, in the end, the customer  
4 agrees with the Company to take service under a  
5 current rate because that is why the number of years  
6 that the like minimum demand provision would apply is  
7 determined. Because it's effectively a revenue  
8 guarantee.

9 For some of those things you can pay up  
10 front, like you can just give the Company the money  
11 that you're required to contribute to the connection  
12 of yourself. Or you can agree to pay it over time, or  
13 you can agree to effectively guarantee revenue  
14 sufficient to cover it.

15 Q. Are you aware of any reason why Consumers couldn't  
16 require a payment other than a connection cost or  
17 special facility costs under the terms of the special  
18 contract?

19 A. No.

20 Q. Okay.

21 MR. WOLLENZIEN: I think that's it for my  
22 follow-ups, your Honor.

23 JUDGE TALBOT: All right, thank you.

24 Any other cross-examination for Mr. Revere?

25 Anybody popped up? No?

1 All right, hearing none, any redirect,  
2 Mr. Singh, and would you like five minutes?

3 MR. SINGH: I would, your Honor.

4 JUDGE TALBOT: All right, we'll go off the  
5 record again for five minutes. Everybody try to be  
6 back around 3:00. Thanks.

7 (Recess taken at 2:55 p.m.)

8 (On the record at 3:00 p.m.)

9 JUDGE TALBOT: Let's go back on the record  
10 in Michigan Public Service case No. U-21859.

11 Mr. Singh?

12 MR. SINGH: Your Honor, we do not have  
13 redirect.

14 JUDGE TALBOT: All right, thank you very  
15 much.

16 So it looks like next we have Ms. Ramirez.

17 Oh, I'm sorry. Mr. Revere, thank you very  
18 much, you're excused.

19 MR. REVERE: Thank you, your Honor.

20 JUDGE TALBOT: Thank you.

21 All right, there's Ms. Ramirez. All right,  
22 I guess --

23 COURT REPORTER: Would you like for me to  
24 swear her in?

25 JUDGE TALBOT: Yes. Mr. Elkin, I had you

1 filling in something. Are you handling this,  
2 Mr. Elkin?

3 MR. ELKIN: Yes, your Honor.

4 JUDGE TALBOT: You are, okay.

5 MR. ELKIN: Should I go ahead and call her  
6 for the record, your Honor?

7 JUDGE TALBOT: Yeah, I'm sorry, I didn't  
8 remember who Mr. Elkin was representing.

9 I'm very sorry, Mr. Elkin. So yeah, let's  
10 go ahead and swear the witness, Ms. Ramirez.

11 SHANA RAMIREZ,  
12 was thereupon called as a witness herein, and after  
13 having first been duly sworn to testify to the truth,  
14 the whole truth and nothing but the truth, was  
15 examined and testified as follows:

16 MR. VIJAYKAR: Hi, good afternoon.

17 JUDGE TALBOT: I'm sorry, Mr. Vi -- I'm  
18 sorry, I'm going to mangle your name again, I'm so  
19 sorry.

20 MR. VIJAYKAR: That's okay, that's okay.

21 JUDGE TALBOT: Say it for me one more time.  
22 I swear I'm going to get these names right.

23 MR. VIJAYKAR: The last name is pronounced  
24 Vi-JAY-car (phonetic).

25 JUDGE TALBOT: Vijaykar, okay. Go ahead

1 and introduce your witness.

2 MR. VIJAYKAR: Thank you, your Honor.

3 DIRECT EXAMINATION

4 BY MR. VIJAYKAR:

5 Q. Good afternoon, Ms. Ramirez. How are you?

6 A. I'm well, thank you.

7 Q. Can you please state and spell your name for the  
8 record?

9 A. Shana Ramirez, S-H-A-N-A, R-A-M-I-R-E-Z.

10 Q. Thank you, Ms. Ramirez. And could you please state  
11 the name of the party on -- on whose behalf you  
12 sponsored testimony in this proceeding?

13 A. Yes, it's the Data Center Coalition.

14 Q. Ms. Ramirez, did you prepare and cause to be filed  
15 rebuttal testimony in this case?

16 A. Yes, I did.

17 Q. And would you like to make any corrections to that  
18 testimony?

19 A. Yes. I have two corrections, both of which relate to  
20 my response to Clean Energy Organization's Witness  
21 Saad Siddique. First on page 27 of my testimony,  
22 table 4, in the row labeled "Clean Energy  
23 Organization, (S. Siddique)" I state 60 percent by  
24 2035 under the column "minimum percent renewable."  
25 That should be changed to "not specified."

1 Q. Ms. Ramirez, I'm going to ask you to slow down just a  
2 little bit.

3 A. Okay.

4 Q. So everybody can follow along. Thank you, please  
5 continue.

6 A. Sure. The second correction is page 29, lines 11  
7 through 15 of my rebuttal testimony should be  
8 stricken. These corrections are necessary to avoid a  
9 mischaracterization of Mr. Siddique's testimony.

10 Q. Thank you, Ms. Ramirez. Other than those two  
11 corrections, do you have any other corrections to make  
12 to your rebuttal testimony?

13 A. No, I do not.

14 Q. And if I asked you the same questions that appear in  
15 your testimony today, would your answers to those  
16 questions be the same, apart from the corrections you  
17 offered on the stand today?

18 A. Yes.

19 Q. And is your testimony true and correct as at the time  
20 it was written to the best of your knowledge, again,  
21 apart from the corrections you offered on the stand  
22 today?

23 A. Yes.

24 Q. Thank you, Ms. Ramirez.

25 MR. VIJAYKAR: And your Honor, DCC would

1 move for the admission of Ms. Ramirez's rebuttal  
2 testimony, pending cross-examination. Tender the  
3 witness for cross.

4 JUDGE TALBOT: All right, thank you.

5 Any objection to binding in the rebuttal  
6 testimony of Ms. Ramirez?

7 Hearing none, the testimony is bound in.

8 (Rebuttal testimony of Shana Ramirez is  
9 bound into the record.)

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**STATE OF MICHIGAN**

**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter of the Application of )  
Consumers Energy Company for *Ex Parte* )  
Approval of Certain Amendments to Rate )  
GPD )

Case No. U-21859

**REBUTTAL TESTIMONY OF**

**SHANA RAMIREZ**

**ON BEHALF OF**

**THE DATA CENTER COALITION**

**JULY 9, 2025**

1 **Q. STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.**

2 A. My name is Shana Ramirez, and I am a Director at Energy and Environmental Economics  
3 also known as E3. My business address is 44 Montgomery Street, Suite 1500, San  
4 Francisco, CA 940104.

5 **Q. On whose behalf are you filing testimony?**

6 A. I am filing testimony on behalf of the Data Center Coalition (“DCC”).

7 **Q. Describe your professional background and experience.**

8 A. I bring over a decade of experience in the energy industry, with a focus on regulatory policy,  
9 load forecasting, rate design, and renewable energy development. Prior to joining E3, I  
10 held several positions at NV Energy, including in the Rates, Load Forecasting, and  
11 Regulatory Affairs departments. Most recently, I served as Program Development Director  
12 in the Renewables Department.

13 In that role, I led a team responsible for advancing innovative power supply  
14 solutions and tariff designs for large-load customers, including data centers and other  
15 energy-intensive users. This work required close coordination with internal regulatory,  
16 legal, and resource planning teams, as well as extensive engagement with external  
17 stakeholders such as customers, developers, and regulatory staff.

18 A key outcome of this work was the design and successful regulatory approval of  
19 the Clean Transition Tariff by the Public Utilities Commission of Nevada. This tariff  
20 enables large-load customers to procure renewable energy resources to meet their  
21 operational needs while aligning customer preferences with state policy objectives. The  
22 role also involved negotiating and structuring contracts that included thorough assessments  
23 of financial security requirements and risk mitigation provisions.

1 Earlier in my career, I worked in the insurance sector where I performed actuarial  
2 analysis focused on risk assessment and modeling. These skills continue to inform my  
3 approach to evaluating utility programs and contract structures.

4 **Q. PLEASE DESCRIBE E3.**

5 A. E3 is an economic consulting firm with more than 30 years of experience specializing in  
6 the North American power sector. The firm provides data-driven insights and objective  
7 recommendations to a diverse range of clients, including utilities, regulatory agencies,  
8 government entities, project developers, investors, and non-profit organizations.

9 Through its work across all segments of the energy industry, E3 offers a  
10 comprehensive understanding of energy markets, resource planning, public policy,  
11 regulation, and environmental considerations. The firm is committed to producing clear  
12 and impartial analyses. That is why my recommendations are fair and balanced, addressing  
13 the needs of both the utility and large-load customers.

14 **Q. Have you previously testified before this Commission?**

15 A. I have not.

16 **Q. What topics are you addressing in your testimony?**

17 A. My testimony addresses financial security requirements for large load customers, including  
18 data centers. I review all parties' proposals, outline best practices for credit and collateral  
19 frameworks, and recommend a holistic risk-appropriate financial security approach to the  
20 Commission. The objective is to protect ratepayers while enabling equitable and scalable  
21 integration of large loads into Consumers' system.

22 I also address the proposed clean energy and renewable resource requirements for  
23 data centers. I evaluate all proposals, state my position, and recommend a flexible approach

1 that supports clean energy options in the context of Michigan's statutes and policies for  
2 large load customers including data centers in a non-discriminatory way.

3 **Q. How is your testimony structured?**

4 A. My testimony is organized in two parts:

5 **i) Part I: Financial Security**

6 Section I: Overview of financial security and large loads

7 Section II: Summary of financial security proposals by party

8 Section III: Best practices for financial security

9 Section IV: Recommendation to the Commission

10 **ii) Part II: Clean Energy**

11 Section I: Summary of clean energy proposals by party

12 Section II: Recommendation to the Commission

13 **Part I: Financial Security**

14 **Section I: Overview of financial security and large loads**

15 **Q. What is financial security?**

16 A. Financial security refers to assets, credit instruments, collateral, or contractual assurances  
17 provided by large-load customers to the utility. It serves to mitigate the risk of non-payment  
18 or stranded assets, helping ensure that the cost of service is recovered and not shifted to  
19 other ratepayers.

20 **Q. What risks do large loads, including data centers, pose to utilities and other  
21 ratepayers?**

22 A. Large loads, such as data centers, pose several potential risks related to system reliability,  
23 cost impacts, and regulatory compliance. Rapid and substantial load growth can strain

1 existing generation resources and create congestion on transmission and distribution  
2 networks. These pressures not only challenge the short-term reliability of the system but  
3 also complicate long-term resource and infrastructure planning.

4 From a financial standpoint, utilities may need to undertake significant capital  
5 investments in infrastructure upgrades, including new substations, transmission lines, and  
6 distribution enhancements, to accommodate such loads. Should the customer reduce  
7 operations unexpectedly or exit the service territory, these investments may become  
8 stranded assets. In such cases, the financial burden could shift to other ratepayers,  
9 especially if adequate financial security protections are not in place to mitigate the impact.  
10 The risk of non-payment or partial recovery of infrastructure costs also poses a liability for  
11 the utility and its broader customer base.

12 The accelerated growth in electricity demand associated with large load customers  
13 may challenge the utility's ability to procure or develop sufficient clean energy resources,  
14 implicating statutory or regulatory clean energy and emission reductions targets along with  
15 the utility's own voluntary objectives.

16 **Q. What are the potential benefits of large load customers taking service in Consumers**  
17 **Energy's territory?**

18 A. Large load customers, including data centers, manufacturing facilities, and emerging  
19 industries, provide substantial economic, operational, and strategic benefits to the utility  
20 and the broader community. Economically, they contribute to job creation, attract private  
21 investment, expand the tax base, and stimulate regional economic development. From a  
22 system reliability perspective, their presence may support and even accelerate necessary

1 utility investments in aging infrastructure, ultimately enhancing service quality for all  
2 customers.

3 Multi-year service commitments from large load customers enhance the utilization  
4 of both existing and new generation and transmission assets. These customers also  
5 contribute stable, long-term demand, which supports more efficient resource planning and  
6 system modernization efforts.

7 Financially, large loads can increase and stabilize utility revenues by expanding  
8 overall system usage. A higher total sales volume allows the utility to distribute fixed  
9 system costs across more kilowatt-hours, which may help reduce costs for other ratepayers.

10 From a policy and compliance standpoint, many large load customers are actively  
11 pursuing ambitious sustainability objectives. This creates opportunities for meaningful  
12 collaboration on clean energy procurement, energy efficiency initiatives, and innovative  
13 grid solutions. Furthermore, large, consistent loads may catalyze the deployment of  
14 emerging technologies, such as advanced geothermal or nuclear power, hydrogen-based  
15 fuels, and grid-scale energy storage as well as supporting a variety of grid-enhancing  
16 technologies. By serving as anchor customers or project sponsors, these entities can help  
17 advance alternative pathways to achieving the utility's clean energy and decarbonization  
18 goals especially if they are willing to take on more risk such as supporting first-of-a-kind  
19 technologies that is not appropriate for a utility to bear but could provide future benefits  
20 when those technologies are potentially de-risked.

21 **Q. Do you support requiring financial security from large load customers?**

22 A. I support requiring financial security from large load customers as a means of protecting  
23 utilities and their ratepayers from potential financial risks, including stranded assets,

1 project delays, and customer default. Large load projects often require substantial  
2 infrastructure investment. If such projects are canceled, delayed, or significantly reduced,  
3 the resulting sunk costs may ultimately be shifted to other ratepayers. Financial assurances  
4 such as collateral, guarantees, or prepayments work in tandem with others rate payer  
5 protections such as capacity reduction penalties and exit fees. These mechanisms  
6 collectively ensure that customers assume appropriate responsibility for the risks they  
7 introduce and that the utility can recover its costs.

8 **Q. At a high level, how should the utility approach the design of financial security**  
9 **requirements for large load customers?**

10 A. Financial security requirements should be proportionate to the specific risks associated  
11 with each project. Many large load customers are backed by financially stable sponsors and  
12 supported by long-term commercial commitments. A rigid and uniform approach may  
13 unintentionally deter low-risk, high-value projects. A more effective strategy involves  
14 structuring requirements to evolve over time, beginning with a collateral ramp reflective  
15 of utility investments, full collateral held during any ramp period and the reduction of  
16 collateral once at full contracted capacity as the risk to both the utility and rate payers  
17 diminishes over the contract term. This staged approach appropriately reflects the risk  
18 profile from the utility's perspective.

19 Offering a range of credit tools, such as milestone-based collateral structures, surety  
20 bonds, guarantees, or upfront financial contributions, can provide necessary flexibility  
21 while maintaining financial discipline. Tailoring credit requirements to a project and  
22 customer-specific risk enhances transparency, reduces unnecessary capital constraints, and  
23 supports responsible growth. The goal is to strike a balance between protecting ratepayers

1 and enabling scalable, long-term development that delivers benefits to both the utility and  
2 the broader community.

3 In addition, flexibility in financial security frameworks can improve how customers  
4 perceive investment risk in the utility's service territory. While stricter requirements may  
5 appear to reduce risk, excessive collateral obligations can, in practice, deter investment.  
6 When combined with uncertain project timelines, these obligations can significantly  
7 increase carrying costs for customers. This may lead to otherwise viable projects being  
8 abandoned or removed from interconnection queues, which in turn increases the risk of  
9 stranded assets and undermines the very protections the financial requirements aim to  
10 ensure.

11 **Q. Should financial security requirements apply only to data centers?**

12 A. No. Limiting financial security requirements to data centers while exempting other large  
13 load customers is both inequitable and unjustified. All large loads, whether from new or  
14 existing customers, including manufacturing facilities and other high-demand users, can  
15 pose similar financial and operational risks to utilities. These risks include project  
16 cancellations, delays, underperformance, or abrupt departures, any of which can result in  
17 stranded costs or unrecovered infrastructure investments.

18 Imposing stricter financial requirements solely on data centers unfairly targets a  
19 sector that often includes financially stable entities with strong institutional backing,  
20 consistent high load factors, and long-term service commitments. At the same time, other  
21 large customers with comparable or even greater risk profiles may not be held to the same  
22 standards.

1           It is also important to evaluate the risk characteristics of individual data centers  
2 rather than generalizing across the entire industry. The data center sector is diverse,  
3 encompassing a range of business models such as hyperscalers, colocation providers, and  
4 enterprise-owned facilities. It also includes widely varying financial and ownership  
5 structures. For this reason, a uniform approach to financial security is not appropriate.  
6 Instead, policies should be structured based on measurable risk factors and applied  
7 consistently across all large load customers, regardless of industry classification.

8           A risk-based framework should consider project maturity, customer financial  
9 strength, and the scale of potential exposure. Applying consistent criteria in this way  
10 promotes fairness, protects ratepayers, and upholds transparency and nondiscriminatory  
11 utility practices. This also ensures that the financial security practices determined today  
12 can apply to the next innovative type of large load customers.

13 **Section II: Financial security proposals by party**

14 **Q. Provide an overview of each party's views on Consumers Energy's financial security**  
15 **proposal and any recommended changes.**

16 A. Table 1 summarizes the recommendations and positions of all parties regarding Consumers  
17 Energy's financial security proposal.

1

**Table 1: Parties Positions on Credit and Collateral**

<b>Party</b>	<b>Collateral Requirement</b>	<b>Creditworthiness Criteria</b>
<b>Consumers Energy (L. Connolly)<sup>1</sup></b>	Up to 100% of projected cost to serve over 15-year contract term; additional financial security at discretion.	Exemptions for investment-grade credit and high liquidity, but not embedded in tariff.
<b>MPSC Staff (D. Isakson)<sup>2</sup></b>	Acknowledges the need for financial security to protect other ratepayers from risks tied to large data centers. Supports clear tariff language enabling Consumers to require financial protections, including collateral.	Recommends formalizing the evaluation process and requiring Consumers to outline credit standards in the tariff to avoid arbitrary application and ensure transparency.
<b>Attorney General (M. Deupree)<sup>3</sup></b>	Supports financial security; criticizes vagueness; seeks codified credit standards and oversight.	Wants formal tariff language defining credit standards; partial/full exemptions based on credit rating and liquidity.

2

3 **Q. What is your understanding of Consumers Energy's financial security proposal?**

4 A. Consumers Energy proposes the authority to require data center customers to provide  
 5 collateral equal to up to 100 percent of the projected cost of service over a 15-year contract  
 6 term if not deemed creditworthy. Customers with credit rating of A- from S&P and A3 from  
 7 Moody's and liquidity greater than 10 times the collateral requirement will be exempt from  
 8 collateral. Customers that do not possess that credit rating but have liquidity greater than  
 9 10 times the collateral requirement would be exempt from 50% of the requirement not  
 10 exceeding \$250 million. The proposal would also allow Consumers to impose additional  
 11 financial security requirements at its discretion.

<sup>1</sup> Connolly Direct at 7 (collateral); Draft Data Center Contract at Jester Direct, Exhibit MEC-2 at 3; and Deupree Direct at 16 (discussing including specifics of collateral requirements as part of the tariff) (credit).

<sup>2</sup> Isakson Direct at 9-10 (collateral) and 11-12 (credit).

<sup>3</sup> Deupree Direct at 17-18 (collateral) and 20-22 (credit).

1 **Q. What is your position on Consumers Energy's proposal?**

2 A. Consumers Energy's proposal to require up to 100 percent financial security is  
3 disproportionate to the actual risk presented by most large load projects. When combined  
4 with other safeguards such as exit fees, minimum billing demand provisions, and long-term  
5 contracts, such a high collateral requirement creates an unnecessary barrier that could  
6 discourage investment and delay beneficial projects.

7 Many of the customers anticipated to take service under the tariff at issue are likely  
8 to have investment-grade credit and stable, long-term commitments. For these customers,  
9 imposing blanket, high collateral requirements are not warranted. Instead, I support flexible  
10 collateral structures that are calibrated to the specific risk profile of each customer. These  
11 structures should operate within a clearly defined framework based on industry best  
12 practices, which I discuss later in my testimony. This approach ensures both ratepayer  
13 protection and the promotion of sustainable load growth.

14 **Q. Are you opposed to Consumers Energy's proposal to address financial security**  
15 **through individual agreements with customers?**

16 A. No, I am not opposed. I view bilateral negotiations and a defined collateral framework as  
17 complementary tools that serve the same overall purpose: protecting ratepayers while  
18 enabling responsible load growth. Bilateral agreements provide the flexibility to tailor  
19 solutions to the specific financial conditions of large load customers. At the same time, a  
20 well-designed, standardized framework can offer consistency and transparency where  
21 individual negotiations are not feasible. However, Consumers' proposal does not  
22 appropriately balance risk management with the goal of encouraging long-term,  
23 sustainable load growth. A rigid, high-collateral model may discourage projects that could

1 improve load factors, enhance fixed-cost recovery, and support grid investments. A  
2 proportionate, risk-based framework is needed to safeguard ratepayers while enabling  
3 growth that strengthens system performance and long-term affordability.

4 **Q. Provide more detail on Staff's financial security proposal.**

5 A. Staff proposes that the required collateral would equal the exit fee, defined as 80 percent  
6 of the customer's contracted capacity multiplied by the number of months remaining in the  
7 contract. This amount would decrease annually to reflect the utility's declining financial  
8 exposure.

9 Customers could satisfy the requirement using approved instruments, including:

- 10 i) A parent or affiliate guarantee from an entity rated at least A- by S&P and A3 by  
11 Moody's, with liquidity ten times the required collateral  
12 ii) A standby irrevocable letter of credit from a qualifying U.S. or U.S.-branch bank  
13 iii) Cash posted in full  
14 iv) Unrated customers may qualify for a 50 percent exemption, capped at \$250 million, if  
15 they provide quarterly financials and certify liquidity of ten times the required amount.

16 Staff's proposal rejects Consumers Energy's broader discretionary authority to require  
17 collateral up to the full projected service cost.

18 **Q. What is your position on Staff's proposal?**

19 A. I do not support Staff's proposal. While its intent to protect ratepayers is sound, the  
20 collateral structure is excessive and misaligned with practical risk management. Requiring  
21 collateral equal to the full or half of the remaining exit fee imposes an unnecessary barrier  
22 for customers, particularly those with strong financial backing and long-term  
23 commitments.

1           A more appropriate approach would base collateral on a customer's monthly bill  
2 over a defined period. This method better reflects actual exposure and allows exemptions  
3 for creditworthy customers. The collateral should increase as the utility makes investments  
4 on the customers behalf to the date of energization and then should also be reduced  
5 annually following the ramp period, recognizing the declining risk to the utility and  
6 ratepayers.

7           If the Commission includes credit requirements in the tariff, they should be based  
8 on project-specific risk. The current proposal, even in its "compromise" form, still poses  
9 an unreasonable financial barrier and does not align with principles of fairness, risk  
10 calibration, or regulatory equity.

11 **Q. What is the Attorney General's financial security proposal?**

12 A. The Attorney General opposes granting the utility broad authority to impose collateral  
13 equal to the full cost of service. Instead, the proposal calls for specific tariff language to  
14 govern how collateral is calculated and to ensure that only customers posing significant  
15 risk are required to provide financial security.

16           The Attorney General supports Consumers' exemptions for customers with  
17 investment-grade credit ratings and sufficient liquidity, and allows a 50 percent exemption,  
18 capped at \$250 million, for unrated customers that meet liquidity thresholds. These  
19 standards must be clearly stated in the tariff.

20 **Q. What is your position on the Attorney General's proposal?**

21 A. I do not support the Attorney General's proposal because it is overly prescriptive and does  
22 not provide adequate flexibility for Consumers Energy and large load customers to engage  
23 in bilateral negotiations regarding financial security requirements. Bilateral agreements are

1 an important tool that allow financial security obligations to be tailored based on the unique  
2 financial characteristics, risk profiles, and development stages of individual projects. This  
3 flexibility is critical to supporting long-term, sustainable load growth while ensuring that  
4 collateral requirements remain proportionate and do not create unnecessary barriers to  
5 investment.

6 However, I also recognize the importance of establishing a consistent framework  
7 that outlines guiding principles for determining financial security obligations. A well-  
8 defined framework can enhance transparency, promote fairness, and provide a predictable  
9 structure for both the utility and prospective customers. It helps ensure that ratepayers are  
10 protected and that financial risk is managed appropriately.

11 Importantly, I do not view a consistent framework and the ability to negotiate  
12 bilateral agreements as mutually exclusive. Rather, they can and should function together.  
13 A standardized framework can serve as a foundational reference that sets expectations and  
14 best practices, while still allowing for case-by-case adjustments through negotiation where  
15 circumstances warrant a more customized approach. This dual-path structure ensures that  
16 the utility is equipped to manage financial risk effectively while also encouraging economic  
17 development and grid-enhancing projects.

### 18 **Section III: Financial security best practices**

19 **Q. Are there best practices for large load financial security?**

20 A. Yes. E3 has identified best practices for managing financial security for large load  
21 customers, particularly where utilities face significant capital investment and risk of  
22 stranded costs. These practices aim to ensure cost recovery, support responsible load  
23 growth, and promote fair treatment of all customers.

1           A key principle is aligning financial security requirements with actual risk  
2 exposure. This involves using a phased or milestone-based structure in which collateral  
3 levels adjust based on the project's stage and the utility's financial commitment. Early-  
4 stage projects, which carry higher risk, should provide greater upfront security that can be  
5 reduced as the project advances through permitting, financing, construction, and operation.

6           Another best practice is offering a standardized set of acceptable collateral  
7 instruments. Utilities should accept various forms of security, such as surety bonds;  
8 guarantees from a parent, affiliate, tenant, or other entity with a financial interest in the  
9 customer; sponsor support agreements; and contributions in aid of construction. This  
10 flexibility accommodates different customer financial structures while maintaining utility  
11 protection.

12           Avoiding redundancy is also important. Utilities should not impose overlapping  
13 forms of security that address the same risk, such as combining contributions-in-aid-of-  
14 construction ("CIAC"), exit fees, and demand guarantees without clear justification. Credit  
15 frameworks should include evaluation tools, such as a credit efficiency index or  
16 "scorecard", to assess the adequacy of existing protections and calibrate requirements  
17 appropriately.

18           Transparency and consistency are essential. Utilities should define clear credit  
19 evaluation criteria, including liquidity thresholds, credit ratings, and exemption standards.  
20 Frameworks must also be scalable and adaptable to accommodate growing and evolving  
21 large load interconnection requests.

1           Together, these practices provide a disciplined and balanced approach that protects  
2           ratepayers, supports infrastructure investment, and ensures a fair and efficient  
3           interconnection process.

4   **Q.   Please provide more details on the milestone-based approach.**

5   A.   A milestone-based approach to financial security ties the level and type of collateral to key  
6           stages in the development of a large load project and the customer's lifecycle. Rather than  
7           imposing a fixed collateral requirement, this approach adjusts financial security obligations  
8           as the utility's exposure evolves over time.

9           Collateral requirements should begin when the utility starts making financial  
10          commitments on behalf of the customer and increase as those investments grow. At the  
11          customers' facility commercial operation date and throughout the load ramp period, full  
12          collateral should be held to incentivize customers to meet their ramp targets and to mitigate  
13          the risk of underutilized assets. Once the customer has fully ramped their load, collateral  
14          should be gradually reduced to reflect the declining risk to the utility and ratepayers. This  
15          reduction should continue month by month as the customer meets its contractual  
16          obligations, aligning financial security with actual performance and risk.

17          The milestone-based framework offers a transparent, scalable, and disciplined way  
18          to manage financial security. It balances ratepayer protection with flexibility for  
19          responsible, creditworthy customers and aligns financial obligations with both project risk  
20          and utility investment timing.

21   **Q.   Please expand on the standardized menu of acceptable collateral instruments.**

22   A.   A standardized menu of acceptable collateral instruments is essential to a transparent and  
23          effective financial security framework for large load customers. It provides clarity and

1 consistency by listing approved financial tools that customers may use to meet collateral  
2 obligations. This approach promotes fairness and allows customers to select instruments  
3 that align with their financial structure, while ensuring the utility remains protected.

4 Common instruments include letters of credit, guarantees, surety bonds, and cash  
5 deposits. Letters of credit must be issued by a U.S. bank or a U.S. branch of a foreign bank  
6 with a minimum credit rating, typically BBB- or higher from S&P and a Baa3 or higher  
7 from Moody's. These letters must meet requirements for term length and automatic  
8 renewal. Parent or affiliate guarantees must come from entities with sufficient credit quality  
9 and liquidity to support the obligation. Surety bonds, issued by qualified insurers, can be a  
10 cost-effective option. Cash collateral, though less flexible, offers strong security and is  
11 universally accepted.

12 Including these instruments, along with clear eligibility standards, ensures the  
13 utility's financial exposure is adequately managed without imposing excessive burdens on  
14 customers. The availability of multiple options supports a range of financial profiles and  
15 simplifies compliance and enforcement. This structure helps maintain equitable treatment,  
16 operational efficiency, and a balanced approach to risk management.

17 **Q. Should there be collateral exemptions?**

18 A. Yes. Collateral exemptions are appropriate because financial security requirements should  
19 reflect the actual risk posed by each customer. Applying uniform collateral across all large  
20 load customers can lead to overcollateralization and create unnecessary barriers,  
21 particularly for financially stable and low-risk entities.

22 Exemptions should be based on objective criteria as discussed in the previous  
23 answer. For example, a customer with an investment-grade rating and liquidity exceeding

1 ten times the required collateral should not be subject to the same obligations as a customer  
2 with speculative credit and low liquidity. Customers without formal ratings but with strong  
3 liquidity and financial transparency should also qualify for partial exemptions.

4 Establishing structured, risk-based exemptions allows utilities to maintain  
5 necessary protections while promoting fairness and investment. A balanced exemption  
6 framework ensures accountability, avoids unnecessary cost burdens, and protects  
7 ratepayers without discouraging viable large load development.

8 **Q. What is your stance on collateral reduction?**

9 A. Collateral reduction is an essential element of a sound financial security framework. As a  
10 large load project progresses and the utility recovers capital investments, financial risk  
11 declines. Collateral requirements should decrease accordingly, either over time or upon  
12 reaching performance milestones. For example, once a customer completes construction,  
13 begins commercial operation, and demonstrates payment reliability, the likelihood of  
14 default or early termination diminishes. A declining collateral schedule ensures alignment  
15 with actual risk and prevents unnecessary capital burdens on the customer.

16 This mechanism should be clearly outlined in the tariff or service agreement, with  
17 reductions triggered automatically by defined criteria such as contract term progression or  
18 ongoing compliance. Collateral reduction reflects prudent credit practice, enhances  
19 investment efficiency, and maintains protection for ratepayers.

20 **Q. Do you recommend a certain form of collateral?**

21 A. No. There is no single form of collateral suitable for all utilities or large load customers.  
22 Risk preferences vary by utility, and customer financial structures differ widely. A rigid,  
23 uniform approach is often impractical and may lead to unintended consequences.

1 Collateral options should include cash deposits, standby letters of credit from  
2 investment-grade institutions, surety bonds from qualified insurers, and guarantees from a  
3 parent, affiliate, tenant or other entity with a financial interest in the customer and  
4 supported by strong credit and liquidity. Each instrument carries distinct costs, risks, and  
5 administrative considerations.

6 Providing a standardized menu of approved collateral types allows utilities to  
7 manage risk effectively while giving customers flexibility to meet requirements in a  
8 manner consistent with their financial strategy. This approach encourages participation,  
9 streamlines project development, and upholds ratepayer protection through enforceable,  
10 risk-aligned instruments.

11 **Q. Why are scalability and adaptability in credit frameworks important?**

12 A. Scalability and adaptability are essential for managing the increasing number and diversity  
13 of large load customers, including data centers, electric vehicle charging hubs, hydrogen  
14 production facilities, and other emerging technologies. A scalable credit framework enables  
15 utilities to apply consistent processes across a wide range of project sizes and customer  
16 types. This promotes efficiency, reduces administrative burden, and supports fair and  
17 timely evaluation of interconnection requests.

18 Adaptability ensures that the credit framework remains responsive to changes in  
19 market conditions, regulatory objectives, and customer risk profiles. As new customer  
20 categories emerge or financial conditions evolve, utilities must have the ability to adjust  
21 credit thresholds, collateral requirements, and exemption criteria without overhauling the  
22 entire policy structure. This flexibility allows utilities to maintain a consistent approach  
23 while addressing unique risk characteristics in a practical and efficient manner.

1           Together, scalability and adaptability provide the foundation for a stable,  
2           transparent, and future-ready credit policy. They allow utilities to protect ratepayers from  
3           financial exposure while facilitating the reliable and equitable integration of large loads  
4           into the electric grid. Importantly, credit policies should not be limited to near-term  
5           concerns or tailored narrowly to one customer segment. Rather, they should be designed  
6           with a long-term, system-wide perspective that supports the anticipated growth and  
7           diversification of large load interconnections. A forward-looking framework that is both  
8           scalable and adaptable will enable utilities to manage emerging risks effectively while  
9           supporting innovation, investment, and sustained grid reliability.

10   **Section IV: Recommendation to the Commission**

11   **Q.    What credit and collateral requirements do other utilities in the region have for large**  
12    **load customers?**

13    A.    Table 2 summarizes the credit and collateral requirements of selected regional utilities for  
14    large load customers.

1 **Table 2: Credit and Collateral Proposed or Approved Requirements of Regional Utilities**

<b>Attribute</b>	<b>Indiana Michigan Power</b>	<b>Evergy Kansas &amp; Missouri</b>	<b>ComEd</b>	<b>Consumers Energy</b>	<b>Dominion Energy Virginia</b>
<b>Customer Type</b>	Loads $\geq$ 70 MW or 150 MW aggregated	Large Commercial $>$ 100 MW	Large Commercial / Industrial	Data centers $\geq$ 100 MW	GS-5 customers $\geq$ 25 MW & $\geq$ 75% load factor
<b>Collateral Requirement</b>	24 $\times$ max monthly bill	24 $\times$ max monthly bill	Negotiated under PJM ESA	Negotiated; up to 100% of projected cost	\$1.5M / MW
<b>Credit Exemption / Reduction</b>	Full waiver if credit & liquidity requirements met, partial waiver if only liquidity requirement met	50% or 40% waived if credit & liquidity requirements met	Waived / reduced under PJM standards	Waived / reduced with guarantees or rating	70% reduction if credit & liquidity requirements met
<b>Forms of Collateral</b>	LOC, guarantee, cash		Negotiated (LOC, guarantee, bond)	Negotiated (LOC, guarantee, bond)	LOC, surety bond, cash, parent guarantee

2 **Q. What does Table 2 demonstrate?**

3 A. Table 2 illustrates the varied approaches utilities use to manage credit and collateral  
 4 requirements for large load customers. These practices differ based on each utility's size,  
 5 risk tolerance, existing and prospective customer profile, and regulatory environment. This  
 6 diversity confirms that no single standardized model is appropriate across all jurisdictions.  
 7 Instead, it underscores the value of adopting best practices as a guiding framework. Such  
 8 practices promote consistency, fairness, and transparency while allowing for flexibility  
 9 based on local conditions. They provide a practical foundation for developing policies that  
 10 effectively manage risk and support the integration of large loads into the electric grid.

1 **Q. Based on the financial security best practices framework explained earlier, what are**  
2 **your recommendations on financial securities in this case?**

3 A. Based on the established best practices, the recommended approach should balance  
4 ratepayer protection with proportionality, transparency, and administrative efficiency.  
5 While bilateral negotiation between Consumers Energy and large load customers is  
6 acceptable, if the Commission prefers a standardized framework, I recommend the  
7 following structure:

8 i) **Collateral Amount and Duration:** Customers should post collateral equal to two  
9 years of non-fuel revenue, beginning when Consumers makes capital investments to  
10 serve the customer, increasing at the same pace as Consumers makes investments, and  
11 reaching the full amount by the time the project is energized. This collateral should  
12 remain in place through the load ramp-up period.

13 This level of collateral provides sufficient "skin in the game" to demonstrate the  
14 customer's commitment to project development. Maintaining the collateral during the  
15 ramp period also serves as an incentive for the customer to achieve full load ramp,  
16 thereby minimizing the risk of cost shifts to other customers. While instances of  
17 customer default are rare, in such cases, two years of non-fuel revenue would be  
18 sufficient to cover the costs associated with underutilized assets until the capacity can  
19 be reassigned to a new customer and that customer becomes operational.

20 ii) **Ramp-Down Schedule:** After one year of operations at contracted capacity, collateral  
21 should be reduced by 10 percent annually, reaching zero by the end of the contract term.  
22 If the contract is extended, no new collateral should be required unless additional utility

1 investments are necessary. The 10 percent reduction annually mirrors the reduced risk  
2 to Consumers and ratepayers of stranded assets.

3 **iii) Credit Rating-Based Exemptions:** Customers whose guarantor has a credit rating of  
4 at least BBB (S&P) or Baa3 (Moody's), and liquidity of at least five times the collateral  
5 amount, should be eligible for a 50 percent exemption. These entities must certify their  
6 rating and liquidity annually.

7 Customers without formal ratings may qualify for a 30 percent exemption if their  
8 guarantor meets the same rating threshold, is not on a credit watch, and maintains five  
9 times liquidity, subject to the same annual certification.

10 **iv) Acceptable Forms of Collateral:** Customer should have the option of posting  
11 collateral in the form of a guarantee from a parent, affiliate, tenant or other entity with  
12 a financial interest in the customer; a letter of credit; a surety bond, or cash.

13 **v) Collateral in the form of Cash:** Collateral posted in cash should accrue interest while  
14 held by Consumers.

15 **vi) Use of Collateral Proceeds:** If Consumers draws on posted collateral, the proceeds  
16 should be used to offset costs for remaining ratepayers to ensure the financial security  
17 serves its intended purpose to offset costs for all ratepayers.

18 This structure protects ratepayers while avoiding excessive financial obligations for large  
19 customers. It ensures recovery of utility costs through a fair, risk-based mechanism that  
20 supports investment and operational equity.

1 **Q. Provide an example of the difference in what a customer would pay under Consumers’**  
2 **proposal as compared to your recommendation.**

3 A. Consider an illustrative data center customer with a contracted demand of 100 MW and a  
4 typical load factor of 85 percent. Under Consumers Energy’s Large General Service  
5 Primary Demand Rate, an estimate of the customer’s annual cost for electric service would  
6 be approximately \$25.4 million.

7 Under Consumers’ proposal, which requires collateral equal to 15 years of expected  
8 revenues, this customer would be obligated to provide over \$380 million in collateral to  
9 the utility. Assuming Consumer’s pre-tax weighted average costs of capital (“WACC”) of  
10 7.85 percent as the discount rate over the 15-year term, with equal monthly credits applied  
11 to the customer’s account, the net present cost of this collateral commitment would be  
12 approximately \$150 million.

13 By contrast, under a more proportionate and risk-aligned collateral framework,  
14 such as a requirement equal to 2 years of expected revenues, the same customer would  
15 provide \$51 million in collateral. Using the same WACC and assuming the collateral is  
16 returned in equal monthly installments over a 10-year period, the net present cost to the  
17 customer would be approximately \$24 million.

18 This example of collateral posted in cash form, held by the utility without accruing  
19 interest, underscores the significant financial burden imposed by the proposed collateral  
20 structure. This highlights the need for a more balanced and scalable approach to credit  
21 requirements. While cash collateral imposes an immediate and direct strain on a customer’s  
22 liquidity, alternative forms of collateral—such as letters of credit or performance bonds—  
23 can provide equivalent financial security with significantly less impact on cash flow.

1 As shown in Table 3 below, excessive collateral obligations may deter investment  
 2 by increasing the cost of capital and creating financial uncertainty. This risk is amplified if  
 3 the utility does not meet interconnection timelines, as customers may be forced to carry  
 4 collateral for extended periods, incurring substantial carrying costs. In some cases, this  
 5 could result in project delays or abandonment.

6 A well-calibrated, risk-based collateral framework helps mitigate these risks by  
 7 aligning financial requirements with the actual creditworthiness of the customer and the  
 8 project's development stage. Such an approach protects ratepayers and preserves utility  
 9 financial integrity, while also supporting investment in large load projects that can improve  
 10 grid efficiency and long-term affordability.

11 **Table 3: Collateral Cash Flow Illustrative Example**

Period (Year)	Cash Flow (\$M)		
	15-Yr Collateral & 15-Yr Recovery	2-Yr Collateral & 10-Yr Recovery	
0	\$ (381)	\$ (51)	<i>Upfront Collateral</i>
1	\$ 25.4	\$ 0	<i>Credit</i>
2	\$ 25.4	\$ 0	<i>Credit</i>
3	\$ 25.4	\$ 0	<i>Credit</i>
4	\$ 25.4	\$ 0	<i>Credit</i>
5	\$ 25.4	\$ 5.1	<i>Credit</i>
6	\$ 25.4	\$ 5.1	<i>Credit</i>
7	\$ 25.4	\$ 5.1	<i>Credit</i>
8	\$ 25.4	\$ 5.1	<i>Credit</i>
9	\$ 25.4	\$ 5.1	<i>Credit</i>
10	\$ 25.4	\$ 5.1	<i>Credit</i>
11	\$ 25.4	\$ 5.1	<i>Credit</i>
12	\$ 25.4	\$ 5.1	<i>Credit</i>
13	\$ 25.4	\$ 5.1	<i>Credit</i>
14	\$ 25.4	\$ 5.1	<i>Credit</i>
15	\$ 25.4	N/A	<i>Credit</i>
	<b>\$ (150)</b>	<b>\$ (24)</b>	<b><i>Approximate NPV</i></b>

12

1 **Part II: Clean Energy**

2 **Section I: Clean energy proposals by party**

3 **Q. What are the clean energy obligations relevant to electric utilities in the state of**  
4 **Michigan?**

5 A. Michigan requires electric utilities to meet escalating clean energy targets under the  
6 Renewable Energy Standard (“RES”) and Clean Energy Standard (“CES”), as established  
7 by Public Act 235 of 2023.

8 i) RES: Utilities must source at least 15 percent of electricity from renewable resources  
9 through 2029, increasing to 50 percent by 2030 and 60 percent by 2035. Eligible  
10 sources include wind, solar, hydroelectric, and certain biomass. Compliance is tracked  
11 through Renewable Energy Credits (“RECs”), with one REC equal to one megawatt-  
12 hour of renewable generation.

13 ii) CES: Utilities must achieve 80 percent clean energy by 2035 and 100 percent by 2040.  
14 Clean energy includes both renewable and non-emitting sources, such as nuclear power  
15 and natural gas with carbon capture.

16 These standards support the state’s broader climate goals to reduce greenhouse gas  
17 emissions and advance sustainable energy development.

18 **Q. Is clean or renewable energy important to data center customers?**

19 A. Clean or renewable energy is important to some data center customers, particularly those  
20 with environmental, social, and governance (ESG) commitments or sustainability goals.  
21 However, it is not a universal priority. For many data centers, especially those focused on  
22 commercial deployment, the primary concern is time to market, i.e. securing reliable power  
23 quickly to begin operations.

1           While clean energy may factor into long-term strategy or branding, immediate  
2 power availability and scalability often take precedence. It remains important to support  
3 clean energy development and offer flexible participation options for large load customers.  
4 These may include on-site generation, third-party power purchase agreements, and access  
5 to green tariff programs. Such flexibility enables progress toward renewable goals while  
6 accommodating varying operational needs.

7 **Q. Please summarize the clean energy requirement proposals by parties in this**  
8 **proceeding.**

9 A. Table 4 provides a summary of each party's position on clean energy requirements for data  
10 center customers.

1

**Table 4: Clean Energy Requirements Proposal by Party**

Party	Clean Procurement Requirement	Energy	Minimum Renewable	%	Mechanism Proposed
<b>Attorney General (M. Deupree)<sup>4</sup></b>	Require data centers to contract for renewable energy to meet PA 235 obligations and tax exemption requirements		≥60% renewables	from	Contractual mandate for 60% renewable energy (within MISO Zone 7) + support for 90% clean energy for tax exemptions
<b>Clean Energy Organizations (S. Siddique)<sup>5</sup></b>	Require data centers to participate in clean energy programs via CESP and VGPs		60% by 2035		Voluntary Green Pricing (VGP), customer CESP, prioritization of low-grid-impact projects
<b>MEIU (J. Albers)<sup>6</sup></b>	Offer flexible clean energy sourcing options through utility and third-party solutions		Not specified		Competitive RFPs, behind-the-meter resources, demand flexibility, grid-enhancing tech, and 50/50 utility vs. 3rd-party ownership
<b>MNSC<sup>7</sup> (D. Jester)</b>	Require data centers to meet 90% clean energy for tax exemption requirements and 60% renewables through bespoke portfolios tied to long-term contracts		90% energy; renewable	clean 60%	Voluntary Green Pricing, long-term clean energy contracts, on-site generation; bespoke clean resource portfolios per customer

2

3 **Q. What is the Attorney General's clean energy proposal?**

4 A. The Attorney General recommends incorporating firm clean energy requirements into  
 5 Consumers Energy's proposed tariff for large-load data centers under Rate GPD. The  
 6 proposal includes a requirement for data center customers to procure at least 60 percent of

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<sup>4</sup> Deupree Direct at 12-13.

<sup>5</sup> Siddique Direct at 13-14.

<sup>6</sup> Albers Direct at 14-17.

<sup>7</sup> Jester Direct at 10-11, 14-15, 18, 21-22.

1 their incremental energy use from renewable sources located within MISO Zone 7, in  
2 alignment with Michigan's Renewable Energy Standard target of 60 percent by 2035.

3 Additionally, to qualify for sales and use tax exemptions under MCL 205.54ee, data  
4 center customers would be required to demonstrate compliance with the statute's 90  
5 percent clean energy threshold. These provisions are intended to ensure compliance with  
6 state law and avoid cost-shifting by requiring customers to procure renewable energy  
7 directly for their load.

8 **Q. What is your position on the Attorney General's proposal?**

9 A. The requirement that data center customers meet the 90 percent clean energy threshold to  
10 qualify for tax exemptions under MCL 205.54ee is reasonable and appears to be consistent  
11 with state law. Regarding the proposed 60 percent renewable energy target, achieving this  
12 goal may be feasible provided there are no constraints related to time to market. However,  
13 prior to committing large-load customers to this accelerated target, it would be prudent to  
14 obtain further clarity on the implementation framework, associated timelines, and  
15 operational implications. A comprehensive understanding of these factors is essential to  
16 ensure informed decision-making and to avoid unintended impacts on market dynamics  
17 and project viability.

18 **Q. What is the Clean Energy Organizations' clean energy proposal?**

19 A. The Clean Energy Organizations propose a clean energy framework to ensure that large  
20 data center customers comply with statutory requirements while limiting cost impacts on  
21 other utility customers. They recommend that data centers seeking sales and use tax  
22 exemptions under Public Acts 207 and 181 of 2024 be required to procure at least 90  
23 percent of their electricity from clean energy sources, as defined in Section 51 of the Clean

1 and Renewable Energy and Energy Waste Reduction Act. Additionally, they propose that  
2 all new data center load be served by a portfolio that includes at least 60 percent renewable  
3 energy. To meet these targets, they suggest Consumers Energy offer options such as  
4 voluntary green pricing, long-term power purchase agreements, and on-site renewable  
5 generation, tailored to each data center's load profile.

6 **Q. What is your position on the Clean Energy Organizations' proposal?**

7 A. My position is consistent with my view on the Attorney General's proposal. I support the  
8 requirement that data center customers meet the 90 percent clean energy threshold to  
9 qualify for sales and use tax exemptions, as it is a reasonable standard and appears to be  
10 consistent with state law.

11 With respect to the proposed 60 percent renewable energy procurement  
12 requirement, achieving this target could be feasible if there are no constraints on time to  
13 market. However, it would be premature to impose this standard on data center customers  
14 without first obtaining greater clarity on how the requirement would be implemented,  
15 enforced, and integrated into existing planning and procurement processes.

16 **Q. What is the MEIU's clean energy proposal?**

17 A. MEIU proposes a clean energy framework that emphasizes customer flexibility,  
18 innovation, and market-based procurement. Instead of imposing fixed renewable energy  
19 procurement requirements, MEIU recommends offering data center customers a range of  
20 clean energy options. These include behind-the-meter solutions such as on-site solar and  
21 battery storage, participation in demand-side flexibility programs, and deployment of grid-  
22 enhancing technologies.

1           MEIU also proposes allowing customers to reduce their effective contract capacity,  
2           which determines minimum demand charges, if they commit to serving part of their load  
3           through on-site resources. In addition, customers should be permitted to enter into third-  
4           party power purchase agreements (“PPAs”) without being required to participate in  
5           Consumers Energy’s Voluntary Green Pricing (“VGP”) program.

6           To meet any remaining capacity needs, MEIU recommends that Consumers Energy  
7           conduct competitive all-source requests for proposals (“RFPs”), evaluated by an  
8           independent administrator to ensure fairness and transparency. Customers would also have  
9           the option to pay a premium to prioritize certain resource types, such as solar or storage, in  
10          Consumers’ resource planning.

11   **Q.    What is your position on MEIU’s proposal?**

12   A.    I support MEIU’s clean energy proposal. Allowing customers to reduce their effective  
13          contract capacity in exchange for deploying on-site resources promotes flexibility and  
14          recognizes distributed energy investments. The recommendation to permit third-party  
15          PPAs outside of the VGP program enhances market access and customer choice.

16          Requiring Consumers Energy to issue competitive, independently evaluated all-  
17          source RFPs for unmet needs improves transparency and cost control. Providing customers  
18          the option to pay a premium for prioritizing specific resource types further supports  
19          alignment between sustainability goals and utility planning. Overall, MEIU’s proposal  
20          offers a balanced and practical framework for advancing clean energy while maintaining  
21          customer choice and protecting ratepayers.

1 **Q. What is the MNSC' clean energy proposal?**

2 A. MNSC's proposal is similar to the Attorney General's proposal which includes a  
3 requirement for data center customers to procure at least 60 percent of their incremental  
4 energy use from renewable sources and a requirement to demonstrate compliance with the  
5 statute's 90 percent clean energy threshold for sales and use tax exemptions.

6 **Q. What is your position on the MNSC's proposal?**

7 A. As stated previously, the requirement that data center customers meet the 90 percent clean  
8 energy threshold to qualify for tax exemptions under MCL 205.54ee is reasonable and  
9 appears to be consistent with state law. Regarding the proposed 60 percent renewable  
10 energy target, achieving this goal may be feasible provided there are no constraints related  
11 to time to market. However, prior to committing large-load customers to this accelerated  
12 target, it would be prudent to obtain further clarity on the implementation framework,  
13 associated timelines, and operational implications. A comprehensive understanding of  
14 these factors is essential to ensure informed decision-making and to avoid unintended  
15 impacts on market dynamics and project viability.

16 **Section II: Recommendation to the Commission**

17 **Q. What is your clean energy recommendation to the Commission?**

18 A. I recommend that the Commission adopt a balanced and pragmatic approach that  
19 incorporates the most reasonable and flexible elements from the proposals submitted by  
20 various stakeholders. Specifically, I support policies that allow data center customers to  
21 reduce their effective contract capacity through investments in on-site renewable  
22 generation. I also support enabling third-party PPAs outside of the VGP program, requiring  
23 competitive all-source RFPs evaluated by an independent administrator, and providing

1 customers the option to pay a premium to prioritize specific renewable resource types.  
2 These mechanisms, as proposed by MEIU, offer essential flexibility and are well aligned  
3 with the operational and procurement needs of large-load customers.

4 With respect to the proposed 60 percent renewable energy procurement  
5 requirement, I am not in a position to fully support its adoption at this time. While the target  
6 may be technically achievable and consistent with the clean energy goals of many large-  
7 load customers, there is currently insufficient clarity regarding how such a requirement  
8 would impact project development timelines. Time to market is a primary concern for data  
9 centers. If not carefully structured, accelerated renewable mandates could introduce delays,  
10 uncertainty, or additional barriers that are incompatible with the rapid deployment  
11 schedules typical of data center development.

12 Accordingly, I recommend that the Commission direct Consumers Energy to  
13 conduct further analysis and engage with stakeholders to evaluate the feasibility,  
14 implementation pathways, and timing of such a target. The results of this process should  
15 be reviewed by the Commission at a later date before any binding commitments are  
16 established.

17 Finally, any clean energy requirements or associated cost allocation mechanisms  
18 adopted by the Commission should be applied equitably across all large-load customers. A  
19 consistent, technology-neutral policy framework is essential to ensure regulatory fairness,  
20 encourage continued investment, and support Michigan's broader transition to a clean  
21 energy economy.

22 **Q. Does this conclude your testimony?**

23 **A.** Yes.

1 JUDGE TALBOT: Now go ahead, Mr. Elkin, go  
2 ahead.

3 MR. ELKIN: Thank you. And apologies for  
4 that.

5 CROSS-EXAMINATION

6 BY MR. ELKIN:

7 Q. Good afternoon, Ms. Ramirez. The first piece of  
8 testimony you filed in this case was your rebuttal  
9 testimony; is that right?

10 A. Yes.

11 Q. And your rebuttal testimony addressed, in part, the  
12 proposals made by parties related to clean and  
13 renewable energy; is that right?

14 A. Yes.

15 Q. And one of the proposals that you responded to was  
16 made by MNSC Witness Douglas Jester; is that also  
17 right?

18 A. Correct.

19 Q. Mr. Jester had proposed that Consumers' revised Rate  
20 GPD include a requirement that data centers meet the  
21 statutory 90 percent clean energy threshold to qualify  
22 for the enterprise data center tax exemptions. In  
23 your rebuttal testimony you said that this proposal  
24 was reasonable and appeared to be consistent with  
25 state law; is that right?

1 A. Yes.

2 Q. And because the proposal was reasonable and appeared  
3 consistent with state law, your testimony did not  
4 object to the inclusion of such a term in Rate GPD for  
5 data centers seeking those tax exemptions; is that  
6 right?

7 A. I didn't really offer a position either way. It is  
8 part of state law, so I don't have any reason to  
9 disagree with that.

10 Q. In your testimony -- I think this was in related to  
11 the CEO's proposal. It's on page 29, lines 7 to 9 of  
12 your testimony -- you said that you "support the  
13 requirement that data center customers meet the 90  
14 percent clean energy threshold to qualify for sales  
15 and use tax exemptions"; is that right?

16 A. Yes.

17 Q. And is that still your position today?

18 A. Yes.

19 Q. Okay, good. Thank you.

20 A. I misspoke earlier. I was looking at my -- part of  
21 the testimony for MMSC, and it didn't have that  
22 statement in it.

23 Q. Understood, thank you. And I guess just to clarify,  
24 the statement of your supporting that requirement, to  
25 the extent that that also applies to MNSC's witness

1 testimony would you also say that you support that  
2 requirement?

3 A. Yes.

4 Q. Thank you. Your rebuttal testimony, you also  
5 responded to the question, "What are the clean energy  
6 applications relevant to electric utilities in the  
7 state of Michigan"; is that right?

8 A. Yes.

9 MR. VIJAYKAR: Mr. Elkin, if it's possible  
10 for you to just direct us to a portion of the  
11 testimony. That would just help me follow along.

12 MR. ELKIN: I'd be happy to. This is page  
13 25, line 3 to 4, that's where the question is.

14 BY MR. ELKIN:

15 Q. And your answer on the same page, you identified  
16 Michigan's renewable energy standard as one such clean  
17 energy obligation; is that right?

18 A. Yes.

19 Q. Thank you. The renewable energy standard requires  
20 that at least 15 percent of the electricity that  
21 Consumers provides to its customers comes from  
22 renewable resources through 2029; is that right?

23 A. Yes.

24 Q. And 50 percent starting in 2030?

25 A. Yes.

1 Q. And 60 percent starting in 2035?

2 A. Correct.

3 Q. Thank you. And in your view, the addition of  
4 substantial amounts of new load, would that impact the  
5 amount of renewable generation Consumers would have to  
6 build or acquire to comply with the renewable energy  
7 standard?

8 A. So it does state that compliance is tracked through  
9 RECs, so you can get RECs a couple of ways, but one of  
10 the ways is through procuring generation or building  
11 generation. Or you could buy RECs from the market, so  
12 not necessarily only building generation.

13 Q. Understood. And just so the record's clear, you laid  
14 out three ways to comply then, building generation,  
15 procuring or through acquiring RECs otherwise; is that  
16 right?

17 A. Yes, yes.

18 Q. Thank you, just to give an example then, if we assumed  
19 that a data center that uses 1 million megawatt hours  
20 of electricity a year comes online in Consumers'  
21 service territory at the beginning of 2028, excuse me,  
22 would it be correct that in a comparison without that  
23 data center, Consumers would need 150,000 megawatt  
24 hours? So 15 percent more renewable energy or RECs  
25 each -- in each of 2028 and 2029 to comply with the

1 renewable energy standard?

2 A. It depends on the headroom of the amount of renewable  
3 energy capacity in Consumers' territory currently.

4 And I'm not sure what that is and whether they would  
5 need to procure or build or buy more RECs to comply.

6 Q. And if there -- assuming a scenario in which there is  
7 headroom, if a 1 million megawatt data center --  
8 sorry, megawatt hours of electricity a year data  
9 center came online and was receiving energy that was  
10 below 15 percent renewable energy, would that decrease  
11 the headroom available for other customers?

12 A. If it's a new customer, yes.

13 Q. It would, thank you. Just to -- and let's assume a  
14 scenario in which there is no headroom available. If  
15 that same data center came online, then would it be  
16 correct that Consumers would need 150,000 more  
17 megawatt hours of renewable energy a year?

18 A. Yes. But I also believe that's true of any new  
19 customer coming on. There would be that same  
20 15 percent equivalent that would be needed. And so  
21 not necessarily only data centers, other large  
22 customers and other smaller customers, as well.

23 Q. Understood. If I can -- I'll jump to a question about  
24 that and we'll jump back to this hypothetical in a  
25 second. Would you say that data center projects --

1 and correct me if this characterization is not to your  
2 understanding, but which often cost hundreds of  
3 millions to billions of dollars, would those projects  
4 be better positioned to help procure substantial  
5 amounts of additional renewable generation than, say,  
6 existing renew -- existing residential, excuse me, or  
7 small commercial customers?

8 A. I'm not sure what you mean by that question. So would  
9 you mind restating it?

10 Q. Happy to. If you take a new data center customer, you  
11 know, on the one hand, or for now let's say existing  
12 residential customers on the other, which of those two  
13 customers would have more of an ability to procure  
14 substantial amounts of additional renewable generation  
15 themselves? Does that clarify?

16 A. Yes. Obviously a large commercial customer would be  
17 able to do that easier than a residential customer.  
18 However, I'm not sure we were discussing the data  
19 center's procuring their own renewable generation to  
20 comply with the renewable energy standard.

21 Q. That's fair. And perhaps I shouldn't have jumped to  
22 this question now, but if we can just stick to this  
23 question for another minute, would you also say --  
24 speaking in terms of procurement from the customer  
25 would you say that large -- a data center customer

1 would have more of an ability to do the same than,  
2 say, a small commercial customer?

3 A. I don't think that I can answer that question on the  
4 behalf of any specific data centers. I don't run a  
5 data center. And so, you know they're a very diverse  
6 group of customers. And some may be able to do so,  
7 some may not. I don't know the answer to that  
8 question.

9 Q. Understood. And do you have a position, say, for an  
10 average data center customer, whether it would be more  
11 true of them than, say, the average small commercial  
12 customer?

13 A. I -- I really don't know. I don't -- you know, it's  
14 hard to say what the average data center customer is,  
15 they're a very diverse group of customers. So without  
16 more information, I really -- I can't -- I don't want  
17 to speculate if they could or not.

18 Q. Understood. Jumping to the point you just said a  
19 moment ago about -- talking about customer  
20 procurement. Would you agree that data center  
21 procurement of renewable energy would be one option  
22 for helping to meet the renewable energy standard?

23 A. Yes.

24 Q. Thank you. I know we -- I just took us on a bit of a  
25 roundabout, I want to jump back to the hypothetical

1 that we were talking about a second ago. And I'll  
2 sort of refresh that question. I'd raised the  
3 hypothetical about a 1 million megawatt hour of  
4 electricity a year customer coming online in  
5 Consumers' service territory. And the question that  
6 I'd asked was, assuming that there was no headroom  
7 within Consumers for renewable energy, would it be  
8 correct that in comparison to a scenario without that  
9 data center, Consumers would need 150,000 megawatts  
10 more renewable energy in each of 2028 and 2029 to  
11 comply with the renewable energy standard? Can you  
12 remind me of your answer to that?

13 A. In that hypothetical situation where there is zero  
14 headroom? Yes.

15 Q. All right, thank you. And looking at the 50 percent  
16 standard by 2030, would it be correct that Consumers  
17 would need 500,000 megawatt hours more renewable  
18 energy per year to comply with that standard?

19 A. In this same hypothetical situation, yes.

20 Q. And looking at 2035, 60 percent Consumers would need  
21 600,000 more megawatt hours renewable energy a year to  
22 comply; is that right?

23 A. Yes.

24 Q. Thank you. So we were just talking about the  
25 renewable energy standard. I want to return to your

1 response to Mr. Jester's testimony.

2 Is it your understanding that Mr. Jester  
3 proposed that new data centers be served with a  
4 portfolio of resources that is at least 60 percent  
5 renewable so as to avoid making it more difficult for  
6 Consumers to comply with Michigan's renewable energy  
7 standard?

8 A. Yes, that is my understanding. Can you just point me  
9 to where in the testimony we're talking about?

10 Q. I can. So I have both where we are in your testimony,  
11 but also where it's referring to Mr. Jester's  
12 testimony. But for your testimony, I am looking at  
13 page 28, lines 12 to 15. Sorry, those are the lines  
14 for your response, but I think that's the same page.  
15 Does that situate you?

16 A. Yes, yes, thank you.

17 Q. And you respond -- so I guess just to, now that you're  
18 there, restate my question, is it your understanding  
19 that Mr. Jester proposed that new data centers be  
20 served with a portfolio of resources that's at least  
21 60 percent renewable?

22 A. Yes.

23 Q. And in those lines that I just directed you to, you  
24 responded that Mr. Jester's recommendation --  
25 responded to his recommendation by stating that "Prior

1 to committing large load customers to this accelerated  
2 target, it would be prudent to obtain further clarity  
3 on the implementation framework, associated timelines,  
4 and operational implications"; is that an accurate  
5 reading?

6 A. Yes.

7 Q. Thank you. I'm going to turn to a data response that  
8 I've premarked in the SharePoint. Do you have access  
9 to the -- the hearing SharePoint currently?

10 A. Yes.

11 Q. And I'm going to be pointing you to a response that's  
12 in MNSC folder "hearing exhibits" and then your name.  
13 Could you just let me when you're there?

14 A. Yes, I have it.

15 Q. Great, thank you. If you could pull up what's labeled  
16 MEC-44?

17 A. I have it up.

18 Q. Great, thank you. Do you recognize this document?

19 A. Yes, I do.

20 Q. And is this exhibit a response that you provided to a  
21 discovery question labeled MNSC-DCC-3.1?

22 A. Yes.

23 Q. Thank you. I want to focus on your -- on subpart G.  
24 And you were asked -- and the question is on the first  
25 page of the pdf. You were asked in what ways the

1           60 percent renewable energy target is an accelerated  
2           target.

3                         And then on the final page of the pdf you  
4           responded as follows, "it is my understanding, based  
5           on discussion with counsel and review of the testimony  
6           by interveners in this proceeding, that Michigan law  
7           subjects Consumers Energy to a 60 percent renewable  
8           energy standard which the Company must meet by 2035.  
9           It is my understanding that MNSC and other parties  
10          propose a 60 percent renewable energy target to be  
11          achieved for a subset of customers at an earlier date.  
12          The phrase accelerated target refers to the difference  
13          between 2035 and the earlier date"; is that an  
14          accurate reading?

15         A.    Yes.

16         Q.    And so based on this response, am I correct in  
17          understanding that your concern with Mr. Jester's  
18          proposal is that you believe he was calling for large  
19          load customers to be required to achieve the 60  
20          percent renewable energy target prior to 2035?

21         A.    Yes.

22         Q.    And that is because the standard requires 60 percent  
23          renewables by 2035, rather than prior to it?

24         A.    Correct.

25         Q.    And so would you not have the same concern about

1 implementing tariff language saying that 60 percent of  
2 energy for a large load customers must be from  
3 renewable resources by 2035?

4 A. So just so I'm understanding, you're asking would I --  
5 well, maybe actually, if you could just rephrase that  
6 would be helpful.

7 Q. Yeah, happy to. So a second ago, and correct me if  
8 I'm mischaracterizing, you said that the concern with  
9 Mr. Jester's proposal was that it required large load  
10 customers to be required to achieve the 60 percent  
11 renewable energy target prior to 2035. And my  
12 question is, would that same concern about  
13 implementing tariff language not apply if it required  
14 60 percent of the energy for a large load customer to  
15 be from renewable resources by 2035, rather than prior  
16 to it?

17 A. Right. Yes, that would be consistent with the  
18 renewable energy standard law. So that, I believe  
19 is -- I wouldn't have a concern with that.

20 Q. And just to clarify, you wouldn't have a concern with  
21 implementing that in the Rate GPD tariff language?

22 A. I don't know that if it's a law it necessarily needs  
23 to be in the tariff. But either way, Consumers will  
24 have to -- have to comply with that. So there's not  
25 really a lot to -- you know, I'm not against it.

1 Q. Understood. So I guess similarly then, would you not  
2 be against implementing tariff language saying that 50  
3 percent of energy for a large load customer must be  
4 from renewable energy sources by 2030?

5 A. Again, if it's consistent with what Consumers will  
6 have to do regardless, I don't have an opinion either  
7 way.

8 Q. And then would it be -- would you have the same  
9 response about 15 percent of the energy for a large  
10 load customer needing to be from renewable resources  
11 upon taking service, assuming that service is prior to  
12 2030?

13 A. Upon taking service? No, I would not agree, because  
14 we don't know how that would be implemented and if  
15 that would impede speed to market, which is the most  
16 important thing for data center customers.

17 Q. Just to clarify -- or just to follow up on that, I  
18 want to make sure that I phrase my question correctly  
19 and that I understand your response. Is it your  
20 understanding that Consumers, prior to 2030, including  
21 starting today, needs to comply with the renewable  
22 energy standard, have 15 percent of its energy be  
23 renewable or through renewable energy credits?

24 A. 15 percent in 2029. You said right now.

25 Q. Bear with me one moment. I want to take -- did you

1 still have your rebuttal testimony available?

2 A. Yes.

3 Q. Can we go to page 25?

4 A. Yes.

5 Q. Lines 8 to 9? It says, "RES: Utilities must source at  
6 least 15 percent of electricity from renewable  
7 resources through 2029"; is that right?

8 A. Oh. Yes, I'm sorry, I misinterpreted that. I thought  
9 it said "at" 2029. You're correct.

10 Q. Understood, thank you. And so jumping back to where  
11 we just were, and I need a second to situate myself.  
12 But with that in mind, would you have concern about  
13 implementing tariff language saying that upon taking  
14 service, assuming that is prior to 2030, 15 percent of  
15 energy for a large load customer would need to be from  
16 renewable energy resources?

17 A. It's the same answer. I don't have an opinion either  
18 way, it is the state law. Yeah, I don't have an  
19 opinion either way.

20 Q. Thank you. And so I was just asking about tariff  
21 language. Would your answer be the same about  
22 implementing those targets in the service contract  
23 between Consumers and a data center customer under  
24 Rate GPD?

25 A. It's -- yeah, again, I don't -- I don't know that

1           that's necessary, as Consumers has to comply. And  
2           whether that needs to be included in the service  
3           agreement, I don't have an opinion.

4       Q.    Thank you.  If it was -- actually, let me rephrase  
5           that.  Do you have an opinion about requiring the  
6           customer and Consumers to develop a plan for achieving  
7           those benchmarks in the tariff?  Or having a  
8           requirement in the tariff to require the customer and  
9           Consumers to develop a plan to meet those targets?

10     A.    I believe -- you know, I'm not a lawyer, but I believe  
11           the law applies to Consumers and not to the customer.  
12           However, I am not a lawyer, so that's not a legal  
13           opinion.  I think that that, you know, should be left  
14           to the utility to comply.

15     Q.    Understood, thank you.

16                   MR. ELKIN:  At this time, I'd like to move  
17           to admit Exhibit MEC-44.

18                   JUDGE TALBOT:  Any objection to the  
19           admission of MEC 44?

20                   MR. VIJAYKAR:  No objection, your Honor.

21                   JUDGE TALBOT:  Okay, so hearing none, it's  
22           admitted.

23                   EXHIBIT MEC-44 ADMITTED

24                   3:30 p.m.

25                   JUDGE TALBOT:  Go ahead.

1 MR. ELKIN: Thank you. I think I'm about  
2 wrapped up, but if I could have five minutes just to  
3 review my notes and consult.

4 JUDGE TALBOT: All right, let's go off the  
5 record for five minutes. Thank you.

6 (Off the record at 3:31 p.m.)

7 (On the record at 3:36 p.m.)

8 JUDGE TALBOT: Okay, all right, let's go  
9 back on record. We're on the record in Michigan  
10 Public Service case No. U-21859.

11 Go ahead, Mr. Elkin.

12 MR. ELKIN: Thank you, your Honor. No  
13 further questions at this time.

14 JUDGE TALBOT: Great. Thank you very much.

15 Did anyone else have cross-examination for  
16 Ms. Ramirez? No.

17 MR. VIJAYKAR: Yes, your Honor.

18 Luke, you're on mute.

19 JUDGE TALBOT: Oh, okay.

20 MR. WOLLENZIEN: Oh, my bad, my bad.

21 JUDGE TALBOT: Like I said, don't worry  
22 about speaking up.

23 All right, if I didn't say we're back on  
24 record, we're back on the record.

25 Go ahead, Mr. Wollenzien.

1 MR. WOLLENZIEN: Great.

2 CROSS-EXAMINATION

3 BY MR. WOLLENZIEN:

4 Q. And thank you, Ms. Ramirez. By the way, I'm Luke  
5 Wollenzien with the Michigan Attorney General.

6 So I had some questions with background  
7 materials, but just to kind of expedite this a little  
8 bit, I understand we're late in the day here. You  
9 have prior work as an insurance actuary; am I  
10 understanding that correctly?

11 A. I've been to (phonetic) school in actuarial analysis.  
12 My undergraduate degree is in actuarial science and  
13 statistics.

14 Q. Okay. And how long did you work in the insurance  
15 sector?

16 A. It was about seven years.

17 Q. So at seven years, in that time you have some  
18 experience dealing with risk assessment, am I reading  
19 that correctly here?

20 A. Yes.

21 Q. And did you carry that forward? Where did you work  
22 after that?

23 A. I've done -- continually done statistical modeling in  
24 my previous positions in the energy. But yeah, I have  
25 also done some risk assessment in special contracts

1 with large load customers.

2 Q. And so in your sort of risk assessment experience, has  
3 that involved experience -- strike that.

4 In your experience with risk assessment,  
5 has that involved evaluating business risk?

6 A. Business risk, by you mean large load customers  
7 specifically or --

8 Q. I'm talking about your background. I'm talking about  
9 your background. Do you have experience evaluating  
10 business risk in your work experience?

11 A. I stated just a second ago that I have evaluated large  
12 load customers' risks for special contracts.

13 Q. And so is that a yes --

14 A. Yes.

15 Q. -- to my question? Great, thank you. And in fact, I  
16 think at least at one point in your rebuttal testimony  
17 you emphasize you purport to approach this subject  
18 matter with a "risk-based framework"; am I  
19 understanding that correctly?

20 A. Yes.

21 Q. Okay. You work as a witness for DCC in other  
22 jurisdictions as well, right?

23 A. Yes.

24 Q. And DCC, that stands for Data Center Coalition, right?

25 A. Yes, it does.

1 Q. Okay. And so I'm assuming that the work you do for  
2 DCC in other cases also involves to some degree, data  
3 centers; am I understanding that correctly?

4 A. Yes, it does.

5 Q. And is it fair to assume that you have some experience  
6 looking at the operations of data centers?

7 A. I have general knowledge of the operations of data  
8 centers from my experience. I don't claim to be an  
9 expert in their operations.

10 Q. Okay. Is it fair to say that you have some knowledge  
11 of looking at the data center industry overall?

12 A. Yes.

13 Q. Okay. So I'm just going to walk through some of the  
14 materials you've reviewed. So I believe counsel for  
15 MNSC confirmed you only filed -- sorry, you only filed  
16 rebuttal testimony in this case, right?

17 A. That's correct.

18 Q. Okay. And did you review the direct testimony of the  
19 other parties' witnesses in this case in preparing  
20 rebuttal?

21 A. I did.

22 Q. Okay. And I'm assuming you reviewed DCC Witness  
23 Bieber's direct testimony as well, correct?

24 A. Yes, I did. Yes.

25 Q. And did you review his rebuttal testimony in

1 preparation for your testimony here today?

2 A. I have seen it. I have not reviewed it in depth.

3 Q. Okay. And I believe there were some work papers  
4 produced in discovery, I think, for both you and  
5 Witness Bieber, does that sound accurate?

6 A. Yes.

7 Q. And did you review Witness Bieber's work papers?

8 A. No, I did not.

9 Q. Okay. And you also reviewed a couple large load or  
10 data center tariffs from other jurisdictions, right?

11 A. Yes, I did.

12 Q. Okay. And in fact, you responded in discovery that  
13 you have not reviewed Ohio Power's current effective  
14 data center tariff, correct?

15 A. Yes, I have.

16 Q. Okay, great. And do you have access to the SharePoint  
17 in front of you, right now?

18 A. Yes.

19 Q. Okay. If you go in there, there's a document titled  
20 Exhibit 1 -- AG-1.22 DCC response to AG's second set  
21 of discovery; can you open that for me?

22 A. Yes, one second.

23 MR. VIJAYKAR: Counsel, can I have the  
24 number of that one again?

25 MR. WOLLENZIEN: Yeah, it's AG-1.22. I

1 believe that's sequential.

2 MR. VIJAYKAR: Got it, thank you.

3 THE WITNESS: Sorry, I had it open and then  
4 it closed. Sorry, one more second.

5 MR. WOLLENZIEN: You're fine.

6 THE WITNESS: Okay.

7 BY MR. WOLLENZIEN:

8 Q. And so this is discovery request and response where  
9 the AG asked if you reviewed the Ohio scheduled DCT  
10 tariff; is that correct?

11 A. Yes.

12 Q. Okay. And you're the responding witness here?

13 A. Yes, I was.

14 Q. Okay. And you understand it to be the response that  
15 you helped to prepare, correct?

16 A. I'm sorry, I missed that question.

17 Q. You understand this document we're looking at to be  
18 the response that you helped to prepare, correct?

19 A. Yes.

20 Q. Okay.

21 MR. WOLLENZIEN: At this time, I move to  
22 admit this document as Exhibit AG-1.22, DCC response  
23 to AG's second set of discovery.

24 JUDGE TALBOT: Any objection to the  
25 admission of AG 1.22?

1 MR. VIJAYKAR: No objection, your Honor.

2 JUDGE TALBOT: Thank you --

3 BY MR. WOLLENZIEN:

4 Q. Okay. Going back --

5 JUDGE TALBOT: Hearing none, it's admitted.

6 Hold on. It's admitted.

7 EXHIBIT AG-1.22 ADMITTED

8 3:43 p.m.

9 MR. WOLLENZIEN: I'm sorry. I'm sorry.

10 We're running late in the day here. I'm trying to not  
11 waste any time.

12 BY MR. WOLLENZIEN:

13 Q. If you go right back into the SharePoint, there's also  
14 Exhibit AG-1.23; do you see that?

15 A. Yes.

16 Q. And this is the same document that was attached to  
17 that discovery request. This is Ohio scheduled DCT  
18 tariff as it made effective. Do you recognize this  
19 document?

20 A. Yes.

21 Q. Okay.

22 MR. WOLLENZIEN: At this time, I'd like to  
23 move to admit this as Exhibit AG-1.23, titled "Ohio  
24 Power Company's Schedule DCT."

25 JUDGE TALBOT: Thank you.

1 Any objection to the admission of AG-1.23?

2 Hearing none, it's admitted.

3 EXHIBIT AG-1.23 ADMITTED

4 3:44 p.m.

5 JUDGE TALBOT: Go ahead.

6 BY MR. WOLLENZIEN:

7 Q. Okay, Ms. Ramirez, let's go to your rebuttal testimony  
8 here, and let's go down to page so 10. Do you have  
9 that open in the SharePoint?

10 A. I have it open. I am going to page 10.

11 Q. Oh, I think I didn't get quite the right page. Keep  
12 on scrolling down to page -- I apologize -- page 20.  
13 Are you there?

14 A. I am now.

15 Q. Awesome, awesome. And so here there is a table 2, do  
16 you see that?

17 A. Yes.

18 Q. And it lists a series of utility companies, correct?

19 A. Yes.

20 Q. Okay. And let's go through these real quick. So did  
21 you review -- Indiana Michigan Power Company's tariff  
22 in advance of preparing your rebuttal testimony?

23 A. Yes.

24 Q. Okay. Evergy Kansas and Missouri that's listed next,  
25 is that two cases or one case?

1 A. It's two separate cases. Evergy in Kansas and Evergy  
2 in Missouri.

3 Q. Okay.

4 A. But the proposal is the same.

5 Q. The proposal is the same. And do you have testimony  
6 in either one of those cases?

7 A. I have testimony in the Evergy Missouri case.

8 Q. Okay. And when you say the proposal is the same, does  
9 that mean -- what does that mean exactly, for both  
10 cases?

11 A. That Evergy is proposing the same terms of the  
12 collateral piece that I reviewed.

13 Q. Is -- is the Evergy Kansas case finished? Or is it  
14 pending?

15 A. It's pending.

16 Q. Both of these cases are pending?

17 A. Yes.

18 Q. Okay. All right, I'd like to go back to the  
19 SharePoint real quick. And open up what's labeled  
20 AG-1.24 Ramirez Missouri, or MO, testimony.

21 A. All right.

22 Q. And do you recognize this to be your testimony in the  
23 Missouri Evergy case?

24 A. Yes, it is.

25 Q. Okay. And is this rebuttal testimony?

1 A. Yes.

2 Q. Did you file direct testimony in that case?

3 A. No.

4 Q. Okay.

5 MR. WOLLENZIEN: At this time, I'd like to  
6 move to admit this document as Exhibit AG-1.24 Ramirez  
7 MO testimony.

8 JUDGE TALBOT: All right, any objection to  
9 the admission of AG-1.24? Exhibit 1.24?

10 MR. VIJAYKAR: No objection, your Honor.

11 MR. BZDOK: Thank you.

12 Hearing none, it's admitted.

13 EXHIBIT AG-1.24 ADMITTED

14 3:47 p.m.

15 JUDGE TALBOT: Go ahead.

16 BY MR. WOLLENZIEN:

17 Q. Witness Ramirez, do you have a reference for the  
18 Kansas Everygy case, a case reference that we could  
19 look at?

20 A. A case number?

21 Q. Yes.

22 A. Yes, it's EO-2025-0154.

23 Q. Awesome, thank you, okay. Now, let's keep moving  
24 here. The next one lined up is ComEd. Is that in  
25 Illinois?

1 A. I'm sorry, ComEd. Are you back at table 2?

2 Q. I apologize. Yes, I'm back at table 2.

3 A. Yes, ComEd.

4 Q. That's in Illinois?

5 A. Yes.

6 Q. And there is an existing tariff for that? Or is that  
7 one pending as well?

8 A. I am not sure if it's proposed or existing, off the  
9 top of my head.

10 Q. So what did you review when you put that in there?

11 A. I reviewed the tariff language that is proposed, or  
12 was maybe proposed at that time. I don't remember if  
13 it's -- if it has been completed or not. The case.

14 Q. And when you say "proposed," do you mean proposed by  
15 the utility?

16 A. Yes. Proposed by the utility.

17 Q. Okay. Did you file testimony in that case?

18 A. No, I did not.

19 Q. Do you have a case reference for that case?

20 A. Not off the top of my head.

21 Q. Could you get one?

22 A. I could look it up.

23 Q. And I don't need you to do it right now.

24 MR. WOLLENZIEN: But could I get a  
25 stipulation from counsel that we can receive a

1 reference to cases referenced in Ms. Ramirez's  
2 rebuttal testimony here?

3 MR. VIJAYKAR: Yes.

4 MR. WOLLENZIEN: Great.

5 BY MR. WOLLENZIEN:

6 Q. And the last one was your --

7 JUDGE TALBOT: All right --

8 MR. WOLLENZIEN: Go ahead.

9 JUDGE TALBOT: Well, I was just going to  
10 say, all right, that solved itself. Go ahead.

11 MR. VIJAYKAR: Your Honor, just a quick  
12 point of logistics, perhaps? We're, of course, happy  
13 to stipulate as counsel requested and provide the  
14 information requested. Is that something you'd like  
15 us to just send to your Honor and the parties? Is  
16 that something that you'd like us to put on the  
17 e-docket for the case? How would you like us to  
18 provide that information?

19 JUDGE TALBOT: Well, Mr. Wollenzien, you're  
20 just looking for the cite?

21 MR. WOLLENZIEN: I just want to have a  
22 reference to where the public docket is available so I  
23 can evaluate the terms were as proposed, and whether  
24 there is a final tariff. I could not find it  
25 immediately last night readily, but that doesn't mean

1           it's not out there. I just want to be able to see  
2           what it is. And insofar as it's referenced, I'd just  
3           appreciate to have some sort of ability to look it up.

4                    JUDGE TALBOT: Okay. Then why don't I just  
5           ask you to forward the information to all counsel, not  
6           necessarily as an exhibit, but simply as information.  
7           Does that work?

8                    MR. VIJAYKAR: It works for me, your Honor.

9                    JUDGE TALBOT: Does that work, okay?  
10          Everybody's nodding.

11                   MR. WOLLENZIEN: That's fine by me, for the  
12          record.

13                   JUDGE TALBOT: Yeah, we'll do it  
14          informally. If there's any issue we'll address it on  
15          Monday.

16                    Go ahead.

17          BY MR. WOLLENZIEN:

18          Q. All right, so the last one was secured, Ms. Ramirez,  
19          is Dominion Energy, right? We're back to table 2, I'm  
20          sorry.

21          A. Oh. Yes.

22          Q. Okay. And is that case pending, as well?

23          A. Yes, it is.

24          Q. And you have testimony in that case?

25          A. I do.

1 Q. Okay. Would you mind going back to the SharePoint and  
2 opening up exhibit AG-1.25 Ramirez VA testimony?

3 A. Yes.

4 Q. Okay. Does this appear to be your testimony in the  
5 Dominion case?

6 A. Yes, it does.

7 Q. Okay.

8 MR. WOLLENZIEN: At this time, I would move  
9 to admit that document as Exhibit AG-1.25, Ramirez VA  
10 testimony.

11 JUDGE TALBOT: Any objection to the  
12 admission of AG-1.25?

13 MR. VIJAYKAR: No objection, your Honor.

14 JUDGE TALBOT: Hearing none, it's admitted.

15 EXHIBIT AG-1.25 ADMITTED

16 3:52 p.m.

17 JUDGE TALBOT: Go ahead.

18 BY MR. WOLLENZIEN:

19 Q. Okay. Let's go down to -- okay, so going back to your  
20 rebuttal testimony, Ms. Ramirez, let's go back to --  
21 let's go down to page 21.

22 A. I'm there.

23 Q. Okay. And you set out your summary of recommendations  
24 for collateral, right?

25 A. Yes, I did.

1 Q. Okay. So going from A1 here, you say, Collateral  
2 amount in duration, "Customer should post collateral  
3 equal to two years of nonfuel revenue." What does  
4 nonfuel revenue refer to?

5 A. It's all of the revenue in a bill associated -- that's  
6 not associated with the energy charge.

7 Q. Okay. So for reference, you have in your chart here  
8 on table 2, Indiana Michigan Power Company as 24x max  
9 monthly bill, right?

10 A. Yes.

11 Q. Do you consider that to be the same as your  
12 recommendation for a two-year nonfuel revenue charge?

13 A. Yes. It can be interpreted as the same.

14 Q. Okay. So that calculation is less restrictive for a  
15 collateral requirement than what was included in the  
16 Ohio Power tariff, correct?

17 A. Yes.

18 Q. Okay. Let's go down to the next paragraph below A1.

19 It says, "This level of collateral" -- this is line

20 13, "This level of collateral provides skin in the

21 game to demonstrate the customer's commitment to

22 product development. Maintaining the collateral

23 during the ramp period also serves as an incentive for

24 the customer to achieve full load ramp, thereby

25 minimizing the risk of cost shift to other customers."

1                   What costs are you avoiding cost shifting  
2                   for when you say "minimizing the risk of cost  
3                   shifting"?

4       A.    So minimizing the -- it's the -- if there is  
5            generation -- a generation asset, it's minimizing the  
6            under-utilization of that asset, as well as the T&D  
7            system.

8       Q.    What is T&D?

9       A.    Transmission and distribution.

10      Q.    Okay.  So would that cost shift risk you're referring  
11            to, would that include interconnection costs?

12      A.    I don't believe so, because I believe that the  
13            interconnection cost is paid, or a portion of it is  
14            paid up front.

15      Q.    How is it paid up front?

16      A.    I'm not very familiar with it.  That's just in my  
17            experience, the interconnection is paid up front by  
18            customers for their facilities.  They're specific to  
19            them.

20      Q.    Okay.  Well, that's okay.  Let's look here, if you go  
21            to the SharePoint Exhibit AG-1.9.

22      A.    Okay.

23      Q.    And you'll see here question 19, "Please describe and  
24            identify the range of total interconnection cost for a  
25            prospective new customer load of 100 megawatts or

1 larger"; do you see that?

2 A. Mm-hmm, yes.

3 Q. And if you go to the middle of the response paragraph  
4 it says, "Consumers Energy estimates a range of  
5 46.5 million to 96 million total cost for  
6 interconnection facilities for a new 100 megawatt  
7 load"; do you see that?

8 A. Yes.

9 Q. Okay. And to go back to your testimony here at the  
10 same point, you don't include -- or let me ask you, do  
11 you include any calculations in your testimony here as  
12 to how two years of nonfuel charge would minimize the  
13 risk of cost shifting?

14 A. No, because this is not -- you know, I don't have  
15 specifics of a customer or any of the revenue  
16 requirement associated with that.

17 Q. So you have no idea how much costs it would cover?

18 A. It would cover two years of nonfuel revenue, which I  
19 don't -- which would cover that cost for those two  
20 years if a customer did not pay their bills, in order  
21 to then interconnect a new customer. And then  
22 therefore that cost does not get shifted to remaining  
23 ratepayers.

24 Q. Revenue is different from costs, right? We're talking  
25 about business risk?

1 A. Right.

2 Q. Okay. So do you have any idea what portion of the  
3 costs, either to interconnect these customers or the  
4 potential stranded asset costs for generation, two  
5 years of nonfuel revenue would cover?

6 A. It would cover the two years -- the two years of  
7 revenue would cover -- whatever amount that is, it  
8 would cover that amount of cost. I don't have I  
9 specific number.

10 Q. What is the amount of minimization that occurs of the  
11 risk of cost shifting?

12 A. I don't -- can you restate the question?

13 Q. Well, you say a minimum -- thereby minimizing the risk  
14 of cost shift to other customers. What is the amount  
15 of minimization that occurs?

16 A. So what this is doing, in my proposal, is I'm saying  
17 that two years of nonfuel revenue would be enough to  
18 cover the cost of that customer having -- if they left  
19 or did not pay their bills -- would be enough time for  
20 then Consumers to have another customer take that  
21 capacity. And then therefore that customer would be  
22 paying for the cost at that time past the two years.  
23 So there would therefore be no shift to remaining  
24 ratepayers.

25 Q. So you said it would cover -- it would be enough to

1 cover. What is enough to cover? What is that amount  
2 you're referring to when you're looking at enough to  
3 cover?

4 A. So, right. This -- what I am recommending is a  
5 balance between what Consumers recommended of the full  
6 term, and stating that this is more in line with the  
7 actual risk that a customer, or set of customers --  
8 the two years is enough to cover any risk of them --  
9 of that cost not being recovered by the utility and  
10 being shifted to other customers.

11 Q. What calculations did you include in your rebuttal  
12 testimony that evaluates that risk?

13 A. I did not do any calculations. This was a  
14 quantitative -- or qualitative analysis. There is no  
15 data at this time to do that. This is a fairly new  
16 paradigm in the -- in industry. And when I'm thinking  
17 about risk and balance of attracting large load  
18 customers to Consumers' territory, a 15-year or -- or  
19 a collateral of the entire contract term is not  
20 commensurate with the risk that these customers pose.

21 And so therefore I identify two years as a  
22 balance. It's not a science. It could be more, or it  
23 could be less, because we don't have the data. And I  
24 would actually state that I think Consumers should do  
25 that risk assessment when they have that data.

1 Q. So you just picked a period of years to use?

2 A. It is based off of my own experience with large load  
3 customers, as well as the collective experience of E3  
4 with large load customers, with utilities, with  
5 regulators. We wanted to balance this framework that  
6 would balance the need of -- or balance the stated  
7 goal of Consumers of having large load customers come  
8 into the territory versus protecting remaining  
9 ratepayers. That is an a very important piece of  
10 this.

11 Q. So does someone at E3 have calculations that show why  
12 this is an appropriate amount of revenue, including  
13 collateral, for the purposes of Michigan's tariff  
14 case?

15 A. No, I just stated that this is a qualitative exercise.  
16 And that, you know, as things move along, there will  
17 be more data. And at that point when there is more  
18 data, I do think that the -- that it needs to be  
19 quantified. But at this time, when there's not, we  
20 have to strike a balance. And this is what we came up  
21 with as a balance for protecting ratepayers versus --  
22 as well as incentivizing large load customers to site  
23 in Consumers' territory.

24 Q. When you say it's a balance, are you saying it's a  
25 balance of a number of years?

1 A. No, I'm saying the balance is not disincentivizing  
2 large load customers from coming to the system, which  
3 would -- which they do have a benefit on the system  
4 versus protecting other ratepayers. And the large  
5 load customers paying their share. That's the  
6 balance.

7 Q. Okay. So let's go back into the SharePoint here and  
8 you'll see an exhibit labeled AG Exhibit 1.26.

9 A. Okay.

10 Q. And so this is a discovery response from DCC where you  
11 are listed as one respondent; do you see that?

12 A. Yes.

13 Q. And you'll see on the bottom of page 2 here it says,  
14 "supplemental response." And subresponse B it says,  
15 "Please see attached work paper of Witness Ramirez"  
16 and it gives the document name, right?

17 A. Yes.

18 Q. Okay. Do you recognize this to be the response you  
19 helped to prepare here?

20 A. Yes.

21 Q. Okay.

22 MR. WOLLENZIEN: At this time, I'd like to  
23 move to admit that exhibit as Exhibit AG-1.26, ECC  
24 supplement to second MNSC VR.

25 JUDGE TALBOT: Any objection to the

1 admission of AG-1.26?

2 Hearing none, it's admitted, thank you.

3 EXHIBIT NO. AG-1.26 ADMITTED

4 4:05 p.m.

5 JUDGE TALBOT: Go ahead.

6 MR. WOLLENZIEN: Great.

7 BY MR. WOLLENZIEN:

8 Q. And if you go back to the SharePoint again, there's an  
9 Excel file titled AG 1.27; do you see that, Witness  
10 Ramirez?

11 A. Yes.

12 Q. Okay. So if you open that up, there are a series of  
13 tabs in this exhibit, right?

14 A. Correct.

15 Q. And let me back up for a second, I'm sorry. That's --  
16 the document title on this exhibit, does that match to  
17 your understanding the document title that was  
18 included in the supplemental discovery response we  
19 just looked at?

20 A. Yes.

21 Q. And so you understand this Excel file to be the  
22 attachment to that discovery response we just looked  
23 at, right?

24 A. Yes.

25 Q. Okay. So I'm looking at this right now. Is there any

1 calculation in here that would explain how -- would  
2 explain what amount of cost -- what amount or what  
3 portion of costs you're looking at would be covered by  
4 two years of nonfuel revenue?

5 A. So this calculation is -- excuse me -- is the  
6 collateral cash flow illustrative example, table 3, in  
7 my rebuttal testimony on page 24. This is just  
8 showing the amount of capital that it would take if a  
9 customer paid the collateral in cash, and what that  
10 cost would be over time.

11 And that's just an example of the fact that  
12 if Consumers -- if their proposal was, you know, put  
13 into the tariff, that a customer would have to post  
14 this amount of money in collateral in cash if they did  
15 it in cash, that they would not be able to use this  
16 cash for any other reasons within their business. And  
17 it's just showing the difference between my proposal,  
18 my recommendation versus the Company's proposal.

19 Q. So this -- this tab in this Excel sheet this is not --  
20 am I understanding you correctly, this is not intended  
21 to demonstrate or show a calculation of how your  
22 proposed collateral calc would minimize cost shifting?

23 A. Right, that's correct.

24 Q. Okay. So there are a couple other tabs on here. The  
25 next one after "results" is "dashboard." And it says

1 up here data center, it says FAC (phonetic) FACOR  
2 (phonetic) or Factor. What is this -- what is this  
3 showing?

4 A. This is just showing the calculation of the two  
5 years -- or the calculation of -- the nonfuel revenue  
6 for a year. This -- it's just the different billing  
7 pieces.

8 Q. Okay. And the next tab over says "calculations" and  
9 this is just a blank tab, just saying -- then the next  
10 tab says "year 1\_8760\_standard." What is this  
11 information?

12 A. This is the cost based off of the hourly -- the hourly  
13 cost calculation for a hypothetical 100-megawatt large  
14 load customer.

15 Q. You're saying this is a cost estimate?

16 A. This would be the revenue that they would pay --

17 Q. Oh.

18 A. -- to the Company.

19 Q. So this is a revenue estimate?

20 A. It's cost to the customer, but it's revenue to the  
21 utility.

22 Q. Okay. Just want to be clear on that. And to the next  
23 one we go over, it says "data center load shape"; are  
24 you seeing that tab?

25 A. Yes.

1 Q. And is this information from Dominion?

2 A. No, it's not. That is an incorrect title --

3 Q. Okay.

4 A. -- on line 5.

5 Q. Where is that information from? And what is this  
6 information?

7 A. This is E3's -- basically the load shape of a -- the  
8 monthly load shape of a high load factor customer.

9 Q. Is this representative of a data center load shape?

10 A. We're just seeing a 100-megawatt customer with a load  
11 factor of 80 percent basically. So any customer that  
12 would fall into that category.

13 Q. Okay. Let's go back to the "results" tab. I want to  
14 look at something here. It looks like the total  
15 right-most column, in column F we're looking at. It  
16 looks like it includes some sort of purported total  
17 revenue total yearly, right?

18 A. Yes, correct.

19 Q. Do these amounts line up at all with the revenue  
20 modeling that was done by Witness Bieber in this case?

21 A. This is -- yes, we compared and were -- we were very  
22 close, we weren't exact, but it was very close, yes.

23 Q. So what does this total here for 2025 represent in  
24 terms of size of customer and renewable billing  
25 demand?

1 A. A 100-megawatt customer at an 80 percent load factor.

2 Q. Okay. Didn't Witness Bieber, isn't he recommending a  
3 70 percent, you know, billing demand?

4 A. This is based off of what the Company's proposal is,  
5 not Mr. Bieber's proposal.

6 Q. Okay. Well, one second. So I'm going to bring  
7 these -- Bieber's work papers here. I just dropped it  
8 in the -- in your -- the SharePoint here, if you want  
9 to open that up. It says "DCC Bieber direct work  
10 paper" as was titled in production.

11 A. Okay.

12 Q. So if you'd go to table JB-1 here.

13 A. Okay.

14 Q. And you change the contract capacity to 100, because  
15 what we're talking about, it spits out a different  
16 annual minimum demand; are you sealing that? Demand  
17 revenue?

18 A. Like I stated, I did not review Mr. Bieber's work  
19 papers, so I don't know. And like I also stated, our  
20 proposed -- what the table 3 was supposed to show is  
21 just based off of Consumers' minimum billing demand,  
22 not any proposal or recommendation by DCC. It was  
23 just to show the difference of what a customer would  
24 pay -- or post in collateral under Consumers'  
25 proposal, and under my recommendation. Nothing more

1           than that.

2       Q.    Okay.  And let's -- one second.  And so you say that  
3           there's some uncertainty as to what costs are known in  
4           this case.  Did you say that earlier?

5       A.    I'm sorry, I couldn't -- you cut out a little bit.

6       Q.    I'm sorry.  I think earlier you said about uncertainty  
7           as to what costs have been forecasted in this case;  
8           did I recall that correctly?

9       A.    No.

10      Q.    Okay, so -- well, that's fine.  We had also look  
11           through, a minute ago, a Company data response where  
12           they indicated some estimated amount of  
13           interconnection costs, right?

14      A.    Yes.

15      Q.    Okay.  And that amount was between 46.5 million and  
16           96 million estimated, right?

17      A.    Yes.

18      Q.    Okay.  So if we go back into your work paper and the  
19           results page?

20      A.    Okay.

21      Q.    And so you'll see two years -- the first two years of  
22           revenue, even as predicted here, that's with an  
23           80 percent load factor, it comes out to what?  
24           \$51 million in total?

25      A.    Yes.  Correct.

1 Q. Okay. So even assuming that that's correct, that is  
2 barely scraping the bottom of this range that  
3 Consumers estimated for interconnection costs, right?

4 A. Yes. But those two things -- I'm struggling to see  
5 how those two things are connected at all. This is  
6 just to show the amount of collateral that would have  
7 to be posted by the customer under Consumers' proposal  
8 and under my recommendation.

9 Q. So you're saying that the collateral shouldn't cover  
10 interconnection costs?

11 A. I did not say that.

12 Q. I'm trying to compare revenues to costs, does that  
13 make sense?

14 A. Sure, yes.

15 Q. So I'm looking at the costs that we know about, or at  
16 least have been estimated by the Company, and  
17 comparing them to the revenue you're looking at in the  
18 collateral, right?

19 A. Yes, this is for one hypothetical customer, not a  
20 whole class of customers with a -- you know, the whole  
21 class of revenue. So that's why I'm saying these  
22 things can't be compared.

23 Q. Okay. And to be clear, the results table that we're  
24 looking at in your work paper, that's based on an  
25 80 percent load factor, right?

1 A. Correct.

2 Q. Okay. All right, one second.

3 And as far as a recommendation of a  
4 two-year nonfuel charge as a collateral calculation,  
5 you made that same recommendation to Missouri, right?

6 A. I believe so, subject to check.

7 Q. And you made the same recommendation in Virginia; am I  
8 understanding that correctly? Or subject to check?

9 A. Subject to check.

10 Q. Okay. Let's go back to your testimony here.

11 A. Okay.

12 Q. Back to A1. And so you include this calculation  
13 recommendation, and you also include recommendation of  
14 something like a ramp-up for collateral, right?

15 A. Correct.

16 Q. Is there any kind of -- was this ramp-up provision  
17 incorporated into INM's final large customer tariff?

18 A. I don't know specifically.

19 Q. Okay. Was it included in Ohio's tariff?

20 A. No, I don't believe so.

21 Q. Do you know of any other jurisdictions that use the  
22 ramp-up you're recommending for their large customer  
23 tariffs or data center tariffs?

24 A. I don't know of any specifically. However, this is a  
25 framework that we came up with that is risk-based.

1           There is -- and so as the Company invests, the  
2           collateral should increase with that investment  
3           approximate. It should be held through the ramp  
4           period to incentivize the customer to fully ramp so  
5           there is no under-utilized assets.

6                         And then as they pay on-time payments over  
7           the years, it should ramp down as the risks to the  
8           utility and remaining ratepayers goes down as well.

9           Q.    Okay. Did you recommend this ramp-up in the Missouri  
10           case you provided testimony in?

11          A.    Yes, I did.

12          Q.    And you provided the same recommendation in Virginia?

13          A.    Yes, I did.

14          Q.    Okay. Let's go down to A2. You have a ramp-down  
15                 schedule. Are you seeing that in your testimony,  
16                 rebuttal testimony?

17          A.    Yes, I do.

18          Q.    Okay. And you were talking about taking, what is it?  
19                 10 percent reduction off of the two-year collateral  
20                 calc?

21          A.    Correct. Per year.

22          Q.    Per year?

23          A.    Yes.

24          Q.    10 percent per year?

25          A.    Yes.

1 Q. Okay. And you say, I believe, that it mirrors reduced  
2 risk?

3 A. Correct.

4 Q. And you don't have any calculations in your rebuttal  
5 testimony to explain how it reduces risk, right -- or  
6 mirrors reduced risk, right?

7 A. I don't have a calculation. However, it -- when a  
8 customer is being -- is paying revenue to the utility  
9 that's covering the cost of investments, so as the  
10 time moves along there's less costs associated with  
11 that group of customers, so the risks to remaining  
12 ratepayers of it being shifted to them goes down as  
13 time goes down and revenue is collected.

14 Q. But you don't know what portion of the costs are  
15 collected by the -- are covered by the two years  
16 revenue to begin with, right?

17 A. That's going to depend on all types of things. So  
18 nobody knows at this point.

19 Q. Okay? The INM settlement -- or sorry -- well,  
20 strike -- well, one thing, DCC was a party to the INM  
21 settlement, right?

22 A. I believe so.

23 Q. Okay. The INM tariff doesn't include a 10 percent  
24 reduction like this, right?

25 A. Like I said earlier, I don't know if it did or not.

1 Q. And I'm sorry, I think that that's right, but I would  
2 ask instead, do you know if the INM tariff includes a  
3 10 percent reduction term like this?

4 A. I do not know.

5 Q. Do you know if the Ohio -- the scheduled DCT includes  
6 a provision like that?

7 A. I don't believe so, as I stated earlier.

8 Q. Okay. Okay, are you aware of another jurisdiction  
9 that has a 10 percent yearly reduction metric for its  
10 collateral in the context of a -- you know, large  
11 customer or data center tariff?

12 A. I don't. However, my recommendation is based off of a  
13 framework that we believe balances the risk to  
14 remaining ratepayers, the mitigation of that risk to  
15 remaining ratepayers, and while still -- while not  
16 disincentivizing large customers from siting in  
17 Consumers' territory.

18 Q. And so it's based on your belief, am I understanding  
19 that correctly?

20 A. No, it's based off of my experience. It's based off  
21 of the E3's holistic experience over 30 years. It is  
22 a risk-based framework.

23 Q. How did your experience lead you to establishing a  
24 10 percent metric for that yearly reduction?

25 A. The 10 percent metric showed -- the reason we came up

1 with 10 percent was that then at the end of the term  
2 there would be zero collateral. So it ramps down as  
3 the customer pays more revenues to the utility each  
4 year.

5 Q. Okay. Do you make the recommendation for a 10 percent  
6 ramp down in Missouri -- in your Missouri testimony?

7 A. I don't know if it was a certain percent, but there  
8 was a ramp-down period in my Missouri testimony.

9 Q. Okay. Do you make a ramp-down recommendation in your  
10 Virginia testimony that's pending?

11 A. I did, yes.

12 Q. Was it a 10 percent annual ramp-down?

13 A. I don't remember if there was a specific percentage or  
14 just a ramp-down period to reach zero by the end of  
15 the contract term.

16 Q. Okay. And I talked about any calculations in your  
17 rebuttal. I'm assuming there's no calculations in  
18 your work as provided that explain or specifically  
19 articulate the reasoning behind the 10 percent  
20 ramp-down?

21 A. I thought I just stated that it was because then it  
22 would get to zero. The collateral held by the Company  
23 would get to zero by the end of the term over those  
24 ten years after the -- after they're fully ramped. So  
25 there is no -- you are correct, there is no

1 calculation, it just is with the root -- the risk to  
2 remaining ratepayers being reduced because of the  
3 revenue collected therefore it released that same, you  
4 know -- the commensurate level of collateral back to  
5 the customer -- or credit based off of that  
6 collateral.

7 Q. Okay. So let's move on in your rebuttal to section A3  
8 here on page 22. And this is credit rating-based  
9 exemptions. So the credit -- the minimum credit  
10 rating you include in your recommendation is at least  
11 BBB from S&P of Baa3 from Moody's; is that correct?

12 A. Yes.

13 Q. And Baa3 from Moody's, that is -- correct me if I'm  
14 wrong, my understanding is that is like the lowest  
15 tier of investment grade credit that Moody's includes  
16 in its designations; is that right? Lowest tier of  
17 investment grade --

18 A. It is investment-grade credit.

19 Q. Okay. What are the minimum credit ratings required  
20 for the exemptions under INM large customer tariff?

21 A. I don't know, off the top of my head.

22 Q. Would you -- okay, I'm realizing I didn't drop the  
23 Ohio -- the INM tariff in the SharePoint, but I will.  
24 Okay, I just included in the SharePoint Exhibit  
25 AG-1.12.

1 A. Okay.

2 Q. Okay, so if you kind of control-F for collateral,  
3 that'll make that go more quickly. It should. Oh,  
4 that's right, the SharePoint doesn't have search  
5 functionality, for some reason. So I'll find the  
6 reference for you here.

7 Okay, page 8 of 8 in the exhibit.

8 A. I'm sorry, I don't know why, but I'm not able to open  
9 the document. Is there another way --

10 Q. You probably need to refresh your page or something.

11 A. Okay.

12 Q. Because I'm opening it from that SharePoint.

13 A. Yeah I -- I'm still not -- I don't know what's  
14 happening, I'm sorry.

15 Q. Okay. Well, can you try to open the Ohio scheduled  
16 DCT that's Exhibit AG-1.23?

17 A. Okay.

18 Q. Okay. So in that tariff if you scroll down to sheets  
19 2235 through 6?

20 A. Okay.

21 Q. And actually on 6, so in numbered paragraph 2 on page  
22 6, it includes a minimum credit rating; do you see  
23 that?

24 A. Yes.

25 Q. And it includes a credit rating of at least A- from

1 S&P and A3 from Moody's, right?

2 A. Yes, that's correct.

3 Q. So that would be sort of a more restrictive exemption  
4 provision from the perspective of customers than the  
5 one you proposed in your rebuttal testimony, right?

6 A. Correct.

7 Q. Okay. And you actually recommended -- well, one  
8 second, strike that.

9 Do you explain in your testimony why the  
10 BBB S&P or Baa3 Moody's minimum credit rating is  
11 appropriate for Michigan?

12 A. It is investor-grade credit. I don't think I  
13 specifically said why it is appropriate for Michigan,  
14 but it is -- you know, investor-grade credit is, I  
15 would say, a measure of risk, a measure of a  
16 customer's risk, an investment grade shows that they  
17 have less risk.

18 Q. Is there a difference between -- and do these  
19 customers have different risks in different  
20 jurisdictions?

21 A. The utilities have different risks in different  
22 jurisdictions, yes.

23 Q. But these provisions apply to customers, not the  
24 utilities, right?

25 A. Right. Right. But these provisions are there to

1 protect the utility and the remaining ratepayers from  
2 cost shift.

3 Q. These collateral provisions apply to designations by  
4 the customers for basically agreements to pay; am I  
5 understanding that correctly? This applies to the  
6 customers, not utilities, right?

7 A. Correct, yes.

8 Q. Okay.

9 A. Yes, that is correct.

10 Q. All right. Is there a difference between an A3 from  
11 Moody's and a Baa3 from Moody's, as far as their  
12 system goes?

13 A. Yes.

14 Q. What is the difference?

15 A. I don't know the specifics of the difference, but it  
16 is a lower credit rating. However, it is still  
17 investment-grade credit.

18 Q. Okay. So in -- one second. What minimum credit  
19 rating do you propose in your Virginia testimony?

20 A. The same credit rating as the one at Consumers.

21 Q. Okay. And if you're looking at page 6 of your  
22 testimony in that case, you have a similar chart to  
23 one you include here where you show Dominion's  
24 proposal and your recommendation, right?

25 A. Correct.

1 Q. And in that case, at least as it states here, Dominion  
2 proposed this BBB-/Baa3 minimum credit rating for an  
3 exemption, right?

4 A. Correct.

5 Q. Okay. So in your Missouri rebuttal testimony, what  
6 minimum credit rating do you propose for an exemption?

7 A. So are we talking partial exemption like I am  
8 recommending in Consumers' territory? Or full  
9 exemption? Because we have two separate  
10 recommendations in the Missouri Evergy case.

11 Q. Do both refer to a credit rating?

12 A. Both do -- no, only the full exemption has a credit  
13 rating of A- from S&P and A3 by Moody's, as well as  
14 liquidity of 10x.

15 Q. So --

16 A. But they would get a full exemption from collateral.  
17 Where in Consumers I am not recommending a full  
18 exemption from collateral.

19 Q. And why aren't you recommending a full exemption from  
20 collateral here as you are in Missouri?

21 A. I am agreeing with Evergy's proposal, their  
22 recommendation to have a full exemption, because I do  
23 believe that very high credit ratings, very high  
24 liquidity customers should -- could or should get a  
25 full exemption.

1 I did not think it was appropriate in  
2 Consumers because of the -- because (a), Consumers did  
3 not think that that was appropriate for their risk,  
4 and so I did take that into account. But also there  
5 is very -- you know, Consumers has very little to no  
6 history with these very large customers. So I didn't  
7 think it would be appropriate from the onset to  
8 include that. It may be, once they have data to then  
9 go and do a risk assessment.

10 Q. So then if we go back to Missouri -- testimony in  
11 Missouri and that table on page 6.

12 A. Yes.

13 Q. Do you recommend the same minimum credit rating there  
14 because that's what -- is what you say here that the  
15 utility proposed?

16 A. That's not a minimum credit rating. That's a --  
17 that's a -- to get a full exemption they have to have  
18 an A- or A3. I did not include any credit rating  
19 requirements in the partial exemption which would be  
20 more similar to Consumers' proposal.

21 Q. Okay. And I think I was -- I think I was misreading  
22 which one I was looking at. I was looking at  
23 Virginia's --

24 A. Oh.

25 Q. I apologize for that, I've got two documents open, I

1           wasn't -- and maybe your answer is similar --  
2           substantially similar, but I was just looking at in  
3           Virginia, you're saying Dominion proposed this  
4           BBB-/Baa3 and you also included that? But I will  
5           say --

6       A.    Yeah.

7       Q.    Okay. Go ahead.

8       A.    That is the -- in my opinion, to get a partial  
9           exemption, that is the credit rating that should apply  
10          for a large partial exemption. There could be a  
11          reduced partial exemption with other factors. But  
12          they -- I do believe that a customer should have  
13          investment-grade credit to get a partial exemption of  
14          the collateral.

15      Q.    Okay. And part of this, as well, is a liquidity  
16          component -- or strike that.

17                                One second.

18                                JUDGE TALBOT: This seems like a good time  
19          to break in. We are getting near 5:00, and you don't  
20          have to wrap up, but can we get to a stopping point  
21          soon? Because I promised we'd be done by 5:00.

22                                MR. WOLLENZIEN: Yes.

23                                Can I have a two-minute -- two minutes,  
24          your Honor?

25                                JUDGE TALBOT: Sure, we'll go off the

1 record for two minutes.

2 MR. WOLLENZIEN: Yeah, thanks.

3 (Off the record at 4:39 p.m.)

4 (On the record at 4:47 p.m.)

5 JUDGE TALBOT: All right, so let's go back  
6 only the record. We're back on the record in Michigan  
7 Public Service case No. U-21859.

8 Go ahead Mr. Wollenzien.

9 MR. WOLLENZIEN: So previously we were  
10 discussing what was labeled in the SharePoint as  
11 exhibit AG-1.27. At this time, I move for admission  
12 of that document as Exhibit AG 1 -- sorry, I move for  
13 admission of that document as Exhibit AG-1.27, labeled  
14 MNSC-DCC-2.1B-(SUPP)\_attach\_1.

15 JUDGE TALBOT: Thank you. Any objection to  
16 that the admission of Exhibit 1. -- AG-1.27?

17 All right, hearing none, it's admitted.

18 EXHIBIT AG-1.27 ADMITTED

19 4:48 p.m.

20 JUDGE TALBOT: While we were off the  
21 record, we sort of -- I should have probably said this  
22 first. But we set the schedule for kind of what we're  
23 doing on Monday. We had all agreed that we would  
24 conclude today by 5:00. Well, I agreed, I guess.

25 So anything else before we go off the

1 record?

2 All right, hearing none, we'll go back off  
3 the record.

4 (Proceedings adjourned at 4:49 p.m.)

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## CERTIFICATE OF REPORTER

STATE OF MICHIGAN)

)SS

COUNTY OF MONROE )

I hereby certify that I reported  
stenographically the foregoing proceedings and  
testimony under oath at the time and place  
hereinbefore set forth; that thereafter the same was  
reduced to computer transcription under my  
supervision; and that this is a full, true, complete  
and correct transcription of said proceedings.



Leisa Pastor, CSR-3500, CRR

Notary Public

Monroe County, Michigan

My Commission expires: 9/7/2027