

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the Application of)
INDIANA MICHIGAN POWER)
COMPANY for Approval of its Integrated)
Resource Plan under MCL 460.6t,)
avoided costs, and for other relief.)
_____)

Case No. U-21189

QUALIFICATIONS AND DIRECT TESTIMONY OF

NAOMI J. SIMPSON

MICHIGAN PUBLIC SERVICE COMMISSION

July 7, 2023

QUALIFICATIONS OF NAOMI J. SIMPSON

CASE NUMBER U-21189

PART I

1 Q. Please state your full name and business address for the record.

2 A. My name is Naomi J. Simpson. My business address is the Michigan Public Service
3 Commission's (MPSC or Commission) work site at 7109 West Saginaw Highway,
4 Lansing, Michigan 48917.

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

6 A. I am employed in the Energy Resources Division of the MPSC. I am the Manager of the
7 Resource Optimization and Certification Section, which is responsible for assisting in the
8 implementation of Public Act 341 of 2016; oversight and input to the Commission
9 regarding some of the Commission's regulatory responsibilities under Public Act 295 of
10 2008, as amended by Public Act 342 of 2016, for renewable energy; and evaluating
11 applications for transmission siting pursuant to Public Act 30 of 1995.

12 Q. Would you please outline your educational background?

13 A. Yes. I earned a Bachelor of Science degree in Engineering from Michigan State University
14 in 1997 and a Master of Arts degree in Education from the University of Phoenix in 2010.
15 Since joining the Commission, I have also attended several training programs sponsored
16 by the National Association of Regulatory Utility Commissioners and Michigan State
17 University, including the Annual Regulatory Studies Program (August 2011, 2012, 2013),
18 the Advanced Regulatory Studies Program (October 2011, 2012, 2013, 2014), and
19 Introduction to Public Utility Regulation and Ratemaking (May 2012). In addition, I have
20 attended the Distribution Efficiency Planning and Voltage Optimization Conference
21 sponsored by Electric Utility Consultants, Inc. (June 2012); the annual Energy, Utility &
22 Environment Conference (January 2013); the National Energy Risk Lab (February 2014);
23 multiple EGEAS modeling training sessions at various Midcontinent Independent System

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1 Operator (MISO) locations (2015, 2016, 2017, 2018, 2019); the Peak Load Management
2 Alliance (2016); the National Council on Electric Policy Workshop (2018) and participated
3 as a Michigan representative in the National Association of Regulatory Utility
4 Commissioners (NARUC) National Association of State Energy Officials Task Force
5 (2019-2020).

6 Q. Would you please outline your professional experience?

7 A. In September 1994, I began working at General Motors Corporation as a student engineer,
8 where I worked with staff engineers to evaluate vehicle calibrations and components
9 related to meeting vehicle emissions standards and fuel efficiency.

10 In February 1998, I began working as a staff Design and Release Engineer with
11 responsibility for vehicle platform exhaust systems in Delphi Automotive Systems, a
12 subsidiary of General Motors, which later became a fully independent corporation in 1999.
13 My duties as a Design and Release Engineer included design team management, durability
14 test validation, production approval, and lean manufacturing implementation. In August
15 2000, I became the Engineering Change Management Coordinator for the Delphi Lansing
16 Cockpit Assembly Plant, where I was responsible for model year program management
17 and mid-cycle engineering change management and was designated the Engineering
18 Liaison to the General Motors staff product engineers, manufacturing engineers, and
19 quality engineers associated with cockpit production. In 2002, I became the on-site
20 Systems, Applications & Products in Data Processing Project Manager for the Delphi
21 Lansing Cockpit Assembly Plant in addition to my previous responsibilities. In November
22 2004, I was assigned the duties of Quality Manager, with responsibility for plant-wide first-

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1 time quality goals, root cause analysis, supplier quality standards, and statistical defect
2 analysis.

3 In 2007, I accepted a position at Barnard Manufacturing, Inc. as a Commodity
4 Buyer of steel and aluminum raw material. My responsibilities included negotiation of
5 commodity contracts to create the most efficient pricing structure, while ensuring timely
6 delivery, creating material quality specifications, initiating build schedules based on
7 customer-desired completion dates, and maintaining a material pricing database for all
8 manufactured components.

9 In March of 2011, I accepted a position as a Public Utilities Engineer in the Smart
10 Grid Section of the MPSC. I was a member of the Smart Grid Collaborative as the co-
11 chair of the Customer Programs and Communication Work Group. In Case No. U-16794,
12 I supported MPSC Staff (Staff) witnesses with the analysis of Consumers Energy
13 Company's Advanced Metering Infrastructure / Smart Grid proposal and request for
14 recovery in Case No. U-16794. I have also assisted with writing the Staff report to the
15 Commission in Case No. U-17000. Upon transfer to the Generation and Certificate of
16 Need (nka Resource Optimization and Certification) Section in May of 2012, I began
17 testifying as an expert witness in utility generation certificate of necessity application
18 filings and utility transmission certificate of public convenience and necessity application
19 filings. In 2015, the Commission established a Demand Response Programs Work Group,
20 of which I remain a member. Throughout 2020 and 2021, I led the MI Power Grid Phase
21 II Advanced Planning effort focused on integration of transmission, resource, and
22 distribution planning. In 2021 and 2022, I led the MI Power Grid Phase III Advanced
23 Planning effort, which resulted in the revised Michigan Integrated Resource Planning

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1 Parameters and updated Integrated Resource Plan Filing Requirements adopted by the
2 Commission in October 2022.

3 Q. Have you previously presented testimony before the Commission?

4 A. Yes. I prepared and filed testimony for the following cases:

- 5 1. Case No. U-16801, Indiana Michigan Power Company electric rate case.
- 6 2. Case No. U-17041, Michigan Electric Transmission Company, LLC application
7 for a certificate of public convenience and necessity for the construction of a
8 transmission line.
- 9 3. Case No. U-17272, ATC Management Inc. and American Transmission Co., LLC
10 application for a certificate of public convenience and necessity for the
11 construction of a transmission line.
- 12 4. Case No. U-17429, Consumers Energy Company application for a certificate of
13 necessity for the Thetford Generating Plant.
- 14 5. Case No. U-17767, DTE Electric Company electric rate case.
- 15 6. Case No. U-18014, DTE Electric Company electric rate case.
- 16 7. Case No. U-18224, Upper Michigan Energy Resources Corporation application
17 for a certificate of necessity for two reciprocating internal combustion engine
18 electric generation facilities.
- 19 8. Case No. U-18322, Consumers Energy Company electric rate case.
- 20 9. Case No. U-18255, DTE Electric Company electric rate case.
- 21 10. Case No. U-18419, DTE certificate of necessity case for a natural gas combined
22 cycle electric generation facility.
- 23 11. Case No. U-20134, Consumers Energy Company electric rate case.

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- 1 12. Case No. U-20165, Consumers Energy Company integrated resource plan case.
- 2 13. Case No. U-20202, Consumers Energy Company power supply cost recovery
- 3 case.
- 4 14. Case No. U-20276, Upper Peninsula Power Company electric rate case.
- 5 15. Case No. U-20497, Michigan Electric Transmission Company, Wolverine Power
- 6 Supply Cooperative, and Midwest Energy and Communication asset
- 7 determination case.
- 8 16. Case No. U-20529, Indiana Michigan Power Company power supply cost
- 9 recovery case.
- 10 17. Case No. U-21089, DTE Electric Company classification of assets case.
- 11 18. Case No. U-21090, Consumers Energy Company integrated resource plan case.
- 12 19. Case No. U-21193, DTE Electric Company integrated resource plan case.
- 13 Q. Have you assisted with other cases before the Commission?
- 14 A. Yes, I assisted Staff in the following integrated resource plan cases: U-20591, U-
- 15 20350, U-20470, U-20471, U-20300, U-21081, and U-21189.

DIRECT TESTIMONY OF NAOMI J. SIMPSON

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PART II

1 Q. What is the purpose of your testimony?

2 A. The purpose of my testimony is to provide the MPSC Staff's (Staff) overall
3 recommendation regarding Indiana Michigan Power Company's (I&M or the Company)
4 request for approval of the contracts for three renewable energy projects and one capacity
5 project in support of the Company's recent integrated resource plan (IRP) approved by the
6 Commission on February 2, 2023, in this case, Case No. U-21189.¹

7 Q. Are you sponsoring any exhibits?

8 A. No.

9 Q. In accordance with the Settlement Agreement approved on February 2, 2023, what
10 resources has I&M included in its portfolio through 2028?

11 A. As stated in Term 1 of the Settlement Agreement, "Accordingly, for the purposes of this
12 settlement, I&M's Preferred Portfolio through 2028 shall consist of 2160 MW (ICAP, or
13 approximately 620 MW UCAP) of carbon-free resources (e.g., solar and wind); 750 MW
14 (ICAP) of fully dispatchable resources (e.g., natural gas combustion turbines); and 255
15 MW (ICAP) of storage."²

16 Q. Specifically, what resources are represented by the contracts that the Company seeks
17 approval for in this case?

18 A. The Company is seeking approval for contracts supporting four projects. The Company
19 seeks approval for Elkhart County Solar Project, which is a 30-year power purchase
20 agreement (PPA) for a 100 MW solar facility. The Company seeks approval for Sculpin
21 Solar Project, which is a 30-year PPA for a 180 MW solar facility. The Company seeks

¹ The Commission's Order on February 2, 2023 in Case No. U-21189 approved the contested settlement agreement.

² The Commission's February 2, 2023 Order in Case No. U-21189, Exhibit A, p. 3.

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1 approval for Mayapple Solar Project, which is a 224 MW purchase-sale agreement (PSA).
2 Lastly, the Company seeks approval for the Montpelier facility, which is a 7-year capacity-
3 only purchase agreement (CPA) for the purchase of 210 MW capacity from the Montpelier
4 Generating Station, an existing natural gas combustion turbine facility. In total, the
5 Company's request represents 504 MW of ICAP solar and 210 MW of fully dispatchable
6 resources.³

7 Q. Does Staff recommend the Commission approve the Company's request?

8 A. Yes. Staff recommends the Commission approve the contracts associated with all four of
9 these resources. These resources support and fully comply with the Company's recently
10 approved IRP. As discussed by Staff witness Marceline A. Champion, Staff has reviewed
11 the Company's competitive procurement and contract selection process and finds it to be
12 reasonable. As discussed by Staff witness Zachary C. Heidemann, these contracts are
13 within the cost range modeled in the resource tiers of the IRP. These resources are needed
14 to serve customers as the Company faces the closure of the Rockport Power Plant.
15 Therefore, Staff recommends the Commission approve these contracts and find that they
16 are reasonable and prudent for future cost recovery.

17 Q. Considering all the projects contracted as part of the Company's 2022 request for proposal,
18 what ownership split did the Company achieve?

19 A. Considering the four projects for which the Company seeks approval in this case and the
20 Lake Trout PSA in Case No. U-21377, all of which were contracted as part of the
21 Company's 2022 solicitation for resources, the Company has collectively achieved a 51%
22 PPA / 49% Company-owned split, rounded to the nearest whole percentage. Staff

³ Direct Testimony of Company witness Andrew J. Williamson, filed on March 30, 2023, in Case No. U-21189, p. 11.

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1 calculated this based upon 490 MW of PPAs that include Sculpin Solar, Elkhart Solar, and
2 Montpelier, as compared to 469 MW of Company-owned resources that include Mayapple
3 Solar and Lake Trout Solar.

4 Q. Is the Company making any specific accounting requests?

5 A. Yes. The Company is requesting deferral accounting authority for its Mayapple Solar PSA,
6 utilizing regulatory asset treatment.⁴

7 Q. Does Staff find the Company's request to use deferral accounting treatment reasonable?

8 A. Yes. Generally, Staff finds the Company's request for deferral accounting treatment
9 reasonable, provided the deferral accounting treatment will be limited to 30 months from
10 the month a project is placed into service, as detailed in term 4d of the Settlement
11 Agreement approved in the underlying IRP proceeding.

12 Q. Does Staff find the Company's proposal to extend production tax credit (PTC) benefits to
13 customers for Mayapple Solar PSA over a 20-year period reasonable?

14 A. Yes. The Company's plan to extend the PTC benefits for the Mayapple Solar PSA over 20
15 years, utilizing regulatory liability treatment,⁵ is reasonable and provides for a smoother
16 rate transition, as shown in Company witness Williamson's testimony, Figure AJW-3.

17 Q. Does this conclude your testimony?

18 A. Yes.

⁴ Direct Testimony of Company witness Williamson, filed on March 30, 2023, in Case No. U-21189, pp. 12-14.

⁵ *Id.*

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Case No. U-21189

QUALIFICATIONS AND DIRECT TESTIMONY OF

ZACHARY C. HEIDEMANN

MICHIGAN PUBLIC SERVICE COMMISSION

July 7, 2023

QUALIFICATIONS OF ZACHARY C. HEIDEMANN

CASE NUMBER U-21189

PART I

1 Q. Please state your name and business address.

2 A. My name is Zachary C. Heidemann, and my business address is 7109 W. Saginaw Hwy.,
3 Lansing, Michigan 48917.

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

5 A. I am employed in the Energy Resources Division of the Michigan Public Service
6 Commission (MPSC or Commission). I am a Public Utilities Engineer in the Resource
7 Optimization and Certification (ROC) Section, which is responsible for assisting in the
8 implementation of Public Act 341 of 2016, reviewing utility generation procurement and
9 contracting, and evaluating applications for transmission siting, pursuant to Public Act 30
10 of 1995.

11 Q. Please describe your educational background.

12 A. I earned a Bachelor of Science in Mechanical Engineering in 2006 from Michigan State
13 University and a Master of Science in Mechanical Engineering from Georgia Institute of
14 Technology in 2013.

15 In addition, I have attended two multi-day training sessions offered through the
16 Midcontinent Independent System Operator (MISO) on the capacity expansion planning
17 software Electric Generation Expansion Analysis System (EGEAS) and multiple training
18 sessions, as well as a conference on Aurora XMP (Aurora) offered by Energy Exemplar.
19 Aurora is an energy market price forecasting software that can also be used in capacity
20 expansion planning. I have also attended Grid School (April 2018) offered through the
21 Institute of Public Utilities at Michigan State University, as well as two courses organized
22 by Electric Utilities Consultants, Inc., Long Term Load Forecasting in MS Excel (August
23 2018) and the Integrated Resource Planning Summit Conference (March 2019).

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PART I

1 Q. Please describe your professional experience.

2 A. I worked as a Graduate Research Assistant at Georgia Institute of Technology from 2007
3 until 2014. I was assigned to study the effect of fluid dynamic shear stress on maturation
4 of spruce tree somatic embryos. My responsibilities included developing a microfluidic
5 encapsulation device and modeling the two-phase flow of the device in FLUENT and
6 COMSOL. In addition, I designed a program using the BioPerl module to connect with
7 the BLAST DNA database and automate the retrieval of search results to find similar DNA
8 base pair combinations within related species.

9 Upon completion of my master's degree, I accepted a position at Franklin Energy
10 as an Efficiency Engineer in October of 2014. My responsibilities included the evaluation
11 of energy savings for custom retrofit projects and final inspection to ensure that energy
12 efficiency projects were properly installed by energy efficiency contractors. Additionally,
13 I verified outside estimates and evaluated assumptions made by third-party consultants
14 regarding energy savings.

15 In 2017, I accepted a position at the Michigan Agency for Energy (MAE) as a
16 Public Utilities Engineer in the Energy Markets Section. My responsibilities included
17 participation in the MISO transmission system modeling as a stakeholder, including the
18 MISO Transmission Expansion Planning (MTEP) process. I also represented Michigan in
19 other MISO stakeholder engagement meetings and advised MPSC Staff (Staff) about the
20 impact of changing MISO policies. In March 2018, I transferred from MAE to the MPSC
21 Generation and Certificate of Need (now known as the Resource Optimization and
22 Certification) Section, where I maintain my involvement in the MTEP process and other
23 modeling efforts at the MPSC related to generation and transmission planning. In January

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1 2021, I was elected as a National Association of Regulatory Utility Commissioners
2 (NARUC) representative to the North American Electric Reliability Council (NERC)
3 Compliance and Certification Committee.

4 Q. Have you filed testimony before the Commission?

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

<u>Case Number</u>	<u>Company</u>	<u>Case Type/Subject</u>
7 U-20165	Consumer Energy Company	IRP
8 U-18091	DTE Electric Company	Avoided Cost Filing
9 U-20350	Upper Peninsula Power Company	IRP
10 U-20471	DTE Electric Company	IRP
11 U-20497	METC/Wolverine/MEC	Asset Classification
12 U-20591	Indiana Michigan Power Company	IRP
13 U-20697	Consumers Energy Company	Electric Rate Case
14 U-20963	Consumers Energy Company	Electric Rate Case
15 U-21089	DTE Electric Company	Asset Classification
16 U-21090	Consumers Energy Company	IRP
17 U-21081	UMERC	IRP
18 U-21189	Indiana Michigan Power Company	IRP
19 U-21193	DTE Electric Company	IRP

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PART II

1 Q. What is the purpose of your testimony?

2 A. The purpose of my testimony is to discuss technical aspects surrounding the Mayapple
3 Solar, Sculpin Solar, Elkhart County Solar, and Montpelier contracts and how they align
4 with Indiana Michigan Power Company's (I&M or the Company) most recent integrated
5 resource plan (IRP) and the subsequent Settlement Agreement.

6 Q. Are you sponsoring any exhibits?

7 A. Yes, I am sponsoring the following exhibits.

8 Confidential Exhibit S-16.0 Combustion Turbine Capacity Price in IRP

9 Exhibit S-16.1 Excerpt from PJM CONE 2026/2027 Report

10 Confidential Exhibit S-16.2 Solar IRP and RFP LCOE Data and Blending

11 Confidential Exhibit S-16.3 Mayapple and IRP O&M Comparison

12 Exhibit S-16.4 Mayapple Site Control

13 Exhibit S-16.5 Mayapple PJM Interconnection Request

14 Exhibit S-16.6 PJM Interconnection Process Overview

15 Exhibit S-16.7 System Impact Study Report for AG1-349

16 Confidential Exhibit S-16.8 Mayapple Risk Registry

17 Exhibit S-16.9 BWEC Risk Registry

18 **Consistency with IRP (Resource Type, O&M, LCOE)**

19 Q. What type of resource is the Montpelier capacity purchase agreement (CPA)?

20 A. The Montpelier CPA is a capacity-only contract with the Montpelier Electric Generating
21 Station, which is an existing 236 MW natural gas combustion turbine (CT) generation
22 facility.¹ Even though the Montpelier Electric Generating Station is 236 MW, I&M has

¹ Direct Testimony and Exhibits of I&M witness Timothy B. Gaul, pp. 30-31.

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1 contracted for 210 MW of capacity for the duration of seven years, starting in the PJM
2 2027/2028 planning year.²

3 Q. Is this resource type and timing consistent with the I&M's last IRP?

4 A. Yes. The Company proposed to acquire 1000 MW of natural gas fired combustion turbines
5 in 2028 to replace a portion of the capacity needed to retire all of the Rockport units.³ In
6 the Settlement Agreement, this number was reduced to 750 MW.⁴ Regardless, the type of
7 resource and the timing of the resources is consistent with both the IRP and the Settlement
8 Agreement.

9 Q. Is the pricing consistent with what was assumed in the IRP?

10 A. [REDACTED]
11 [REDACTED]

12 Q. Are there other points of comparison for the cost of capacity for a CT?

13 A. Yes. PJM publishes report on the cost of new entry (CONE) for specific technologies.
14 CONE is the capacity price required for a new entrant to recover their costs from the
15 capacity market. It is essentially what it would require to build a new plant of that
16 technology if all of the costs were recovered through capacity sales. Net CONE is CONE
17 but with the expected earnings from energy sales removed from CONE, essentially what a
18 specific technology would require for a capacity price if it was functioning in an actual
19 market. The most recent CONE report published for PJM has Net CONE for a CT in

² Direct Testimony and Exhibits of I&M witness Timothy B. Gaul, pp. 30-31.

³ Direct Testimony and Exhibits of I&M witness Mark A. Becker, Exhibit IM-2 (MAB-2), p. 18.

⁴ *In the matter of the application of Indiana Michigan Power Company for approval of its integrated resources plan under MCL 460.6t, avoided cost and for other relief.* February 2, 2023, Order, MPSC Case No. U-21189, Exhibit A, p. 3.

⁵ Staff Confidential Exhibit S-16.0.

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1 American Electric Power's (AEP's) area of PJM as \$315/MW-day.⁶ [REDACTED]

2 [REDACTED]

3 Q. In its IRP, what did the Company assume for the availability of solar?

4 A. In its IRP, the Company assumed that there were two tiers of solar: Tier 1, which has a
5 lower levelized cost of energy (LCOE), and Tier 2, which has a higher LCOE. The
6 Company assumed that there was 250 MW of Tier 1 solar and 250 MW of Tier 2 solar.⁷
7 The Company also assumed that there would be 500 MW of hybrid solar available
8 annually.⁸

9 Q. What was the capacity of the solar resources selected from the Request for Proposal (RFP)?

10 A. The Company selected four solar projects: Elkhart County, Lake Trout, Mayapple, and
11 Sculpin.⁹ The installed capacity (ICAP) of each of these projects is listed below.

- 12 Elkhart County: 100 MW¹⁰
- 13 Lake Trout: 245 MW¹¹
- 14 Mayapple: 224 MW¹²
- 15 Sculpin: 180 MW¹³

16 Staff notes that although Lake Trout is not included in this approval, all of the above
17 projects resulted from a single RFP. The Company has filed for approval of Lake Trout in
18 Case No. U-21377, currently before the Commission.

19 Q. When are these projects set to be completed?

⁶ Staff Exhibit S-16.1, p. 13.

⁷ Direct Testimony and Exhibits of I&M witness Becker, Exhibit IM-2 (MAB-2), p. 116.

⁸ *Id.*

⁹ Direct Testimony and Exhibits of I&M witness D. Dean Koujak, Exhibit IM-1 (DDK-1), p. 17.

¹⁰ Direct Testimony and Exhibits of I&M witness Andrew J. Williamson, p. 4.

¹¹ Direct Testimony and Exhibits of I&M witness Koujak, Exhibit IM-1 (DDK-1), p. 17.

¹² Direct Testimony and Exhibits of I&M witness Williamson, p. 4.

¹³ *Id.*

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1 A. Elkhart County is expected to be operational by December 31, 2025.¹⁴ Sculpin is expected
2 to be operational slightly earlier, by December 15, 2025.¹⁵ Lake Trout is projected to be
3 substantially complete by April 2026, and Mayapple is projected to be operational in May
4 2026.¹⁶

5 Q. Are these resources, generation type, and timing consistent with what the Company
6 proposed in the IRP?

7 A. In its most recent IRP, the Company proposed to acquire 1,300 MW of solar through
8 2027.¹⁷ The IRP, however, settled and the settlement was less prescriptive of the type of
9 resource that was to be selected, stating that the Company would procure 2,160 MW of
10 carbon free resources.¹⁸ Given the resource type and the timing of Lake Trout, it fits both
11 what was originally proposed in the Company’s IRP, as well as in the Settlement
12 Agreement.

13 Q. How do these projects’ capacities compare to the assumed tiers in the IRP?

14 A. [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]

¹⁴ Direct Testimony and Exhibits of I&M witness Gaul, p. 27.

¹⁵ *Id.*, at, p. 29.

¹⁶ *Id.*, at, p. 23. *In the matter of the application of INDIANA MICHIGAN POWER COMPANY for a certificate of necessity pursuant to 460.6(t) and related accounting authority.* March 27, 2023, MPSC Case No. U-21377, Direct Testimony and Exhibits of Indiana Michigan Power Company witness Becker, p. 11.

¹⁷ Direct Testimony and Exhibits of I&M witness Becker Exhibit IM-2 (MAB-2), p. 154.

¹⁸ *In the matter of the application of Indiana Michigan Power Company for approval of its integrated resource plan under MCL 460.6t, avoided costs and for other relief.* February 2, 2023, Order, MPSC Case No. U-21189, Exhibit A, p. 4.

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1 Q. How do the projects' LCOEs compare to the assumed tiers in I&M's most recent IRP?

2 A. [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

■ Staff Confidential Exhibit S-16.2.

²⁰ *In the matter of the application of INDIANA MICHIGAN POWER COMPANY for a certificate of necessity pursuant to 460.6(t) and related accounting authority.* March 27, 2023, MPSC Case No. U-21377, Direct Testimony and Exhibits of I&M witness Becker, p. 13.

²¹ Staff Confidential Exhibit S-16.2.

²² Direct Testimony and Exhibits of I&M witness Gaul, pp. 18-20.

²³ Staff Confidential Exhibit S-16.2.

²⁴ *Id.*

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1 Q. Is Lake Trout being approved in this case?

2 A. No, it is not. It is being reviewed in Case No. U-21377. However, Lake Trout was selected
3 based on the same RFP.

4 Q. What happens if Lake Trout is removed from your calculations, as it is being considered
5 in a separate case?

6 A. [REDACTED]
7 [REDACTED]
8 [REDACTED]

9 Q. Why did the Company procure additional solar in this RFP?

10 A. The Company agreed in settlement to procure 2,160 MW of new carbon free resources
11 when replacing the capacity necessary for Rockport to retire in 2028. While the IRP
12 specified resource types between wind and solar, the settlement does not.²⁶ The settlement
13 also allows the Company to procure additional carbon free resources if it so chooses.²⁷ In
14 the most recent IRP, I&M's preferred plan selected 400 MW of wind in 2026.²⁸ The
15 Company did target wind resources, as well as solar.²⁹ In any event, all the wind resources
16 that responded to I&M's RFP withdrew or were selected by an I&M sister company.³⁰

²⁵ Staff Confidential Exhibit S-16.2.

²⁶ *In the matter of the application of Indiana Michigan Power Company for approval of its integrated resource plan under MCL 460.6(t), avoided costs and for other relief.* February 2, 2023, Order, MPSC Case No. U-21189, Exhibit A, p. 4.

²⁷ *Id.*

²⁸ Direct Testimony and Exhibits of I&M witness Becker, Exhibit IM-2 (MAB-2), p. 196.

²⁹ *In the matter of the application of INDIANA MICHIGAN POWER COMPANY for a certificate of necessity pursuant to 460.6(t) and related accounting authority.* March 27, 2023, MPSC Case No. U-21377, Direct Testimony and Exhibits of I&M witness Gaul, p. 8.

³⁰ *In the matter of the application of INDIANA MICHIGAN POWER COMPANY for a certificate of necessity pursuant to 460.6(t) and related accounting authority.* March 27, 2023, MPSC Case No. U-21377, Direct Testimony and Exhibits of I&M witness Gaul, p. 10.

DIRECT TESTIMONY OF ZACHARY C. HEIDEMANN

CASE NUMBER U-21189

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1 Because of this, I&M selected more solar resources to fill its capacity needs as it is still
2 trying to fill capacity in order to retire Rockport.

3 Q. Are there any costs that may not be incurred that are included in the LCOE calculations for
4 Lake Trout and Mayapple?

5 A. Yes. [REDACTED]
6 [REDACTED] It is important to note that the Company includes
7 all of these costs in calculating the LCOE for these projects and that some of these costs
8 may not be incurred. The number presented by the Company for the two purchase-sale
9 agreements (PSAs) are essentially the worst-case scenarios that still result in project
10 completion.

11 Q. How does the cost of the overall portfolio of these projects change [REDACTED]
12 [REDACTED]

13 A. [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]

19 Q. [REDACTED]
20 [REDACTED]

³¹ Staff Confidential Exhibit S-16.2.

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PART II

1 A. [REDACTED]
2 [REDACTED]
3 [REDACTED]

4 Q. In Staff’s opinion, are the LCOE’s of Mayapple and Lake Trout still representative of
5 reasonable market prices?

6 A. Much of what Staff sees about solar pricing is confidential due to the fact that it is market
7 sensitive material, so it can only be spoken about in generalities. That being said, both
8 Mayapple and Lake Trout are not outside what Staff has seen recently in terms of market
9 prices for solar. Other utilities are seeing a general rise in solar prices. Staff does not
10 speculate if this is a long-term trend or a short-term blip in the market reflecting a high
11 level of uncertainty regarding pricing of components, component shortages, and a labor
12 shortage, all exacerbated by increased demand with the passage of the Inflation Reduction
13 Act (IRA) in 2022.

14 Q. Does the Company provide a forecast of the expected O&M for Mayapple?

15 A. Yes. The forecast was provided in discovery. The total forecasted operations and
16 maintenance expense (O&M) for Mayapple is presented in Staff Confidential Exhibit S-
17 16.3.

18 Q. How did Staff endeavor to compare the Mayapple O&M forecast with what was assumed
19 in the most recent IRP?

20 A. Staff compared the output of the I&M model from the preferred portfolio with that of the
21 forecasted O&M for Mayapple. Due to the way that I&M’s IRP model calculated O&M,
22 solar facilities of different vintage would have different O&M in a given year. Staff took
23 the annual average fixed O&M of the output for both Tier 1 and Tier 2 solar. This is a

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1 conservative approach because, as new facilities are added, they would lower the annual
2 average. Since they are newer, less O&M is required as they are not as far along in their
3 life cycle.

4 Q. How does this forecast compare with those presented in the Company's most recently filed
5 IRP?

6 A. [REDACTED]
7 [REDACTED]
8 [REDACTED]

9 Q. What is Staff's conclusion on how Mayapple, Sculpin, and Elkhart County compare with
10 the resources presented in the IRP and the subsequent Settlement Agreement?

11 A. Staff finds that the resource type, timing, and O&M of these solar projects to be consistent
12 with what was presented in the IRP when taken as a portfolio. [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]

21 **Project Management, Milestone, Timeline**

³² Staff Confidential Exhibit S-16.3.

³³ *Id.*

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1 Q. Will the Company receive updates from Savion regarding progress of the Sculpin facility?

2 A. Yes. The seller is required to submit quarterly progress reports regarding the progress made
3 toward completion and any material changes to the development and construction
4 schedule.³⁴ In addition, I&M may monitor construction start up and testing of the Sculpin
5 facility.³⁵

6 Q. Does I&M have this ability for Elkhart County as well?

7 A. Yes. The language is identical in both contracts.³⁶

8 Q. Are there measures in place to insulate ratepayers from risk of delays in the Elkhart County
9 contract?

10 A. [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]

16 Q. Are these measures in place for Sculpin?

17 A. [REDACTED]

18 Q. What is the substantial completion date for Mayapple?

19 A. As previously mentioned, the substantial completion date is May 20th, 2026.

20 Q. Is there anything to note about the substantial completion date?

³⁴ Direct Testimony and Exhibits I&M witness Gaul, Exhibit IM-5 (TBG-3), p. 31.

³⁵ *Id.*

³⁶ *Id.*, Exhibit IM-4 (TBG-2), p. 30.

³⁷ Direct Testimony and Exhibits of I&M witness Gaul, pp. 27-28.

³⁸ *Id.*

³⁹ *Id.*, at, pp. 29-30.

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1 A. [REDACTED]
2 [REDACTED]

3 Q. Does I&M have construction milestones to accompany the substantial completion date for
4 Mayapple?

5 A. [REDACTED]
6 [REDACTED]

7 Q. What level of oversight does the Company have for the completion of Mayapple?

8 A. I&M will have a site representative onsite to monitor the progress of the project.⁴² In
9 addition, the seller must furnish the Company with a monthly development report.⁴³

10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]

14 Q. Does Mayapple have site control?

15 A. Yes. Mayapple has 100% site control.⁴⁶

16 **Interconnection**

17 Q. Will the Montpelier CPA require a new interconnection?

⁴⁰ Direct Testimony and Exhibits of I&M witness Gaul, Exhibit IM-7 (TBG-5), p. 13. Direct Testimony and Exhibits of I&M witness Gaul, p. 25.
⁴¹ *Id.*, Exhibit IM-7 (TBG-5), p. 181.
⁴² *Id.*, at, p. 51.
⁴³ *Id.*
⁴⁴ *Id.*, at, p. 47.
⁴⁵ *In the matter of the Application of INDIANA MICHIGAN POWER COMPANY for a certificate of necessity pursuant to MCL 460.6s and related accounting authority.* Case No. U-21377, Direct Testimony and Exhibits of I&M witness Lozier, p. 9.
⁴⁶ Staff Exhibit S-16.4.

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PART II

1 A. No. The Montpelier Electric Generation Station went into commercial operation in 2001
2 and it already has an existing interconnection.⁴⁷

3 Q. What are the interconnection costs for Sculpin?

4 A. This is unknown. However, because Sculpin is a PPA, the interconnection costs are folded
5 into the overall price of the contract. Any risk of increase in interconnection costs is born
6 by the seller.

7 Q. What are the interconnection costs for Elkhart County Solar?

8 A. Like Sculpin, Elkhart County is a PPA, so while the costs and queue number are opaque,
9 the costs and risks are all folded into the cost of the contract.

10 Q. Does Mayapple have interconnection queue number(s)?

11 A. Yes. Mayapple has the interconnection queue number AG1-349.⁴⁸

12 Q. When were the interconnection requests entered into the queue?

13 A. Based on Staff's inspection of the PJM interconnection queue, AG1-349 entered the queue
14 on 9/30/2023.

15 Q. Is the PJM interconnection process delayed?

16 A. The PJM interconnection process is unfortunately delayed to a similar or greater extent to
17 that of the MISO interconnection process. The current delay in the PJM interconnection
18 process is between four and five years of delay.⁴⁹

19 Q. Has Mayapple completely navigated the PJM Queue?

⁴⁷ Direct Testimony and Exhibits of I&M witness Gaul, p. 31.

⁴⁸ Staff Exhibit S-16.5.

⁴⁹ Direct Testimony and Exhibits of I&M witness Gaul, p. 17.

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1 A. No, not completely. There are typically three studies performed in the PJM New Service
2 Queue: feasibility study, system impact study, and facilities study, in that order. There are
3 also certain agreements that must be signed.⁵⁰ Currently, Mayapple has completed through
4 the system impact study portion of the queue.⁵¹ The facilities study is more rigorous than
5 the system impact study. The system impact study produces an estimate of the transmission
6 upgrades' costs while the facilities study refines these estimates.⁵² Under the facilities
7 study, a conceptual design of the specific connection facilities is used and there is a stability
8 analysis performed, which is not performed in the system impact study phase.⁵³

9 Q. What is the total cost of transmission facilities for Mayapple?

10 A. Based on the Generation Interconnection System Impact Study Report, the interconnection
11 costs associated with Mayapple would be [REDACTED].⁵⁴ A large portion of the cost is for
12 the direct connection or attachment facilities for Mayapple. The total attachment facilities
13 costs are estimated as [REDACTED] and the direct connection cost estimate is [REDACTED].⁵⁵
14 This means that only [REDACTED] is assessed for network upgrades. Though much of this is
15 for a cut into the Olive - Reynold #2 345 kV line, there does exist the possibility that
16 NIPSCO will have to upgrade their protection scheme on the Reynolds substation.⁵⁶
17 NIPSCO has yet to determine if this will be necessary or estimate costs if it is.⁵⁷

18 Q. Are these costs reflected in the total purchase price in the PSA?

⁵⁰ Staff Exhibit S-16.6, p. 8.

⁵¹ Staff Exhibit S-16.5.

⁵² Staff Exhibit S-16.6, p. 11.

⁵³ *In the matter of the Application of INDIANA MICHIGAN POWER COMPANY for a certificate of necessity pursuant to MCL 460.6s and related accounting authority.* Case No. U-21377, Direct Testimony and Exhibits of I&M witness Bartley Taberner, p. 7.

⁵⁴ Staff Exhibit S-16.7, p. 6.

⁵⁵ *Id.*, at, p. 8.

⁵⁶ *Id.*

⁵⁷ *Id.*

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PART II

1 A. They most likely are. It is standard practice to recover the cost of transmission upgrades
2 in the sale of the facility. [REDACTED]

3 [REDACTED]

4 Q. Is there a possibility that these costs could change?

5 A. There is a possibility that these costs could change. The Generation Interconnection
6 System Impact Study Reports note that stability analysis during development of the
7 Facilities Study may identify additional upgrade costs.⁵⁹

8 Q. Where are these possible increased transmission upgrade costs accounted for?

9 A. [REDACTED]
10 [REDACTED]

11 **Treatment of Contingency**

12 Q. [REDACTED]

13 A. [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]

17 Q. [REDACTED]
18 [REDACTED]

19 A. [REDACTED]
20 [REDACTED]

⁵⁸ Staff Confidential Exhibit S-16.8.

⁵⁹ Staff Exhibit S-16.7, p. 6.

⁶⁰ Staff Confidential Exhibit S-16.8.

⁶¹ *Id.*

⁶² *Id.*

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PART II

1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 Q. Does [REDACTED]

9 [REDACTED]

10 A. [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 Q. [REDACTED]

14 A. [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

⁶³ Staff Confidential Exhibit S-16.8.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

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PART II

1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 Q. [REDACTED]

6 A. [REDACTED]

7 [REDACTED]

8 Q. [REDACTED]

9 A. [REDACTED]

10 [REDACTED] Generally, Staff has seen similar or greater
11 price escalations on recent solar projects contracted by other utilities.

12 Q. [REDACTED]

13 A. [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 Q. How do these totals compare to the recent contingencies filed in recent certificate of need
18 (CON) cases?

⁶⁷ Staff Confidential Exhibit S-16.8.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

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1 A. In Case No. U-18419, DTE submitted a request for \$55 million, which was 6% of the
2 project capital cost.⁷¹ Ultimately, DTE was allowed to claim up to \$17.8 million in
3 Contingency, but only the actually incurred amounts were allowed to be recovered in rates
4 and only after these amounts were spent and the Company provided enough information
5 for Staff to conduct a review of reasonableness and prudence.⁷²

6 Q. Did the DTE CON Case No. U-18419 have a risk registry?

7 A. DTE did in Case No. U-18419. In the DTE risk registry for the plant that is now Blue
8 Water Energy Center (BWEC), the two largest risk categories were changes to pricing due
9 to changes in EPC pricing and DTE scope pricing that varied from the CON filing.
10 Combined, the total cost of these were \$64.3 million.⁷³

11 Q. The amounts listed for only two items eclipses the amount that DTE asked for in its
12 contingency request. How is that possible?

13 A. DTE, in its risk registry, had a probability of each event happening and multiplied the
14 impact amount by probability of that event occurring to estimate it's requested
15 contingency. Once the two-line items listed above were multiplied by the probability
16 assigned to the events, the total contingency requested for these totaled \$25.2 million.⁷⁴

17 Q. [REDACTED]

⁷¹ *In the matter of application of DTE ELECTRIC COMPANY approval of Certificates of Necessity pursuant to MCL 460.6s, as amended in connection with the addition of a natural gas combined cycle generating facility to its generation fleet and for related account and ratemaking authorizations.* July 31, 2017, Direct Testimony and Exhibits of DTE witness Dan O. Fahrer, p. 7.

⁷² *In the matter of application of DTE ELECTRIC COMPANY approval of Certificates of Necessity pursuant to MCL 460.6s, as amended in connection with the addition of a natural gas combined cycle generating facility to its generation fleet and for related account and ratemaking authorizations.* April 27, 2018 ,Order, p. 126.

⁷³ Staff Exhibit S-16.9.

⁷⁴ *Id.*

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PART II**

1 A. [REDACTED]
2 [REDACTED]
3 [REDACTED]

4 Q. If DTE did not make judgments on the probability of risk events, what would the total
5 impact of contingency have been?

6 A. If DTE had not assigned probabilities to each of the risk event categories, the total
7 contingency would have been \$156.4 million, or approximately 15.8%.⁷⁶

8 Q. What did DTE estimate for possible transmission interconnection cost increases?

9 A. DTE estimated that it could be \$10.5 million, with a probability of 0.5%. [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]

15 Q. What did DTE estimate for impact due to changes in the law?

16 A. DTE estimated the possibility of cost increases due to changes in law as \$7.2 million.⁷⁹
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]

⁷⁵ Staff Confidential Exhibit S-16.8.

⁷⁶ Staff Exhibit S-16.9.

⁷⁷ Direct Testimony and Exhibits of I&M witness Gaul, Exhibit IM-21 (TBG-4).

⁷⁸ Staff Exhibit S-16.7.

⁷⁹ Staff Exhibit S-16.9.

⁸⁰ Staff Confidential Exhibit S-16.8.

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CASE NUMBER U-21189
PART II

1 [REDACTED]

2 [REDACTED]

3 Q. [REDACTED]

4 A. [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 Q. [REDACTED]

11 [REDACTED]

12 A. [REDACTED]

13 [REDACTED]

14 [REDACTED] The

15 second reason is that there has been and continues to be significant volatility in the solar

16 market for myriad reasons, including potential legislative or legal changes that effect the

17 pricing of components, EPC labor costs, and commodity volatility (particularly modules).

18 Q. What is Staff's recommendation regarding [REDACTED]

19 [REDACTED] given the size and type

20 of resource project, Staff recommends that these costs be approved as part of the total cost

21 of the project. [REDACTED]

⁸¹ Staff Exhibit S-16.9.

⁸² Staff Confidential Exhibit S-16.8.

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1 [REDACTED]. However, the Commission should not allow
2 [REDACTED] to be recovered in rates until several requirements
3 are met:

- 4 • The costs have been incurred.
- 5 • The Company can provide evidence that these expenses have been incurred.
- 6 • The Company provides an explanation of what event or events lead to these costs
7 being necessary. This evidence should be provided in the CON update that is to be
8 filed in this docket, as well as the rate case docket in which I&M is proposing to
9 recover these costs.
- 10 • The costs have been reviewed and the Commission finds the costs included to be
11 reasonable and prudent.

12 Staff does not support the inclusion of [REDACTED] in rates.

13 Q. Does this conclude your testimony?

14 A. Yes. It does.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the Application of)
INDIANA MICHIGAN POWER)
COMPANY for Approval of its Integrated)
Resource Plan under MCL 460.6t,)
avoided costs, and for other relief.)
_____)

Case No. U-21189

QUALIFICATIONS AND DIRECT TESTIMONY OF
MARCELINE A. CHAMPION
MICHIGAN PUBLIC SERVICE COMMISSION

July 7, 2023

QUALIFICATIONS OF MARCELINE A. CHAMPION

CASE NUMBER U-21189

PART I

1 Q. Please state your full name and business address for the record.

2 A. My name is Marceline A. Champion (she/her), and my business address is 7109 W.
3 Saginaw Highway, Lansing, MI 48917.

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

5 A. I am employed in the Energy Resources Division of the Michigan Public Service
6 Commission (MPSC or Commission). I am a Public Utilities Engineer in the Resource
7 Optimization and Certification (ROC) Section, which is responsible for assisting in the
8 implementation of Public Acts 341 and 342 and evaluating applications for transmission
9 siting pursuant to Public Act 30 of 1995.

10 Q. What is your educational background?

11 A. I earned a Bachelor of Science in Biosystems Engineering, with a Concentration in
12 Ecosystems Engineering, from the College of Engineering and a Minor in Environmental
13 and Sustainability Studies from the College of Natural Science at Michigan State
14 University (MSU) in 2019. In 2021, I attended several training seminars, including the
15 Institute for Public Utilities' Power Grid School I and II, the Wisconsin Public Utility
16 Institute's Regional Transmission Organization Fundamentals training course, and the
17 National Association of Regulatory Utility Commissioners' (NARUC) Fundamentals of
18 Resource Adequacy course. In 2023, I attended NARUC's How To Be An Effective
19 Witness training.

20 Q. What are your professional experiences?

21 A. In 2016, I worked as a Student Assistant for Dr. Eric Hanson in MSU's Department of
22 Horticulture. I maintained several hundred raspberry and blackberry plants for a research
23 study of several emerging organic fertilizers and pesticides, built irrigation systems,

QUALIFICATIONS OF MARCELINE A. CHAMPION

CASE NUMBER U-21189

PART I

1 harvested and recorded yield data by section, and performed other tasks for the department.

2 In 2018, I began working for Enviroweather, a program within MSU, as a Student
3 Technician. I installed, maintained, and programmed new weather stations across
4 Michigan. I conducted several special projects during this time, including completing a
5 feasibility study for a proposed microclimate research project, building a solar-battery
6 powered smart irrigation system, and developing Excel tools for weather data analysis.

7 In 2020, I accepted a position as a Public Utilities Engineer in the ROC Section of
8 the MPSC. I am responsible for evaluating regulated utilities' integrated resource plans
9 (IRPs) and analyzing supply and demand side resource investment. I am involved in
10 reviewing Requests For Proposals (RFP) and Voluntary Green Pricing (VGP) programs. I
11 am responsible for the evaluation of Power Purchase Agreements (PPAs), Build Transfer
12 Agreements, and Engineering, Procurement, and Construction contracts fulfilling capacity
13 and energy needs identified in approved IRP Proposed Courses of Action (PCAs) and to
14 meet VGP subscriptions. I participated in several MI Power Grid workgroups, where I
15 assisted with all aspects of the stakeholder process and report writing. I am responsible for
16 updating the MPSC's annual regional fuel mix and emissions data page.

17 Q. Have you previously filed testimony in a contested case before the Commission?

18 A. Yes. I have prepared and filed testimony in the following cases before the Commission:

- 19 • Case No. U-20793: DTE Energy's 2019 DR Reconciliation case;
- 20 • Case No. U-20836: DTE Energy's 2022 Electric Rate Case;
- 21 • Case No. U-21097: NSP's 2021 Electric Rate Case;
- 22 • Case No. U-21090: Consumers Energy Company's 2021 IRP;
- 23 • Case No. U-21224: Consumers Energy Company's 2022 Electric Rate Case; and
- 24 • Case No. U-21172: DTE Energy's 2022 VGP Filing.

DIRECT TESTIMONY OF MARCELINE A. CHAMPION

CASE NUMBER U-21189

PART II

1 Q. What is the purpose of your testimony?

2 A. The purpose of my testimony is to present the Michigan Public Service Commission Staff's
3 (Staff) assessment of Indiana & Michigan Power Company's (I&M or the Company) RFP,
4 I&M's use of an independent monitor (IM), and the Company's adherence to the MPSC
5 Competitive Procurement Guidelines (Competitive Procurement Guidelines), established
6 in case U-20852.

7 Q. Are you sponsoring any exhibits?

8 A. Yes. I am sponsoring the following Exhibits:

9 **Exhibit S-15.1:** STIM-17 Company Response to Staff's 17th Discovery Set

10 **Exhibit S-15.2:** Competitive Procurement Presentation

11 Q. Please describe the Company's Application.

12 A. The Company is seeking approval from the Commission for two Power Purchase
13 Agreements (PPAs), one Purchase-Sale Agreement (PSA), and one Capacity-only
14 Purchase Agreement (CPA) to fulfill its previously approved contested Settlement
15 Agreement in Case No. U-21189. The projects are as follows:

- 16 1. Elkhart County Solar Project, a 30-year PPA for 100 MW with a Commercial
17 Operation Date (COD) of December 31, 2025;
- 18 2. Sculpin Solar Project, a 30-year PPA for 180 MW with a COD of December 31,
19 2025;
- 20 3. Mayapple Solar Project, a PSA for 224 MW with a COD of May 2026;
- 21 4. Montpelier, a CPA for 210 MW with a contract start date in the 2027/2028 planning
22 year.

DIRECT TESTIMONY OF MARCELINE A. CHAMPION

CASE NUMBER U-21189

PART II

1 The Settlement Portfolio from the Company's IRP identified it would need 2,160
2 MW of carbon-free resources, 750 MW of fully dispatchable resources, and 255 MW of
3 storage through 2028.¹ The Company issued its RFP on March 10, 2022 to satisfy the needs
4 identified in its 2021 IRP.² The Company solicited the need for 800 MWac of wind
5 resources, 500 MWac of solar resources, and supplemental capacity resources to meet its
6 capacity needs.³ Proposals were asked to be either a PSA or a PPA. The four contracts
7 listed above are a result of this RFP.

8 Q. Please describe the Company's RFP process.

9 A. American Electric Power Service Corporation's (AEPSC) Regulated Infrastructure
10 Development team worked with I&M and the IM to develop the RFP based on the capacity
11 needs identified in the Company's 2021 IRP.⁴ The IM, Charles River Associates (CRA),
12 engaged with stakeholders starting in January 2022. CRA hosted an RFP website that
13 shared all RFP development information. All comments and questions from stakeholders
14 were published to the website. The aforementioned initial engagement took the form of a
15 RFP Development Meeting with stakeholders on January 18, 2022.⁵ This was later
16 followed by a Pre-RFP Stakeholder Meeting on February 8, 2022.⁶ The Final RFP was
17 issued on March 10, 2022.

18 The Company received 32 proposals from 12 unique bidders in response to its
19 RFP.⁷ In order to evaluate these proposals, the Company's IM conducted an initial

¹ Company Exhibit IM- 2 (AJW-1), p. 3.

² Direct Testimony of Company witness Timothy B. Gaul, pp. 5 & 9.

³ *Id.*

⁴ *Id.*, at, p. 7.

⁵ *Id.*

⁶ *Id.*, at, pp. 7-8.

⁷ *Id.*, at, pp. 9-10.

DIRECT TESTIMONY OF MARCELINE A. CHAMPION
CASE NUMBER U-21189
PART II

1 Eligibility and Threshold (E&T) Review to determine if the proposals received conformed
2 to the RFP requirements.⁸ The projects that made it through the E&T Review were then
3 subject to an Economic Analysis, which accounted for 60% of the point total, and Non-
4 Price Analysis, which accounted for 40% of the point total, to determine the projects' final
5 scores.⁹ The Economic Analysis evaluated proposals based on three metrics:

- 6 1. Levelized Adjusted Cost of Energy;
- 7 2. Levelized Adjusted Cost of Capacity; and
- 8 3. Value to Cost Ratio.¹⁰

9 There was a total of 10 non-price factors, each of which are discussed in Company witness
10 Gaul's direct testimony.¹¹ A total of seven project proposals from the 32 submitted were
11 selected for detailed contract negotiations. In a discovery response, the Company further
12 articulated the iterative nature of its shortlisting process, found on page 4 of Staff Exhibit
13 S-15.1. It is important to note that although there were 32 projects submitted, some were
14 multiple configurations of the same project. Of the seven projects proposals that were
15 selected, five were successfully negotiated.¹² Four of those projects are presented in this
16 case for approval.

17 Q. Please describe how the IM participated in the RFP process.

18 A. The Company used CRA as an Independent Monitor for the overall development of the
19 RFP, to complete the E&T Review, and as the leader in the stakeholder engagement
20 process.¹³ The evaluation of the E&T Review by the IM was done independently of I&M.

⁸ Direct Testimony of Company witness Gaul, pp. 10-11.

⁹ *Id.*, at, p. 11.

¹⁰ *Id.*, at, p. 12.

¹¹ *Id.*, at, pp. 13-14.

¹² *Id.*, at, pp. 14-15.

¹³ *Id.*, at, p. 7.

DIRECT TESTIMONY OF MARCELINE A. CHAMPION

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1 The IM determined that the E&T Review was typical and reasonable of similar RFPs. CRA
2 further found that using the economic and non-price factors was reasonable as compared
3 to standard utility procurement practices.¹⁴ CRA was consulted post-selection to address
4 any issues that came forth during contract negotiations, such as changes to pricing.
5 Company witness D. Dean Koujak opines that the Company satisfied the oversight
6 requirement established in the Competitive Procurement Guidelines through CRA's
7 oversight of the process as an IM.¹⁵ A report detailing CRA's role and independent
8 oversight of I&M's RFP can be found in Company Exhibit IM-1 (DDK-1).

9 Q. Can you describe the Competitive Procurement Guidelines?

10 A. The Competitive Procurement Guidelines were established in the September 9, 2021 Order
11 in Case No. U-20852.¹⁶ The intention of the guidelines is to, "provide utilities with clarity
12 regarding Commission expectations and respondents with confidence in the process. Thus,
13 in considering the guidelines contained herein for competitive solicitations, the
14 fundamental principles of minimizing customer costs, maximizing customer value, and
15 ensuring reasonable rates are paramount."¹⁷ The Competitive Procurement Guidelines are
16 not legislatively mandated or intended to "restrict the utility's ability to procure
17 resources"¹⁸ but are used in helping determine the reasonableness and prudence of a
18 utility's resource procurements.

19 Q. Did the Company follow the Competitive Procurement Guidelines for this RFP?

¹⁴ Company Exhibit IM-1 (DDK-1), pp. 4-5.

¹⁵ *Id.*

¹⁶ *In re, on the Commission's own motion, to commence a collaborative to consider best practices to ensure cost-effective development of new energy resources and to limit procurement barriers for emerging technologies, including processes for competitive bidding.* 09/09/21 Order, MPSC Case No. U-20852, Exhibit A, pp. 31-40. Accessed May 23, 2023. <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t000000TTDJAAA5>

¹⁷ *Id.*, at, Staff Exhibit A, p. 1.

¹⁸ *Id.*, at, p. 2.

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1 A. Yes. Staff reviewed the Company’s application and found the Company’s RFP followed
2 the Competitive Procurement Guidelines. If any information was missing, the Company
3 supplied the information through answers to Staff’s discovery questions.¹⁹

4 Q. Section 2cii of the Competitive Procurement Guidelines states, “If a utility does not use an
5 Independent Administrator (IA), it should provide an explanation to Staff explaining the
6 reasons for an IA not being used...” Did the Company provide this explanation?

7 A. Yes. In response to Staff’s discovery question, found on page 1 of Staff Exhibit S-15.1, the
8 Company states that “[b]y utilizing an Independent Monitor (IM) to provide independent
9 oversight of the RFP process, eligibility and threshold evaluations, and price and non-price
10 scoring, I&M has been able to capitalize on the expertise of the IM; leverage the
11 experience, expertise, and real-time market intelligence of its corporate team; and utilize
12 the local relationships of the I&M team in the communities where these projects will be
13 constructed.”

14 Q. What are the pros and cons of the Independent Administrator’s oversight approaches?

15 A. As can be seen in Staff Exhibit S-15.2,²⁰ Independent Administrators offer a more optically
16 transparent approach that satisfies the recommendations of the Competitive Procurement
17 Guidelines, established in Case No. U-20852. These benefits come at the cost of the
18 Company not being able to engage in contract modifications, due to the more mechanical
19 nature of the process, or to see other shortlisted bids, if the originally selected project
20 becomes no longer viable. This is important to highlight, given the volatile markets that
21 renewable energy suppliers find themselves in. The increasing costs of components,

¹⁹ Staff Exhibit S-15.1, p. 1.

²⁰ Staff Exhibit S-15.2, pp. 33-34.

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1 commodities, and labor; unexpected delays; uncertainties from supply chain issues (i.e. the
2 Department of Commerce Investigations and increased market demand); and
3 interconnection delays all create the unprecedented need for contract modifications for
4 pricing and timing to maintain project viability.

5 Q. What are the pros and cons of the Independent Monitor’s oversight approaches?

6 A. Independent Monitors differ from IAs as they, “allow for a utility-led process, whereby the
7 expertise and capabilities of the utility are leveraged with the IM, which is focused on
8 ensuring fairness and consistency, providing feedback when necessary to ensure
9 compliance.”²¹ This comes at the cost of optical transparency, with the utility being
10 involved throughout the entire RFP selection process. These are important distinctions to
11 consider, as there is incentive for the Company to select a self-built project versus entering
12 a PPA. However, allowing the utility to participate in the process does allow for the
13 Company to consider contract options based upon bidder feedback that may help to
14 mitigate risk in a volatile market. It also allows the Company to have insight as to who the
15 shortlist bidders are, if the preferred contract terminates at any point in the negotiation and
16 execution process.

17 Q. Does Staff prefer one of the independent oversight roles?

18 A. As outlined in the Competitive Procurement Guidelines’ Recommendations, Staff prefers
19 that an IA conduct all aspects of the competitive procurement process. However, since
20 these guidelines are not mandated, the Company has leeway in determining how to run its
21 competitive procurement process: “As stated in the guidelines, the Commission encourages
22 the use of the competitive procurement guidelines for the solicitation of all long-term

²¹ Staff Exhibit S-15.2.

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1 resources but is not imposing their use as a requirement for cost recovery...the guidelines
2 do not foreclose the possibility that procurement by other means may also be reasonable
3 and prudent.”²²

4 Q. Did the Company select any self-build projects?

5 A. No. The Company did not select any self-build projects as part of this RFP. All projects
6 selected from this RFP were for either PPAs or PSAs.

7 Q. Does Staff have any recommendations regarding the future of oversight roles?

8 A. Yes. Staff suggests the Company investigate the possibility of combining the two roles of
9 the IA and the IM to allow for independent oversight that is transparently optimal, while
10 giving the Company the ability to negotiate contracts with bidders to hedge against current
11 market volatility. This hybrid approach is centered around the idea of combining the pros
12 of both the IM and the IA.

13 Q. Does Staff have any additional recommendations related to the Company’s procurement
14 strategy?

15 A. Yes. As noted in the direct testimony of Staff witness Jesse Harlow from I&M’s 2021 IRP
16 in Case U-21189, Staff has seen and continues to see value in a 50%-owned and 50%-PPA
17 model. This 50/50 model worked well to drive costs down pursuant to 2008 PA 295, with
18 annual renewable energy cost decreases over the years.²³ Staff acknowledges that the
19 Company was able to reach this goal in this RFP, with PPAs and a CPA totaling 490 MWs

²² *In re, on the Commission’s own motion, to commence a collaborative to consider best practices to ensure cost-effective development of new energy resources and to limit procurement barriers for emerging technologies, including processes for competitive bidding.* 09/09/21 Order, MPSC Case No. U-20852, pp. 23-24. Accessed May 23, 2023. <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068f000000TTDJAAA5>

²³ Case No. U-21189, 6/24/2022 Direct Testimony of Staff witness Harlow, p. 9; *Report on the Implementation of the P.A. 295 Renewable Energy Standard and Cost-Effectiveness of Energy Standard.* February 15, 2017, pp. 15-19. Accessed February 21, 2023. https://www.michigan.gov/mpsc/-/media/Project/Websites/mpsc/regulatory/reports/pa295-ren/MPSC_PA295_Renewable_Energy_Report_Feb_2017.pdf?rev=3e166622d42a4a9fb4978343c7426d7c

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1 and PSAs totaling 469 MWs.²⁴ Staff continues to encourage the Company to hit this target
2 in future RFPs.

3 Q. Does this conclude your testimony?

4 A. Yes.

²⁴ Direct Testimony of Staff witness Naomi J. Simpson, p. 7.