STATE OF IOWA
BEFORE THE IOWA UTILITIES COMMISSION

IN RE: MIDAMERICAN ENERGY COMPANY	)	DOCKET NO. RPU-2025-0001

PUBLIC VERSION

CROSS-REBUTTAL TESTIMONY OF

DEVI GLICK

ON BEHALF OF

THE IOWA ENVIRONMENTAL COUNCIL, ENVIRONMENTAL LAW AND POLICY CENTER, AND SIERRA CLUB

("ENVIRONMENTAL INTERVENORS")

June 19, 2025

TABLE OF CONTENTS

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. Please state your name and occupation.

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

Q. Are you the same Devi Glick who filed direct testimony in this docket?

A. Yes.

Q. What is the purpose of your cross-rebuttal testimony?

A. In my cross-rebuttal testimony, I address OCA Witness Bents's arguments regarding the adequacy of MidAmerican's modeling to compare solar photovoltaics (PV) to alternatives. I respond to the direct testimony of the IBEC Witness Meyer, Tech Customers Witness Gabel-Frank, and OCA Witness Bents regarding MidAmerican's proposed cost cap for the Advanced Ratemaking Principles (ARP). I respond to OCA Witness Bents regarding the proposed size cap and IBEC Witness Meyer's testimony regarding unit performance.

II. ADEQUACY OF RESOURCE EVALUATION STUDY IN EVALUATING ALTERNATIVES TO THE PROPOSED SOLAR PV

Q. Please summarize the position of other Intervenors regarding the adequacy of MidAmerican's evaluation of alternatives to the proposed solar PV.

A. On page 11 of his direct testimony, OCA Witness Bents takes the position that MidAmerican has not adequately evaluated alternatives to the proposed solar. He cites three reasons for this position: (1) There are deficiencies with the resource evaluation

study (RES), which MidAmerican relied on for its ARP application; (2) it is problematic that MidAmerican included all the Wind PRIME projects in the modeling despite uncertainty on how much will actually come online; and (3) MidAmerican did not consider power purchase agreements (PPAs).

Q. How do you respond to OCA claims that there are deficiencies with the RES and that it therefore does not support the Company's need to have adequately evaluated alternatives?

A. I agree with OCA that there are deficiencies with the RES process. The EI were vocal about their concerns throughout the RES process, and I outlined a number of recommendations to improve future RES processes in my direct testimony in this proceeding. However, as I also discussed in my direct testimony (page 16), I find that MidAmerican's near-term results regarding solar PV are reasonable and well supported even with these deficiencies. This is because significant new solar PV was part of every scenario that EI modeled in the RES, with the model adding as much as 2,700 MW by 2030 in scenarios with relaxed build limits (and the proposed 800 MW of solar PV was part of MidAmerican's own modeling).[1] The Tech Customers had similar findings in their RES modeling.[2] The deficiencies we identified related to the model's evaluation and selection of fossil resources and constraints it put on solar additions. None of these things would negatively impact the economics of near-term solar. In fact, increasing the build

[1] EI Comments on Final RES at 39, 44.
[2] Direct Testimony of Gabel-Frank at 5.

limit as both EI and OCA recommended in the RES process is likely to lead to more solar in the near term.[3]

The specific concerns that OCA cites with the RES process—limitations on annual solar additions, limited data to inform renewable resource costs assumptions, limitations on demand-side management resources, and the potential repeal of the inflation reduction act (IRA) along with the federal production tax credit (PTC)[4]—are unlikely to materially change the model's addition of cost-effective, near-term solar resources. I also note that several of OCA's concerns (specifically that MidAmerican limits solar builds and relied on conservative cost assumptions) if addressed would only further support the economics and amount of the solar that the model did select. This is because, as noted, when the build limit is removed, the model adds as much as 2,700 MW cost-effective solar by 2030.[5]

Q. How do you respond to OCA Witness Bents's claims on page 17 that modeling [redacted] Wind PRIME buildout would have produced different resource build results?

A. [redacted] the amount of wind in Wind PRIME will result in a [redacted] near-term capacity need and will change the Company's long-term resource build results, but it should not reduce the need for solar. As discussed in my direct testimony, annual build limits rather than resource costs were the main constraint in how much new solar the model added in the near term. The Company has very limited near-term resource options. It cannot bring

[3] OCA Comments on Final RES at 2; EI Comments on Final RES at 4.
[4] Direct Testimony of Bents at 11.
[5] EI Comments on Final RES at 39, 44.

online a new gas plant in the next few years. And it needs new resources both to meet its capacity accreditation requirements under MISO's new direct loss of load (DLOL) methodology and to serve new large-load customers. Any [redacted] in resource needs would only further increase the importance and attractiveness of solar PV. Moreover, delaying the addition of solar to re-evaluate the system with a different Wind PRIME build would just make it harder for MidAmerican to meet its near-term resource needs. Such a delay would also potentially reduce the tax credits available for the projects from the PTC. Draft language from the current Senate Budget bill accelerates the phaseout of the PTC for solar PV under the IRA.[6] If MidAmerican has to re-evaluate its near-term resource needs again, it would become less likely that the Company would be able to begin construction of Solar PV in time to get the receive PTC.

Q. How do you respond to OCA Witness Bents's statements on page 20 that MidAmerican should have evaluated PPAs?

A. As discussed in my direct testimony,[7] I agree that MidAmerican should consider PPAs. But this is not primarily a modeling question; this is a competitive procurement issue. If more—and lower-cost—solar is available in the market through a PPA, that would support the case to build even more solar than MidAmerican currently plans. I am concerned that MidAmerican is putting forward its hypothetical concerns about the risks

[6] St. John, Alexa. "Senate Republicans double down and target clean energy in draft tax bill." *AP*. June 17, 2025. Available at https://apnews.com/article/congress-senate-budget-reconciliation-clean-energy-tax-credits-e2f4480fc7cafe1bca32cfb2fee8e614.

[7] Direct Testimony of Devi Glick at 19.

of a PPA and its impact on the Company's credit and finances[8] without any analysis or data to demonstrate that these risk and costs outweigh any potential value from a PPA.

Q. How do you respond to Tech Customers Witness Gabel-Frank and his recommendations regarding the RES process?

A. I agree with his recommendations relating to the RES process, as they largely align with recommendations the EI put forward in our RES comments and my direct testimony in this docket. Specifically, I agree with Witness Gabel-Frank's recommendations 1–4 regarding the use of a resource planning process on a regular cadence, the continued use of a collaborative stakeholder process, the incorporation of a reasonable number of participant-defined scenarios, and reliance on real bid data obtained through RFPs for resource data.[9] These recommendations, if adopted, would produce a more transparent and robust RES process; they would provide the Company, the Commission, and Iowa customers with valuable information upon which they can make more informed resource planning decisions.

Q. How do you respond to OCA Witnesses Bents's[10] and Kruger's[11] concerns about the solar being built to serve speculative load growth?

A. Witness Kruger expresses concern that MidAmerican customers could end up paying for expensive infrastructure that is not needed if load does not materialize.[12] But as Witness

[8] Direct Testimony of Thomas Specketer at 33-35.
[9] Direct Testimony of Gabel-Frank at 8.
[10] Direct Testimony of Bents at 8.
[11] Direct Testimony of Kruger at 24-28.
[12] *Id.* at 24.

Bents acknowledges in his testimony,[13] DLOL has a greater impact on MidAmerican's near-term resource need than data center load. This means that, regardless of whether speculative load materializes, the proposed solar is needed to meet DLOL requirements.

III. PROJECT COST CAP

Q. What is included in the solar reliability project (SRP) cost cap?

A. The cost components included in the cost cap are the following:

- Project purchase
- Balance of services
- Module costs
- Inverter costs
- Racking and tracking costs
- Grid connection
- Offsite upgrades
- Interconnection substation
- Land rights
- Other development costs (including internal labor, permitting, study, design, general and administrative (G&A) costs, and other minor development costs)
- Allowance for Funds Used During Construction (AFUDC)
- A contingency.[14]

[13] Direct Testimony of Bents at 7.
[14] Direct Testimony of Jablonski at 4.

Grid connection and interconnection costs noted above include costs associated with substations and any related tie-lines, interconnection facilities, and interconnection studies.[15]

Witness Jablonski tabulates the magnitude of each cost component in dollars per kW terms separately for MidAmerican's self-developed projects, for developer projects, and in "aggregate" across those two project types. He calculated a summed total cost figure for self-developed projects [redacted], developer projects [redacted], and projects in aggregate ($2,240/kW). The total cost estimate for projects in aggregate became the cost cap.[16]

Q. What did MidAmerican exclude from the cost cap?

A. MidAmerican proposed to exclude from the cost cap any increases that may be imposed by [redacted] Witness Jablonski specifies, "[redacted] rate base shall also include actual capital costs above the cost cap that are attributable to the [redacted]."[17] [redacted]

[15] *Id.* at 20.
[16] *Id.* at 4.
[17] *Id.* at 3.

Q. What concerns do IBEC Witness Meyer, OCA Witness Bents, OCA Witness Kruger, and Tech Customers Witness Gabel-Frank have with the proposed cost cap?

A. On pages 4–5 of his direct testimony, IBEC Witness Meyer expresses concern with the cost cap provisions around [redacted] and the potential elimination of the PTC. OCA Witness Bents expresses a similar concern on page 27 of his direct testimony, as did Tech Customers Witness Gabel-Frank at 13.

OCA Witness Bents expresses concern with the [redacted] included on developer projects on pages 23–26 of his direct testimony.

OCA Witness Kruger expresses general concern with the size of the cost cap relative to the cost cap in prior cases (including Wind PRIME).[18] And Tech Customers Witness Gabel-Frank similarly expresses concern with the cost cap relative to industry benchmarks and actual projects constructed in the region.

Q. How do you respond to the concerns of IBEC, OCA, and Tech Customers about MidAmerican's proposal to [redacted] from the cost cap?

A. I understand IBEC's and OCA's concerns with MidAmerican's request for an unconstrained exemption to the cost cap for [redacted] Given the urgency of resource needs

[18] Direct Testimony of Blake Kruger at 6.

based on the updated DLOL methodology and large-load growth, delaying the addition of new resources with an additional study, as IBEC recommends,[19] will hinder MidAmerican's ability to meet its resource needs. I suggest instead that MidAmerican be limited to a set [redacted]. If MidAmerican cannot provide justification for a specific [redacted] escalation, then [redacted] should not be exempted and MidAmerican can instead request recovery of any other overages in a future rate case.

Q. How do you respond to IBEC and OCA concerns with MidAmerican's proposal to [redacted] in the cost cap?

A. I agree with OCA Witness Bents's assessment that MidAmerican has not justified why it needs a [redacted] For the same reason, I agree with his position on [redacted] Given that there is an opportunity for MidAmerican to request recovery of any overages in a future rate case, I do not believe it is necessary to include the [redacted] in the cost cap, and I support the reduction of the cost cap from $2,240/kW [redacted].

[19] IBEC Witness Meyer recommends that MidAmerican be required to re-evaluate the economics of the project if [redacted] or rescinded the PTC through legislation (Direct Testimony of Meyer at 4-5).

Q. How do you respond to OCA Witness Kruger's and Tech Customer Witness Gabel-Frank's concerns[20] with the overall magnitude of the cost cap?

A. OCA Witness Kruger compares the cost cap to the Wind PRIME cost cap while Witness Gable-Frank compares the cost cap to industry sources. Specifically, Kruger states that the SRP cost cap is [redacted] percent higher than in Wind PRIME.[21] And Gabel-Frank states that the cost cap is a third higher than the average cost of industry benchmarks at $1,686/kW-ac and [redacted] percent higher than a sample of actual resources that have come online in the Midwest at an average cost of $1,738/kW-ac.[22] The Tech Customers recommend a cost cap of $1,740/KW-ac instead of MidAmerican's proposed $2,240/KW-ac.

Comparing the proposed cost cap to the Wind PRIME cost cap ignores the upward pressure that inflation and supply chain challenges have put on all resources—not just solar—over the past few years. In late March 2025, the NextEra CEO stated, "We built our last gas-fired facility in 2022, at $785/kW. If we wanted to build that same gas-fired combined cycle unit today…$2,400/kW…The cost of gas-fired generation has gone up three-fold."[23] In that context, it is reasonable to expect the cost of any new resource project to be higher than one from a few years ago.

---

[20] Direct Testimony of Blake Kruger at 6.

[21] *Id.*

[22] Direct Testimony of Gabel-Frank at 12.

[23] Nicholas Cunningham, "Costs to build gas plants triple, says CEO of NextEra Energy," *Gas Outlook.* (Mar. 25, 2025), *available at* https://gasoutlook.com/analysis/costs-to-build-gas-plants-triple-says-ceo-

Regarding the Tech Customers' comparison to industry standard resources and regional project data—I regularly rely on similar data sources where no actual developer and RFP data is available. But actual market and developer data is the most accurate source of resource cost data. MidAmerican cited two other projects in the region that were recently approved with costs at $2,262/kW-AC (Upper Michigan Energy Resources Corporation's) and $2,134 – $2,326/KW-AC (Wisconsin Public Service Commission).[24] While it is reasonable to question the Company's assumptions, ask them to support the numbers with actual technology and developer data, and push them to open up procurement to competitive PPA, ultimately real market data is the best representation of the cost to build new resources.

Q. Do you believe that the costs for the SRP are reasonable compared to alternatives?

A. Yes. Based on the RES modeling, I believe MidAmerican has demonstrated that the SRP project is reasonable relative to alternatives. The cost cap the Company is proposing is based on actual pricing data and is aligned with the costs modeled in the SRP analysis.[25]

Q. How do the project costs and the proposed cost cap compare to modeled costs?

A. The project costs are slightly higher than the modeled costs. There are some components of the cost cap, such as land purchase and offsite transmission upgrades, that were not

---

of-nextera-energy/#:~:text=%E2%80%9CWe%20built%20our%20last%20gas,%2FkW%2C%E2%80%9D%20he%20said.

[24] Direct Testimony of Jablonski at 10-11.

[25] *Id.* at 4.

included in modeled costs.[26] All stated cost per kW including the cost cap do not include the PTC for which the projects may be eligible. Because the PTC is a production-based incentive, it shows up in the net revenue requirement and net benefit calculations covered by Company Witness Specketer.

Table 1. Confidential solar costs assumption comparisons

Source	$/kw ($2024)	Year online (COD)	Grid interconnection cost ($/kW)	Overnight or installed
RES Modeling[1]	[redacted]	2028		Overnight
SRP Modeling[2]	[redacted]	2028		Overnight
NREL ATB - Moderate Case[3]	$1,239	2028		Overnight
NREL ATB - Conservative Case[3]	$1,343	2028		Overnight
NREL ATB - Moderate Case[3]	$1,407	2028	$ 120	Installed
NREL ATB - Conservative Case[3]	$1,539	2028	$ 142	Installed
Proposed Cost cap[4]	$ 2,240	2028	[redacted]	Installed
MidAmerican self-developed projects[4]	[redacted]	2028	[redacted]	Installed
Developer projects[4]	[redacted]	2028	[redacted]	Installed

Sources: (1) Resource Evaluation Study - Inputs Book 04-26-2024.xlsx, Tab "New Resource Costs"; (1) Action Plan in Confidential RES Report at 11; (2) Hammer Direct Confidential Exhibit 1; (3) National Renewable Energy Laboratory, Annual Technology Baseline 2024; (4) Direct Testimony of Witness Jablonski, Table 1. at 4-5.

Q. Do you believe that the cost cap is reasonable?

A. Yes, I believe the cost cap is reasonable, with the exception of the modifications I recommend for the [redacted] and treatment of [redacted] MidAmerican developed the cost cap of $2,240 per kw-ac based on "…actual pricing data gathered from solar equipment suppliers, contractors, and developers and targeted Iowa projects with some known costs that are a good representative mix of MidAmerican self-developed and developer projects anticipated to be installed as part of the 2025 SRP."[27]

[26] *Id.* at 9.

[27] *Id.* at 4.

MidAmerican provided a table that broke down the components cost cap by cost category for both the self-developed and developer projects. The cost break-down is different across the two development models, but that likely has more to do with the level of transparency that MidAmerican has into developer pricing than substantive differences. The total average costs are similar, with the self-developed costs coming in just below the developer project costs.

The biggest cost categories for self-developed projects are the following:

- Balance of services ([redacted] percent)
- Module [redacted] percent)
- Racking and tracking [redacted] percent)
- Grid connection ([redacted] percent)
- Contingency ([redacted] percent).[28]

Balance of services refers to work completed after development: installing roads, piles, racking and tracking, modules, collection system cable, components and a substation.[29] For developer projects, [redacted] percent is for the project purchase, which includes development, equipment procurement, land rights, and balance of service work. The remaining [redacted] percent is the part that MidAmerican is responsible for which covers substation, interconnection, AFUDC, contingency, and other costs. MidAmerican

[28] *Id.* at 4, Table 1
[29] *Id.* at 18.

included a [redacted] contingency in the cost cap for self-developed projects and [redacted] for developer projects —the Company stated that this assumption is supported by a Berkeley Lab Commons study.[30] [redacted]

Q. Are there risks that MidAmerican will overrun the cost cap?

A. Yes. The uncertainty around the PTC [redacted] is real. [redacted]

[redacted]

As discussed above, I support a specific and well-supported limit on [redacted] increases. If [redacted] impacts exceed the set amount, MidAmerican can request cost recovery for incremental costs in the Company's next rate case.

IV. PROJECT SIZE AND PERFORMANCE

Q. On page 28, OCA Witness Bents recommends that MidAmerican be required to make a compliance filing before making investment beyond the first 450 MW. How do you respond?

A. I am concerned that his recommendation could delay solar deployment or introduce uncertainty into the process. MidAmerican is limited in cost recovery by the cost cap.

[30] *Id.* at 4, 6.
[31] *Id.* at 4.

And it is not likely that the Company's near-term resource needs will change dramatically in the next year. The Company has limited resource options to meet its resource needs in the near term, and with uncertainty around the timeline of the phase-out of the PTC, delaying the addition of solar under the cost cap is likely to increase ratepayers' costs.

Q. On pages 19–22, IBEC Witness Meyer proposes to apply an underperformance penalty on MidAmerican if the solar projects operate substantially below the modeled capacity factor. How do you respond?

A. I have several concerns with Meyer's recommendation to penalize the Company if the solar projects built as part of the ARP have a capacity factor below 90 percent of the Company's modeled capacity factor of 19.7 percent (measured on a three-year rolling average).

First, Meyer indicates that the Company's modeled capacity factor of 19.7 percent is reasonable and even conservative based on industry models (page 20) so he presents no basis for IBEC to be concerned that MidAmerican is overestimating solar performance. Second, I am not aware of any other projects in Iowa that are subject to a performance standard, and IBEC has not justified why the 800 MW of solar deserves to be singled out and held to a different standard. Solar PV is not an unproven or nascent technology that poses an outsize risk to ratepayers. Third, his statement on page 20 that typical generators are available 100 percent of the time to justify the distinction is problematic and untrue. As IBEC acknowledges, typical generators are subject to outages for routine or unplanned maintenance. MidAmerican is not penalized for underperformance when that

happens. If a solar PV project similarly has to come offline for maintenance, IBEC's proposal could penalize MidAmerican for such routine work. Finally, the penalty is asymmetrical, with no rewards or benefits for over-production. Overall, I do not support the proposed penalty.

Q. Does this conclude your testimony?

A. Yes.

AFFIDAVIT OF DEVI GLICK

STATE OF MASSACHUSETTS)
) ss.
COUNTY OF MIDDLESEX)

I, Devi Glick, being duly sworn on oath, state that I am the same Devi Glick identified in the testimony being filed with this affidavit, that I have caused the testimony to be prepared and am familiar with its contents, and that the testimony is true and correct to the best of my knowledge and belief as of the date of this affidavit.

/s/ Devi Glick

State of Massachusetts

County of Middlesex

Subscribed and Sworn before me this 17 day of June, 2025.

/s/ Jennifer Marusiak
Notary Public