#### **COMMONWEALTH OF KENTUCKY**

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY	)
POWER COMPANY FOR APPROVAL OF (1) A	)
CERTIFICATE OF PUBLIC CONVENIENCE	)
AND NECESSITY TO MAKE THE CAPITAL	)
INVESTMENTS NECESSARY TO CONTINUE	)
TAKING CAPACITY AND ENERGY FROM THE	)
MITCHELL GENERATING STATION AFTER	) Case No. 2025-00175
DECEMBER 31, 2028, (2) AN AMENDED	)
ENVIRONMENTAL COMPLIANCE PLAN, (3)	)
REVISED ENVIRONMENTAL SURCHARGE	)
TARIFF SHEETS, AND (4) ALL OTHER	)
REQUIRED APPROVALS AND RELIEF	)

## PUBLIC DIRECT TESTIMONY OF DEVI GLICK ON BEHALF OF SIERRA CLUB

**NOVEMBER 6, 2025** 

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#### 1. Introduction and purpose of testimony

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2	Q	Please state your name and occupation.
3	A	My name is Devi Glick. I am a Senior Principal at Synapse Energy Economics, Inc
4		("Synapse"). My business address is 485 Massachusetts Avenue, Suite 3,
5		Cambridge, Massachusetts 02139.
6	Q	Please describe Synapse Energy Economics.
7	A	Synapse is a research and consulting firm specializing in energy and environmental
8		issues, including electric generation, transmission and distribution system
9		reliability, ratemaking and rate design, electric industry restructuring and market
10		power, electricity market prices, stranded costs, efficiency, renewable energy,
11		environmental quality, and nuclear power.
12		Synapse's clients include state consumer advocates, public utilities commission
13		staff, attorneys general, environmental organizations, federal government agencies,
14		and utilities.
15	Q	Please summarize your work experience and educational background.
16	A	At Synapse, I conduct economic analysis and write testimony and publications that
17		focus on a variety of issues related to electric utilities. These issues include power
18		plant economics, electric system dispatch, integrated resource planning,
19		environmental compliance technologies and strategies, and valuation of distributed
20		energy resources. I have submitted expert testimony in over 60 different

proceedings before state utility regulators in more than 20 states.

industry	ourse of my work, I develop in-house models and perform analysis using
	-standard electricity power system models. I am proficient in the use of
spreadsh	eet analysis tools, as well as widely used optimization and electric dispatch
models.	I have directly run the EnCompass and PLEXOS electricity system models
and have	e reviewed inputs and outputs for several other models.
Before j	oining Synapse, I worked at RMI, focusing on a wide range of energy and
electricit	ty issues. I have a master's degree in public policy and a master's degree in
environr	mental science from the University of Michigan, as well as a bachelor's
degree i	n environmental studies from Middlebury College. I have more than 13
years of	professional experience as a consultant, researcher, and analyst. A copy of
my curre	ent resume is attached as Exhibit DG-1.
Q On who	se behalf are you testifying in this case?
A I am test	rifying on behalf of Sierra Club.
Q Have yo	ou testified previously before the Kentucky Public Service Commission
("Comn	nission" or "KY PSC")?
A No. But	I have submitted testimony on certificates of public convenience and
necessity	y (CPCN), resource planning, and related topics in over 60 dockets across
more tha	an 20 states around the country.
	the purpose of your testimony in this proceeding?
Q What is	
	ate whether Kentucky Power Company ("Kentucky Power" or "the
A I evalua	ate whether Kentucky Power Company ("Kentucky Power" or "the y") has demonstrated that continuing its 50 percent ownership in Mitchell
Q Have you ("Comm	ou testified previously before the Kentucky Public Senission" or "KY PSC")?  I have submitted testimony on certificates of public

1		best interest of Kentucky Power ratepayers relative to all other feasible alternatives,
2		including continuing to own the plant but converting it to operate on natural gas.
3	Q	What documents do you rely upon for your analysis, findings, and
4		observations?
5	A	My analysis relies primarily upon the workpapers, exhibits, and discovery
6		responses of Kentucky Power witnesses associated with this proceeding. I also rely
7		on public information associated with prior Kentucky Power proceedings,
8		including its most recent integrated resource plan (IRP).
9	2.	FINDINGS AND RECOMMENDATIONS
10	Q	Please summarize your findings.
11	A	My primary findings are:
12		1. With the updated cooling tower replacement and repair costs, Kentucky
13		Power's analysis does not support its original claim that continuation of its
14		50 percent share of Mitchell beyond the required termination date of
15		December 31, 2028, is the least-cost option for the Company regardless of
16		environmental compliance options.
17		2. Kentucky Power's own analysis shows that converting Mitchell to operate
18		on gas is lower cost over the long term (beyond 2031) than replacing the
19		cooling tower and continuing to operate the plant on coal.
20		3. Conversion of Mitchell to operate 100 percent on gas would avoid the
21		need to invest in repairing or replacing the cooling tower and would also
22		avoid the need to invest in expensive pollution control technology to
23		comply with the 2024 Effluent Limitations Guidelines (ELG) Rule.

1		4. For the 2028–2031 time period, Kentucky Power does not appear to have
2		considered all alternatives, including entering into a short-term agreement
3		with Wheeling Power Company to buy power from Mitchell.
4		5. The analysis that the Company prepared to support its claims in both its
5		direct and supplemental testimony was piecemeal, at times confusing, and
6		did not follow industry best practices for evaluating resource costs and
7		alternatives.
8	Q	Please summarize your recommendations.
9	A	Based on my findings, I offer the following chief recommendations:
10		1. The Commission should deny the Company's request to continue its 50
11		percent ownership share in Mitchell beyond December 31, 2028, in the
12		current docket.
13		2. The Commission should find that Kentucky Power has not presented
14		sufficient analysis and evidence in this case that retaining ownership of
15		Mitchell beyond 2028 and continuing to operate it on coal is the lowest-
16		cost option for its ratepayers.
17		3. Kentucky Power should robustly evaluate its near-term alternatives by:
18		a. Entering into negotiations with Wheeling Power for a short-term
19		power purchase agreement (PPA) or other agreement to buy Power
20		from Mitchell for the near term (2029–2031).
21		b. Refreshing its bids for near-term PPAs for thermal resources as
22		well as for battery energy storage (BESS) and solar resources.
23		4. Kentucky Power should provide industry-standard production cost and
24		capacity expansion modeling to support its requests to build new resource
25		or invest in existing resources in this and all future CPCNs, especially in
26		cases where its IRP analysis is outdated.

# KENTUCKY POWER IS REQUESTING APPROVAL TO INVEST HUNDREDS OF MILLIONS OF DOLLARS TO RETAIN ITS 50 PERCENT UNDIVIDED SHARE OF THE 50+-YEAR-OLD MITCHELL COAL PLANT What did Kentucky Power request in its original application in this docket?

5 Α Kentucky Power is requesting a CPCN to make the capital investments necessary 6 to continue taking power from the Mitchell Generating Station after its ownership 7 share ends December 31, 2028. This involves (1) upgrades to a cooling tower; (2) 8 taking on 50 percent of the costs to comply with the 2020 ELG Rule, which 9 Wheeling Power completed in 2024; and (3) taking on 50 percent of all other capital 10 projects that were previously allocated to Wheeling Power based on Kentucky Power's planned 2028 exit. Kentucky Power's 50 percent share of the costs to 11 12 comply with the 2020 ELG Rule amounts to \$77.9 million while the nonenvironmental capital projects originally totaled \$60.4 million for a total of \$138.2 13 million.<sup>2</sup> 14

### Q Has the Company's request changed since its initial application and direct testimony was filed?

Yes, Kentucky Power's initial estimates for the cooling tower repairs was \$43 million.<sup>3</sup> This \$43 million is part of the total estimated cost of \$60.4 million for non-environmental capital projects for which the Company seeks a CPCN in this current docket.<sup>4</sup> After beginning the initial tower reinforcement and updates, the

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<sup>2</sup> Application at 6-7.

<sup>&</sup>lt;sup>1</sup> Application at 1.

<sup>&</sup>lt;sup>3</sup> Supplemental Testimony of Vaughan at 5.

<sup>&</sup>lt;sup>4</sup> Direct Testimony of Snodgrass, Figure JDS-3; Direct Testimony of Wolfram, Figure TSW-1.

1		AEP Generation Project team determined that additional work would be needed to
2		keep Unit 2 operational. The original project was halted until a new repair plan is
3		developed and approved. <sup>5</sup> The Company is no longer seeking a CPCN for the
4		cooling tower project in the current docket.
5		Kentucky Power put forward three repair options: two that would extend the plant
6		life by . It also put forward
7		one retirement option. <sup>6</sup> The Company subsequently narrowed the list down to two
8		options: <sup>7</sup>
9		1. Option 3: Construct a new mechanical draft cooling tower for
10		This project extends the plant life by
11		at which point in time the plant would be (assuming it
12		is completed in 2031).
13		2. Option 4: Shorten the cooling tower for This project extends
14		the plant life by (assuming it is completed
15		in 2031).
16	Q	Describe the Mitchell Generating Station.
17	Α	Mitchell is a two-unit coal plant built in 1971. Unit 1 has a nameplate capacity of
18		770 MW and Unit 2 has a nameplate capacity of 790 MW, for a total nameplate
19		capacity of 1,560 MW. Kentucky Power has a 50 percent share of the plant and
20		Wheeling Power Company, who operates the plant, owns the other 50 percent.
21		Kentucky Power's share is estimated to be worth 606 MW of accredited capacity

<sup>&</sup>lt;sup>5</sup> Supplemental Testimony of Vaughan at 2-3.

<sup>&</sup>lt;sup>6</sup> Supplemental Testimony of Vaughan at 3.

 $<sup>^{7}</sup>$  Supplemental Testimony of Vaughan, Table AEV-SD1.

1		in PJM.8 Kentucky Power's entitlement to its share is set to expire at the end of
2		2028 based on the Commission order in Case Nos. 2021-00004 and 2021-00421.
3		The net book value (undepreciated balance) of the plant as of the end of 2024 was
4		\$1.3 billion.
5	Q	What environmental compliance investments have been made in Mitchell in
6		the past five years?
7	A	The Commission granted approval for Kentucky Power to invest in coa
8		combustion residuals (CCR) upgrades so the plant could operate through 2028, but
9		it did not grant approval for the upgrades necessary for the plant to operate beyond
10		2028 under the 2020 ELG Rule. The West Virginia Commission, on the other hand
11		granted approval for Wheeling Power Company to invest in both ELG and CCR
12		compliance. As a result, the Companies split the CCR investments 50/50 but
13		Wheeling Power paid for 100 percent of the 2020 ELG Rule investments. 10 The
14		CCR project was completed in 2023. The 2020 ELG Rule upgrades were completed
15		in August 2024. <sup>11</sup>

<sup>&</sup>lt;sup>8</sup> Application at 5.

<sup>&</sup>lt;sup>9</sup> Application at 2-3.

<sup>&</sup>lt;sup>10</sup> Application at 4-5.

<sup>&</sup>lt;sup>11</sup> Application at 6; Application, Exhibit 6. It is important to distinguish the two sets of ELG costs at issue when evaluating the least-cost option for the Mitchell plant. First, in 2023, Wheeling Power completed upgrades that were necessary to comply with the 2020 ELG Rule. If Kentucky Power retains ownership of Mitchell, its share of those costs is \$77.9 million. Second, in 2024, EPA updated the ELG Rule, which would impose additional upgrade costs for the plant to meet the Rule's zero liquid discharge (ZLD) standard. EPA estimates that the updated ELG Rule will require more than \$50 million in additional costs at Mitchell. Those ZLD costs, however, could be avoided if the facility is converted to burn gas by 2034. Kentucky Power has included 2024 ELG costs in some of its conversion to gas alternative scenarios, but the magnitude of those costs is unclear.

1	4.	Kı	ENTUCKY POWER'S CONCLUSIONS THAT CONTINUED OWNERSHIP OF MITCHELL
2		AN	D OPERATION ON COAL IS THE LEAST-COST OPTION FOR RATEPAYERS ARE NOT
3		SU	PPORTED BY ITS OWN ANALYSIS IN THE RECORD IN THIS CASE
4		i.	Kentucky Power evaluated the cost of continued investment in the Mitchell coal
5			plant relative to alternatives over the near term (2029–2031) and long term
6			<u>(2031–2051)</u>
7	Q		What analysis did Kentucky Power conduct to supports its original request?
8	A		Kentucky power conducted a two-part analysis.
9			First, the Company evaluated the annual revenue requirement for the near-term
10			period of 2029–2031 of three alternatives to ending its ownership share in Mitchell
11			at the end of 2028. <sup>12</sup>
12			1. Alternative 1 is investment in continued ownership of the plant. This
13			option includes the full cost of the 2020 ELG Rule upgrades and other
14			capital upgrades necessary for Kentucky Power to retain its undivided 50
15			percent interest in Plant Mitchell.
16			2. Alternative 2 is to enter into short-term thermal PPAs.
17			3. Alternative 3 is to purchase market energy and capacity for the near term.
18			All three near-term alternatives include what the Company calls "Net Book Value
19			Recovery," which consists of amortized depreciation of the remaining book value
20			as of 2028 as well as the Company's rate of return (roughly a 50/50 split). The

<sup>&</sup>lt;sup>12</sup> Direct Testimony of Vaughan at 5-7; Kentucky Power Response to Attorney General Request 1-1, Attachment 03\_KPCO\_R\_AG\_1\_1\_PublicAttachment1.

<sup>&</sup>lt;sup>13</sup> Direct Testimony of Vaughan, Table AEV-1; Kentucky Power Response to Attorney General Request 1-1, Attachment 04\_KPCO\_R\_AG\_1\_1\_Attachment2 and 05\_KPCO\_R\_AG\_1\_1\_Attachment8.

1	Company did not consider new resources at this stage given the timeline for
2	deployment. <sup>14</sup>
3	Second, Kentucky Power evaluated resource options beyond 2031. At the time the
4	analysis was conducted, federal greenhouse gas rules did not permit operation on
5	100 percent coal beyond 2032. <sup>15</sup> The Company evaluated five alternatives:
6	1. Alternative E1 evaluated conversion to co-fire 40 percent on gas, did not
7	include installation of a zero liquid discharge system (ZLD), and assumed
8	the plant retired by December 31, 2034. <sup>16</sup>
9	2. Alternative E2 evaluated conversion to co-fire 40 percent on gas,
10	installation of a ZLD, and retirement by 2039.17
11	3. Alternative E3 evaluated conversion to 100 percent gas and installation of
12	a ZLD with no assumed retirement date (note that the inclusion of ZLD
13	costs in this scenario is concerning because ZLD technology should not be
14	required with conversion to 100 percent operation on gas as discussed
15	more below). 18
16	4. Alternative E4 evaluated construction of a new combined-cycle gas plant
17	to replace Mitchell. <sup>19</sup>

<sup>&</sup>lt;sup>14</sup> Direct Testimony of Vaughan at 7.

<sup>&</sup>lt;sup>15</sup> Direct Testimony of Vaughan at 8-10.

<sup>&</sup>lt;sup>16</sup> Direct Testimony of Vaughan at 10; Kentucky Power Response to Attorney General Request 1-1, Attachment KPCO R AG 1 1 ConfidentialAttachment3.

<sup>&</sup>lt;sup>17</sup> Direct Testimony of Vaughan at 10; Kentucky Power Response to Attorney General Request 1-1, Attachment KPCO\_R\_AG\_1\_1\_ConfidentialAttachment4.

<sup>&</sup>lt;sup>18</sup> Direct Testimony of Vaughan at 10; Kentucky Power Response to Attorney General Request 1-1, Attachment KPCO R AG 1 1 ConfidentialAttachment5.

<sup>&</sup>lt;sup>19</sup> Direct Testimony of Vaughan at 10; Kentucky Power Response to Attorney General Request 1-1, Attachment KPCO R AG 1 1 ConfidentialAttachment6.

1		5. Alternative E5 evaluated delayed environmental compliance, which is
2		equivalent to continued operation on coal. <sup>20</sup>
3	Q	What did Kentucky Power conclude based on its initial analysis?
4	A	First, for the short-term alternatives, the Company calculated that the cost of service
5		over the three years of 2029–2031 was lowest with continued operation of Mitchell
6		on coal (Alternative 1) for a cost of \$335 million, followed by Thermal PPAs
7		(Alternative 2) at \$471 million, and the most expensive option was market
8		purchases (Alternative 3) for a cost of \$895 million. <sup>21</sup>
9		With its long-term analysis (2031–2051), the Company calculated that continued
10		operation on coal (Alternative E5) was the lowest-cost option with an NPVRR of
11		<sup>22</sup> Alternative E3, conversion to 100 percent operation on gas with
12		no future retirement date, was a close second with an NPVRR of
13		This pre-dated the cooling tower construction, therefore the alternatives did not
14		include the updated cooling tower costs.
15		In direct testimony, Kentucky Power witness Vaughan concluded that his analysis
16		demonstrated that making investments necessary for Kentucky Power to continue
17		its 50 percent interest in Mitchell beyond the end of 2028 is the least-cost

<sup>&</sup>lt;sup>20</sup> Direct Testimony of Vaughan at 10; Kentucky Power Response to Attorney General Request 1-1, Attachment KPCO\_R\_AG\_1\_1\_ConfidentialAttachment7.

<sup>&</sup>lt;sup>21</sup> Kentucky Power Response to Attorney General Request 1-1, Attachment 03\_KPCO\_R\_AG\_1\_1\_PublicAttachment1.

<sup>&</sup>lt;sup>22</sup> Kentucky Power Response to Attorney General Request 1-1, Attachment KPCO\_R\_AG\_1\_1\_ConfidentialAttachment7.

<sup>&</sup>lt;sup>23</sup> Errata Direct Testimony of Vaughan, Confidential Table AEV-2; Kentucky Power Response to Attorney General Request 1-1, Attachment KPCO R AG 1 1 Confidential Attachment 5.

1		reasonable alternative for the utility. <sup>24</sup> There was no discussion of how close in cost
2		the alternative of conversion to operate on gas was, or the un-accounted for risks of
3		increased capital cost investment needed to sustain Mitchell.
4	Q	What updated analysis did the Company provide in its supplemental
5		testimony?
6	A	With the updated capital expenditure estimates for the cooling tower, Kentucky
7		Power once again performed short-term and long-term analysis to evaluate the cost
8		of ending its stake in Mitchell relative to continued operation on coal and other
9		alternatives. The Company also included a calculation it called the break-even
10		analysis. Company witness Vaughan claimed this break-even analysis assessed
11		how much the capital cost associated with maintaining Mitchell and upgrading the
12		cooling tower would need to increase before an alternative, specifically a new
13		combined-cycle gas plant, was more economic. <sup>25</sup>
14		For the short-term analysis (2029–2031), the Company compared the cost of
15		service of the initial three short-term alternatives (continued operation on coal,
16		thermal PPAs, and market energy and capacity) to Option 3 and Option 4 for the
17		cooling tower upgrades. The Company also calculated what it called a break-even
18		floor and ceiling for the period 2029–2031. <sup>26</sup> It is unclear exactly how the break-
19		even analysis was calculated for both the short and long-term analysis <sup>27</sup> because all

<sup>&</sup>lt;sup>24</sup> Direct Testimony of Vaughan at 13.

<sup>&</sup>lt;sup>25</sup> Supplemental Testimony of Vaughan at 7.

<sup>&</sup>lt;sup>26</sup> Kentucky Power Response to Staff Request 3-6, Attachment KPCO\_R\_KPSC\_3\_6\_ConfidentialAttachment9.

 $<sup>^{27}</sup>$  Kentucky Power Response to Staff Request 3-6, Attachments 1-8.

1		of the associated analysis was hard-coded in its workpapers without clear sourcing
2		to its original calculation source (as I discuss more below).
3	Q	Did the Company's findings change based on its updated analysis?
4	A	No. Witness Vaughan claimed that even the updated analysis showed that Mitchell
5		Plant remains the best option for the Company and its customers. <sup>28</sup>
6	ii	Kentucky Power's analysis shows that conversion to operate Mitchell on 100
7		percent gas is lower-cost than continued investment in Mitchell operating on
8		coal and will avoid in near-term capital investments
9	Q	Are the Company's conclusions from its original and supplemental analysis
10		consistent with your findings and interpretation of their analysis?
11	Α	No. The Company's original long-term analysis shows that conversion to operate
12		on gas (Alternative E3) is only than continued operation
13		on coal (Alternative E5) (see below). The Company also includes the cost
14		associated with ZLD technology in Alternative E3. This is concerning because
15		conversion to operate 100 percent on gas should preclude the need to install ZLD.
16		The Company's footnote indicates that these costs are for existing sources, such as
17		ash ponds, further confuses things. <sup>29</sup> First, because it's not clear that ZLD is needed
18		for existing ash ponds, and second because even if ZLD is needed for existing ash
19		ponds, it should be included in all scenarios and it was not included in Alternative
20		E1.

 $<sup>^{28}</sup>$  Supplemental Testimony of Vaughan at 9.

<sup>&</sup>lt;sup>29</sup> Direct Testimony of Vaughan at 10, footnote 4.

1	With delta between the Alternative E3 to convert to 100
2	percent gas and E5 to continue operation on coal over a 20-year period, this means
3	that even one large capital project could flip the results and make conversion to gas
4	cheaper.30 And this is exactly what happened when the cooling tower repairs ended
5	up having an up-front capital cost that was the costs than
6	originally estimated (i.e., an increase from \$43 million to
7	4 or under Option 3). With a 50+-year-old coal plant, it is not
8	surprising that repairs would become more costly and complicated.
9	In the supplemental testimony, the Company's own results (excerpted in
10	below) show that with the increased capital costs to replace the mechanical cooling
11	tower (Option 3), conversion to operate on gas is now than continued
12	operation on coal. Option 4, to shorten instead of replacing the tower is
13	than conversion to gas, but it is not an apples-to-apples
14	comparison to conversion to gas because the cooling tower fix only extends the life
15	of Mitchell by , at which point a replacement resource would need to be
16	procured.
17	
1 /	
18	
19	Source: Supplemental Direct Testimony of Vaughan, Figure 1.

 $<sup>^{\</sup>rm 30}$  Direct Testimony of Vaughan, Confidential Table AEV-2.

#### Q Do you have concerns with Kentucky Power's analysis?

1

2 Α Yes. The Company's original analysis was piecemeal, breaking apart the near term 3 from the long term. While it's valuable to understand both perspectives, industrystandard best practices are to conduct production cost and capacity expansion 4 5 modeling of the full study horizon. Then Kentucky Power can extract the net 6 present value (NPV) results for the desired time periods. Especially with its last 7 IRP having been prepared in 2023, conducting full modeling here was essential to adequately evaluate alternatives and to ensure that the alternatives evaluated were 8 9 still relevant and reflected current costs. The Company also does not make clear what ZLD costs it is including in each of the Alternative scenarios.<sup>31</sup> This is 10 important because the EPA estimates compliance costs at around \$50 million.<sup>32</sup> 11 12 The Company's supplemental analysis was even more concerning. The break-even 13 analysis that the Company performed was opaque, and the Company provided insufficient documentation for its methodology and assumptions.<sup>33</sup> As mentioned 14 above, the Company's workpapers do not clearly show how it calculated the break-15 16 even values. Further, the benchmark alternative of a new combined-cycle plant is not the least-cost option; conversion to gas is the least-cost option. Thus, the 17 benchmark provides a skewed point of comparison. 18

31 Kentucky Power Response to Attorney General Request 1-1,

 $\label{lem:kpco_radial} KPCO\_R\_AG\_1\_1\_Confidential Attachment 3, KPCO\_R\_AG\_1\_1\_Confidential Attachment 4, and KPCO\_R\_AG\_1\_1\_Confidential Attachment 5.$ 

<sup>&</sup>lt;sup>32</sup> See EPA, Rulemaking for the Steam Electric Power Generating Effluent Limitations Guidelines, Generating Unit-level Costs and Loadings Estimates by Regulatory Option for the 2024 Final Rule – DCN SE11756, EPA Doc. No. EPA-HQ-OW-2009-0819-10336 (May 9, 2024), available at <a href="https://www.regulations.gov/document/EPA-HQ-OW-2009-0819-10336">https://www.regulations.gov/document/EPA-HQ-OW-2009-0819-10336</a> (EPA's final 2024 Rule corresponds to the cost estimates reflected in the columns labeled "Regulatory Option B").

<sup>&</sup>lt;sup>33</sup> Kentucky Power Response to Staff Request 3-6, Confidential Attachments 1-9.

#### 1 Q Did the Company consider all alternatives? 2 No. For the 2028-2031 timeframe, the Company evaluated only thermal PPAs and Α 3 market power and energy as alternatives to continued reliance on Mitchell.<sup>34</sup> But the request for proposal (RFP) it references is from 2023 and the Company does 4 5 not appear to have refreshed the RFP in the two years since. Kentucky Power didn't 6 consider non-thermal PPAs, or battery energy storage and solar. 7 The Company also doesn't appear to have considered negotiation with Wheeling 8 Power or exploring the option of entering into an agreement with Wheeling Power 9 to buy power from Mitchell for the period 2028–2031 instead of re-entering into its 10 50 percent ownership agreement. Especially now that the Company needs approval 11 for the cooling tower upgrades through a separate CPCN application, Kentucky 12 Power should be exhausting all short-term options. 13 Q Is Kentucky Power requesting a CPCN for the updated cooling tower project 14 in the current docket? 15 Α No. As mentioned above, the Company will have to file a subsequent CPCN for the cooling tower project if it determines that this is the lowest-cost option for 16 customers.<sup>35</sup> This means that the Company is requesting approval to maintain its 17 18 share of a 50+-year-old plant without robust analysis, before it has even decided 19 which repair or replacement option to pursue—and before it even has approval to 20 make the upgrades required to keep the plant operational.

<sup>&</sup>lt;sup>34</sup> Direct Testimony of Vaughan at 4.

<sup>&</sup>lt;sup>35</sup> Supplemental Testimony of Vaughan at 5-6.

#### 1 Q What are the benefits and avoided cost of alternative options? 2 Α If Kentucky Power chooses to fully convert Mitchell to operate on gas, the 3 Company avoids an cost in up-front capital investments in cooling tower upgrades.<sup>36</sup> Given that the Company's first cost estimates for the 4 5 cooling tower repairs were inaccurate, and that capital and project costs in general 6 are going up, it's also possible that the actual cooling tower costs could be higher than currently estimated. The Company also will avoid tens of million in costs to 7 8 comply with the 2024 ELG Rule's ZLD standard, as discussed above. 9 Q What are your recommendations for the Commission? 10 Α I recommend that the Commission not approve the Company's request in the 11 current docket to extend its ownership share in the Mitchell Generating Station 12 beyond 2028. The Company's analysis is piecemeal and incomplete. The Company 13 has not presented sufficient evidence that it has robustly considered all alternatives 14 to continued investment in the plant, and the Company has not demonstrated that 15 continued operation of the plant is the least-cost option for ratepayers. It is 16 important for the Commission to signal, as part of this docket, that it expects robust, 17 industry-standard analysis to support a CPCN docket and proper consideration of a 18 range of alternatives.

Does this conclude your testimony?

19

20

Q

Α

Yes.

<sup>&</sup>lt;sup>36</sup> Supplemental Testimony of Vaughan, Table AEV-SD1.

## DG-1 Resume of Devi Glick



#### Devi Glick, Senior Principal

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617-453-7050 dglick@synapse-energy.com

#### PROFESSIONAL EXPERIENCE

**Synapse Energy Economics Inc.**, Cambridge, MA. *Senior Principal*, May 2022 – Present; *Principal Associate*, June 2021 – May 2022; *Senior Associate*, April 2019 – June 2021; *Associate*, January 2018 – March 2019.

Conducts research and provides expert witness and consulting services on energy sector issues. Examples include:

- Modeling for resource planning using PLEXOS and Encompass utility planning software to evaluate the reasonableness of utility IRP modeling.
- Modeling for resource planning to explore alternative, lower-cost and lower-emission resource portfolio options.
- Providing expert testimony in rate cases on the prudence of continued investment in, and operation
  of, coal plants based on the economics of plant operations relative to market prices and alternative
  resource costs.
- Providing expert testimony and analysis on the reasonableness of utility coal plant commitment and dispatch practice in fuel and power cost adjustment dockets.
- Serving as an expert witness on avoided cost of distributed solar PV and submitting direct and surrebuttal testimony regarding the appropriate calculation of benefit categories associated with the value of solar calculations.
- Reviewing and assessing the reasonableness of methodologies and assumptions relied on in utility IRPs and other long-term planning documents for expert report, public comments, and expert testimony.
- Evaluating utility long-term resource plans and developing alternative clean energy portfolios for expert reports.
- Co-authoring public comments on the adequacy of utility coal ash disposal plans, and federal coal ash disposal rules and amendments.
- Analyzing system-level cost impacts of energy efficiency at the state and national level.

#### **Rocky Mountain Institute,** Basalt, CO. August 2012 – September 2017 *Senior Associate*

 Led technical analysis, modeling, training and capacity building work for utilities and governments in Sub-Saharan Africa around integrated resource planning for the central electricity grid energy.
 Identified over one billion dollars in savings based on improved resource-planning processes.

- Represented RMI as a content expert and presented materials on electricity pricing and rate design at conferences and events.
- Led a project to research and evaluate utility resource planning and spending processes, focusing
  specifically on integrated resource planning, to highlight systematic overspending on conventional
  resources and underinvestment and underutilization of distributed energy resources as a least-cost
  alternative.

#### Associate

- Led modeling analysis in collaboration with NextGen Climate America which identified a CO2 loophole in the Clean Power Plan of 250 million tons, or 41 percent of EPA projected abatement.
   Analysis was submitted as an official federal comment which led to a modification to address the loophole in the final rule.
- Led financial and economic modeling in collaboration with a major U.S. utility to quantify the impact that solar PV would have on their sales and helped identify alternative business models which would allow them to recapture a significant portion of this at-risk value.
- Supported the planning, content development, facilitation, and execution of numerous events and workshops with participants from across the electricity sector for RMI's Electricity Innovation Lab (eLab) initiative.
- Co-authored two studies reviewing valuation methodologies for solar PV and laying out new
  principles and recommendations around pricing and rate design for a distributed energy future in
  the United States. These studies have been highly cited by the industry and submitted as evidence in
  numerous Public Utility Commission rate cases.

The University of Michigan, Ann Arbor, MI. Graduate Student Instructor, September 2011 – July 2012

The Virginia Sea Grant at the Virginia Institute of Marine Science, Gloucester Point, VA. *Policy Intern*, Summer 2011

Managed a communication network analysis study of coastal resource management stakeholders on the Eastern Shore of the Delmarya Peninsula.

**The Commission for Environmental Cooperation (NAFTA),** Montreal, QC. *Short Term Educational Program/Intern*, Summer 2010

Researched energy and climate issues relevant to the NAFTA parties to assist the executive director in conducting a GAP analysis of emission monitoring, reporting, and verification systems in North America.

**Congressman Tom Allen,** Portland, ME. *Technology Systems and Outreach Coordinator*, August 2007 – December 2008

Directed Congressman Allen's technology operation, responded to constituent requests, and represented the Congressman at events throughout southern Maine.

#### **EDUCATION**

The University of Michigan, Ann Arbor, MI

Master of Public Policy, Gerald R. Ford School of Public Policy, 2012

Master of Science, School of Natural Resources and the Environment, 2012

Masters Project: Climate Change Adaptation Planning in U.S. Cities

#### Middlebury College, Middlebury, VT

Bachelor of Arts, 2007

Environmental Studies, Policy Focus; Minor in Spanish

Thesis: Environmental Security in a Changing National Security Environment: Reconciling Divergent Policy Interests, Cold War to Present

#### **PUBLICATIONS**

Glick, D., T. Gyalmo, D. Karabakal, L. Metz, C. Resor. 2024. *Review of Tennessee Valley Authority's Draft 2025 Integrated Resource Plan.* Synapse Energy Economics for Sierra Club.

Biewald, B., D. Glick, S. Kwok, K. Takahashi, J. Carvallo, L. Schwartz. 2024. *Best Practices in Integrated Resource Planning: A guide for planners developing the electricity resource mix of the future.* Synapse Energy Economics and Lawrence Berkeley National Laboratory for The Energy Foundation.

Kwok, S., D. Glick, R. Anderson, T. Gyalmo. 2023. *Review of Southwestern Public Service Company 2023 Integrated Resource Plan*. Synapse Energy Economics for Sierra Club.

Kwok, S., J. Smith, D. Glick. 2023. *Review of Cleco Power's 2021 IRP Report*. Synapse Energy Economics for Sierra Club.

Addleton, I., D. Glick, R. Wilson. 2021. *Georgia Power's Uneconomic Coal Practices Cost Customers Millions*. Synapse Energy Economics for Sierra Club.

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

Glick, D., S. Kwok. 2021 *Review of Southwestern Public Service Company's 2021 IRP and Tolk Analysis.* Synapse Energy Economics for Sierra Club.

Glick, D., P. Eash-Gates, S. Kwok, J. Tabernero, R. Wilson. 2021. *A Clean Energy Future for Tampa*. Synapse Energy Economics for Sierra Club.

Glick, D. 2021. Synapse Comments and Surreply Comments to the Minnesota Public Utility Commission in response to Otter Tail Power's 2021 Compliance Filing Docket E-999/CI-19-704. Synapse Energy Economics for Sierra Club.

Eash-Gates, P., D. Glick, S. Kwok. R. Wilson. 2020. *Orlando's Renewable Energy Future: The Path to 100 Percent Renewable Energy by 2020.* Synapse Energy Economics for the First 50 Coalition.

Eash-Gates, P., B. Fagan, D. Glick. 2020. *Alternatives to the Surry-Skiffes Creek 500 kV Transmission Line*. Synapse Energy Economics for the National Parks Conservation Association.

Biewald, B., D. Glick, J. Hall, C. Odom, C. Roberto, R. Wilson. 2020. *Investing in Failure: How Large Power Companies are Undermining their Decarbonization Targets*. Synapse Energy Economics for Climate Majority Project.

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

Glick, D., J. Frost, B. Biewald. 2020. *The Benefits of an All-Source RFP in Duke Energy Indiana's 2021 IRP Process.* Synapse Energy Economics for Energy Matters Community Coalition.

Camp, E., B. Fagan, J. Frost, N. Garner, D. Glick, A. Hopkins, A. Napoleon, K. Takahashi, D. White, M. Whited, R. Wilson. 2019. *Phase 2 Report on Muskrat Falls Project Rate Mitigation, Revision 1 – September 25, 2019.* Synapse Energy Economics for the Board of Commissioners of Public Utilities, Province of Newfoundland and Labrador.

Camp, E., A. Hopkins, D. Bhandari, N. Garner, A. Allison, N. Peluso, B. Havumaki, D. Glick. 2019. *The Future of Energy Storage in Colorado: Opportunities, Barriers, Analysis, and Policy Recommendations*. Synapse Energy Office for the Colorado Energy Office.

Glick, D., B. Fagan, J. Frost, D. White. 2019. *Big Bend Analysis: Cleaner, Lower-Cost Alternatives to TECO's Billion-Dollar Gas Project*. Synapse Energy Economics for Sierra Club.

Glick, D., F. Ackerman, J. Frost. 2019. *Assessment of Duke Energy's Coal Ash Basin Closure Options Analysis in North Carolina*. Synapse Energy Economics for the Southern Environmental Law Center.

Glick, D., N. Peluso, R. Fagan. 2019. San Juan Replacement Study: An alternative clean energy resource portfolio to meet Public Service Company of New Mexico's energy, capacity, and flexibility needs after the retirement of the San Juan Generating Station. Synapse Energy Economics for Sierra Club.

Suphachalasai, S., M. Touati, F. Ackerman, P. Knight, D. Glick, A. Horowitz, J.A. Rogers, T. Amegroud. 2018. *Morocco – Energy Policy MRV: Emission Reductions from Energy Subsidies Reform and Renewable Energy Policy.* Prepared for the World Bank Group.

Camp, E., B. Fagan, J. Frost, D. Glick, A. Hopkins, A. Napoleon, N. Peluso, K. Takahashi, D. White, R. Wilson, T. Woolf. 2018. *Phase 1 Findings on Muskrat Falls Project Rate Mitigation*. Synapse Energy Economics for Board of Commissioners of Public Utilities, Province of Newfoundland and Labrador.

Allison, A., R. Wilson, D. Glick, J. Frost. 2018. *Comments on South Africa 2018 Integrated Resource Plan.* Synapse Energy Economics for Centre for Environmental Rights.

Hopkins, A. S., K. Takahashi, D. Glick, M. Whited. 2018. *Decarbonization of Heating Energy Use in California Buildings: Technology, Markets, Impacts, and Policy Solutions*. Synapse Energy Economics for the Natural Resources Defense Council.

Knight, P., E. Camp, D. Glick, M. Chang. 2018. *Analysis of the Avoided Costs of Compliance of the Massachusetts Global Warming Solutions Act*. Supplement to 2018 AESC Study. Synapse Energy Economics for Massachusetts Department of Energy Resources and Massachusetts Department of Environmental Protection.

Fagan, B., R. Wilson, S. Fields, D. Glick, D. White. 2018. *Nova Scotia Power Inc. Thermal Generation Utilization and Optimization: Economic Analysis of Retention of Fossil-Fueled Thermal Fleet to and Beyond 2030 – M08059*. Prepared for Board Counsel to the Nova Scotia Utility Review Board.

Ackerman, F., D. Glick, T. Vitolo. 2018. Report on CCR proposed rule. Prepared for Earthjustice.

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

Smith, O., M. Lehrman, D. Glick. 2014. *Rate Design for the Distribution Edge*. Rocky Mountain Institute.

Hansen, L., V. Lacy, D. Glick. 2013. A Review of Solar PV Benefit & Cost Studies. Rocky Mountain Institute.

#### **TESTIMONY**

**Public Utilities Commission of Ohio (Case No. 24-153-EL-RDR):** Direct Testimony of Devi Glick In the Matter of the Legacy Generation Resource Rider Audits Required by R.C. 4928.148 for Duke Energy Ohio Inc., the Dayton Power and Light Company dba AES Ohio, and Ohio Power Company dba AEP Ohio. On behalf of Office of the Ohio Consumers' Counsel. November 4, 2025.

**Michigan Public Service Commission (Case No. U-21428):** Direct Testimony and Exhibits of Devi Glick in the application of Indiana Michigan Power Company for a power supply cost recovery reconciliation proceeding for the 12-month period ended December 31, 2024. On behalf of Attorney General Dana Nessel, Citizens Utility Board of Michigan, and Sierra Club. October 17, 2025.

Indiana Utility Regulatory Commission (Cause No. 38707-FAC 145): Direct Testimony and Exhibits of Devi Glick in the application of Duke Energy Indiana, LLC for approval of a change in its fuel cost adjustment for electric service and for approval of a change in its fuel cost adjustment for high pressure steam service, in accordance with Indiana Code §8-1-2-42, Indiana Code §8-1-2-42.3, and various orders of the Indiana Utility Regulatory Commission. On behalf of Sierra Club. September 3, 2025.

**Virginia State Corporation Commission (Case No. PUR-2025-00037).** Direct Testimony of Devi Glick in Virginia Electric and Power Company application for approval of a CPCN to construct/operate the proposed Chesterfield Energy Reliability Center Electric, generation/transmission facilities and approval of designated rider CERC. July 25, 2025.

Virginia State Corporation Commission (Case No. PUR-2025-00058 and Case No. PUR-2025-00059): Direct Testimony of Devi Glick in Virginia Electric and Power Company's 2025 biennial review of the rates, terms, and conditions for the provision of generation, distribution, and transmission services pursuant to Virginia Code § 56-585.1; and Virginia Electric and Power Company's application to revise its fuel factor pursuant to Virginia Code § 56-249.6. On behalf of Sierra Club. July 16, 2025.

**Iowa Utilities Commission (Docket RPU-2025-0001):** Cross Rebuttal Testimony of Devi Glick in MidAmerican Energy Company Application for a Determination of Ratemaking Principles. On behalf of the Environmental Intervenors. June 19, 2025.

**Iowa Utilities Commission (Docket RPU-2025-0001):** Direct Testimony of Devi Glick in MidAmerican Energy Company Application for a Determination of Ratemaking Principles. On behalf of the Environmental Intervenors. April 11, 2025.

**Louisiana Public Service Commission (Docket No. U-37425):** Direct Testimony of Devi Glick in the Application of Entergy Louisiana, LLC. for approval of generation and transmission resources proposed in connection with services to a significant customer project in north Louisiana, including proposed rider, and request for timely treatment. On behalf of Sierra Club. April 11, 2025.

Michigan Public Service Commission (Case No. U-21262): Direct Testimony of Devi Glick in the matter of the Application of Indiana Michigan Power Company for approval of a Power Supply Cost Recovery Plan and Factors (2025). On behalf of Attorney General Dana Nessel, Citizens Utility Boad of Michigan, and Sierra Club. March 4, 2025.

**Virginia State Corporation Commission (Case No. PUR-2024-00184):** Direct Testimony of Devi Glick in re: Virginia Electric and Power Company's 2024 Integrated Resource Plan filing pursuant to Virginia Code to §56-597 *et seq.* On behalf of Sierra Club and NRDC. February 28, 2025.

Michigan Public Service Commission (Case No. U-21262): Direct Testimony of Devi Glick in the matter of the Application of Indiana Michigan Power Company for a Power Supply Cost Recovery Reconciliation proceeding for the 12-month period ended December 31, 2023. On behalf of the Michigan Attorney General, Sierra Club, and Citizens Utility Board of Michigan. October 16, 2024.

State of Vermont Public Utility Commission (Case No. 24-2945-PET): Direct testimony of Devi Glick in Petition of VT Real Estate Holdings 2 LLC ("Fair Haven Solar") for a Certificate of Public Good, pursuant to 30 V.S.A. § 248, authorizing the installation and operation of a 20 MW solar electric generation facility off Airport Road in Fair Haven, Vermont to be known as the "Fair Haven Solar Project". On behalf of VT Real Estate Holdings 2 LLC. September 17, 2024

**Public Service Commission of South Carolina (Docket No. 2024-203-E):** Direct Testimony of Devi Glick in Application of Kingstree East 230 for a certificate of environmental compatibility and public convenience and necessity for the construction and operation of a 249 MW AC solar and battery facility in Williamsburg County, South Carolina Pursuant to S.C.Code Ann. § 58-33-10 et. Seq., and request to

proceed with initial construction work, S.C. Code Ann. § 58-33-110(7). On behalf of Kingstree East 230 LLC. August 9, 2024.

**Indiana Utility Regulatory Commission (Cause No. 46038):** Direct Testimony of Devi Glick in Petition of Duke Energy Indiana, LLC Pursuant to Indiana code §§ 8-1-2-42.7 and 8-1-2-61, for authority to modify its rate and changes. On behalf of Citizens Action Coalition of Indiana, Inc. July 11, 2024.

State of Vermont Public Utility Commission (Case No. 23-1447-PET): Rebuttal testimony of Devi Glick in the Petition of VT Real Estate Holdings 1 LLC for a Certificate of Public Good, pursuant to 30 V.S.A. § 248, for a 20 MW ground-mounted solar array in Shaftsbury, Vermont. On behalf of VT Real Estate Holdings 1 LLC ("Shaftsbury Solar"). Revised June 27, 2024.

State of Vermont Public Utility Commission (Case No. 23-1447-PET): Direct testimony of Devi Glick in the Petition of VT Real Estate Holdings 1 LLC ("Shaftsbury Solar") for a Certificate of Public Good, pursuant to 30 V.S.A. § 248, authorizing the installation and operation of a 20 MW solar electric generation facility off Holy Smoke Road in Shaftsbury, Vermont to be known as the "Shaftsbury Solar Project". On behalf of VT Real Estate Holdings 1 LLC ("Shaftsbury Solar"). Revised June 27, 2024.

**Iowa Utilities Board (RPU-2023-002):** Supplemental Testimony of Devi Glick in re: Interstate Power and Light Company, Proposed Rate Increase. On behalf of Environmental Intervenors. June 21, 2024.

**Florida Public Service Commission (Docket No. 20240026-EI):** Direct testimony of Devi Glick in petition for rate increase by Tampa Electric Company. On behalf of Sierra Club. June 6, 2024.

**Iowa Utilities Board (RPU-2023-0002):** Surrebuttal Testimony of Devi Glick in re: Interstate Power and Light Company, Proposed Rate Increase. On behalf of Environmental Intervenors. June 3, 2024.

**Iowa Utilities Board (RPU-2023-0002):** Direct Testimony of Devi Glick in re: Interstate Power and Light Company, Proposed Rate Increase. On behalf of Environmental Intervenors. April 16, 2024.

Michigan Public Service Commission (Case No. U-21051): Direct Testimony of Devi Glick in the Matter of the application of DTE Electric Company for reconciliation of its power supply cost recovery plan (Case No. U-21050) for the 12 months ended December 31, 2022. On behalf of Michigan Environmental Council. March 8, 2024.

Michigan Public Service Commission (Case No. U-21427): Direct Testimony of Devi Glick in the matter of the Application of Indiana Michigan Power Company for approval of a Power Supply Cost Recovery plan and factors (2024). On behalf of Sierra Club and Citizens Utility Board of Michigan. March 4, 2024.

**Georgia Public Service Commission (Docket No. 55378):** Direct Testimony of Devi Glick and Lucy Metz in Re: Georgia Power Company's 2023 Integrated Resource Plan Update. On behalf of Sierra Club. February 15, 2024.

**Louisiana Public Service Commission (Docket No. U-36923):** Direct Testimony of Devi Glick in the Application of Cleco Power LLC for: (1) Implementation of changes in rates to be effective July 1, 2024; and (2) extension of existing formula rate plan. On behalf of Sierra Club. February 5, 2024.

**Public Service Commission of South Carolina (Docket No. 2023-154-E):** Supplemental Testimony of Devi Glick in re: 2023 Integrated Resource Plan for the South Carolina Public Service Authority. On behalf of Sierra Club. January 29, 2024.

**Public Service Commission of South Carolina (Docket No. 2023-154-E):** Surrebuttal Testimony of Devi Glick in re: 2023 Integrated Resource Plan for the South Carolina Public Service Authority. On behalf of Sierra Club. November 17, 2023.

**Public Utilities Commission of Ohio (Case No. 21-477-EL-RDR):** Direct Testimony of Devi Glick in the Matter of the OVEC Generation Purchase Rider Audits Required by 4928.148 for Duke Energy Ohio, Inc. the Dayton Power and Light Company, and AEP Ohio. On behalf of Union of Concerned Scientists and the Citizens Utility Board. October 10, 2023.

**Public Service Commission of South Carolina (Docket No. 2023-154-E):** Direct Testimony of Devi Glick in re: 2023 Integrated Resource Plan for the South Carolina Public Service Authority. On behalf of Sierra Club. September 22, 2023.

**Public Utilities Commission of Ohio (Case No. 20-165-EL-RDR):** Direct Testimony of Devi Glick in the matter of the review of the Reconciliation Rider of the Dayton Power and Light Company. On behalf of Office of the Ohio Consumers' Counsel. September 12, 2023.

**Virginia State Corporation Commission (Case No. PUR-2023-00066):** Direct Testimony of Devi Glick in re: Virginia Electric and Power Company's 2023 Integrated Resource Plan filing pursuant to Virginia Code to §56-597 *et seq.* On behalf of Sierra Club. August 8, 2023.

**Public Utility Commission of Texas (PUC Docket No. 54634):** Direct Testimony of Devi Glick in the application of Southwestern Public Service Company for authority to change rates. On behalf of Sierra Club. August 4, 2023

**Arizona Corporation Commission (Docket No. E-1345A-22-0144):** Surrebuttal Testimony of Devi Glick in the matter of the application of Arizona Public Service Company for a hearing to determine the fair value of the utility property of the company for ratemaking purposes, to fix a just and reasonable rate of return thereon, and to approve rate schedules designed to develop such return. On Behalf of Sierra Club. July 26, 2023.

**Arizona Corporation Commission (Docket No. E-01345A-22-0144):** Direct Testimony of Devi Glick in the matter of the application of Arizona Public Service Company for a hearing to determine the fair value of the utility property of the company for ratemaking purposes, to fix a just and reasonable rate of return thereon, and to approve rate schedules designed to develop such return. On Behalf of Sierra Club. June 5, 2023.

**Virginia State Corporation Commission (Case No. PUR-2023-00005):** Direct Testimony of Devi Glick in the Petition of Virginia Electric & Power Company for revision of rate adjustment clause, Rider E, for the recovery of costs incurred to comply with state and federal environmental regulations pursuant to §56-585.1 A 5 e of the Code of Virginia. On behalf of Sierra Club. May 23, 2023.

New Mexico Public Regulation Commission (Case No, 22-00286-UT): Direct Testimony of Devi Glick in the matter of Southwestern Public Service Company's application for: (1) Revisions of its retail rates under advance no. 312; (2) Authority to abandon the Plant X Unit 1, Plant X Unit 2, and Cunningham Unit 1 Generating Stations and amend the abandonment date of the Tolk Generating Station; and (3) other associated relief. On behalf of Sierra Club. April 21, 2023.

Michigan Public Service Commission (Case No. U-20805): Direct Testimony of Devi Glick in the matter of the Application of Indiana Michigan Power Company for a Power Supply Cost Recovery Reconciliation proceeding for the 12-month period ended December 31, 2021. On behalf of Michigan Attorney General. April 17, 2023.

Michigan Public Service Commission (Case No. U-21261): Direct Testimony of Devi Glick in the matter of the application of Indiana Michigan Power Company for approval to implement a Power Supply Cost Recovery Plan for the twelve months ending December 31, 2023. On Behalf of Sierra Club. March 23, 2023.

New Mexico Public Regulation Commission (Case No. 19-00099-UT / 19-00348-UT): Direct Testimony of Devi Glick in the matter of El Paso Electric Company's Application for Approval of Long-Term Purchased Power Agreements with Hecate Energy Santa Teresa, LLC, Buena Vista Energy, LLC, and Canutillo Energy Center LLC. On Behalf of New Mexico Office of the Attorney General, January 23, 2023.

**Arizona Corporation Commission (Docket No. E-01933A-22-0107):** Direct Testimony of Devi Glick in the matter of the application of Tucson Electric Power Company for the establishment of just and reasonable rates and charges designed to realize a reasonable rate of return on the fair value of the properties of Tucson Electric Power Company devoted to its operations throughout the state of Arizona for related approvals. On Behalf of Sierra Club. January 11, 2023.

**New Mexico Public Regulation Commission (Case No. 22-00093-UT):** Direct Testimony of Devi Glick in the amended application for approval of El Paso Electric Company's 2022 renewable energy act plan pursuant to the renewable energy act and 17.9.572 NMAC, and sixth revised rate no. 38-RPS cost rider. On Behalf of New Mexico Office of the Attorney General, January 9, 2023.

**Iowa Utilities Board (Docket No. RPU-2022-0001):** Supplemental Direct and Rebuttal Testimony of Devi Glick in MidAmerican Energy Company Application for a Determination of Ratemaking Principles. On behalf of Environmental Intervenors. November 21, 2022.

**Public Utility Commission of Texas (PUC Docket No. 53719):** Direct Testimony of Devi Glick in the application of Entergy Texas, Inc. for authority to change rates. On behalf of Sierra Club. October 26, 2022.

**Virginia State Corporation Commission (Case No. PUR-2022-00051):** Direct Testimony of Devi Glick in re: Appalachian Power Company's Integrated Resource Plan filing pursuant to Virginia Code §56-597 *et seq.* On behalf of Sierra Club. September 2, 2022.

Public Service Commission of the State of Missouri (Case No. ER-2022-0129, Case No. ER-2022-0130): Surrebuttal Testimony of Devi Glick in the matter of Every Missouri Metro and Evergy Missouri West request for authority to implement a general rate increase for electric service. On behalf of Sierra Club. August 16, 2022.

**Iowa Utilities Board (Docket No. RPU-2022-0001):** Direct Testimony of Devi Glick in MidAmerican Energy Company Application for a Determination of Ratemaking Principles. On behalf of Environmental Intervenors. July 29, 2022.

Public Service Commission of the State of Missouri (Case No. ER-2022-0129, Case No. ER-2022-0130): Direct Testimony of Devi Glick in the matter of Every Missouri Metro and Evergy Missouri West request for authority to implement a general rate increase for electric service. On behalf of Sierra Club. June 8, 2022.

**Virginia State Corporation Commission (Case No. PUR-2022-00006):** Direct Testimony of Devi Glick in the petition of Virginia Electric & Power Company for revision of rate adjustment clause: Rider E, for the recovery of costs incurred to comply with state and federal environmental regulations pursuant to §56-585.1 A 5 e of the Code of Virginia. On behalf of Sierra Club. May 24, 2022.

**Oklahoma Corporation Commission (Case No. PUD 202100164):** Direct Testimony of Devi Glick in the matter of the application of Oklahoma gas and electric company for an order of the Commission authorizing application to modify its rates, charges, and tariffs for retail electric service in Oklahoma. On behalf of Sierra Club. April 27, 2022.

**Public Utility Commission of Texas (PUC Docket No. 52485):** Direct Testimony of Devi Glick in the application of Southwestern Public Service Company to amend its certifications of public convenience and necessity to convert Harrington Generation Station from coal to natural gas. On behalf of Sierra Club. March 25, 2022.

**Public Utility Commission of Texas (PUC Docket No. 52487):** Direct Testimony of Devi Glick in the application of Entergy Texas Inc. to amend its certificate of convenience and necessity to construct Orange County Advanced Power Station. On behalf of Sierra Club. March 18, 2022.

**Michigan Public Service Commission (Case No. U-21052):** Direct Testimony of Devi Glick in the matter of the application of Indiana Michigan Power Company for approval of a Power Supply Cost Recovery Plan and Factors (2022). On Behalf of Sierra Club. March 9, 2022.

**Arkansas Public Service Commission (Docket No. 21-070-U):** Surrebuttal Testimony of Devi Glick in the Matter of the Application of Southwestern Electric Power Company for approval of a general change in rate and tariffs. On behalf of Sierra Club. February 17, 2022.

**New Mexico Public Regulation Commission (Case No. 21-00200-UT):** Direct Testimony of Devi Glick in the Matter of the Southwestern Public Service Company's application to amend its certifications of public convenience and necessity to convert Harrington Generation Station from coal to natural gas. On behalf of Sierra Club. January 14, 2022.

**Public Utilities Commission of Ohio (Case No. 18-1004-EL-RDR):** Direct Testimony of Devi Glick in the Matter of the Review of the Power Purchase Agreement Rider of Ohio Power Company for 2018 and 2019. On behalf of the Office of the Ohio Consumer's Counsel. December 29, 2021.

**Arkansas Public Service Commission (Docket No. 21-070-U):** Direct Testimony of Devi Glick in the Matter of the Application of Southwestern Electric Power Company for Approval of a General Change in Rates and Tariffs. On behalf of Sierra Club. December 7, 2021.

Michigan Public Service Commission (Case No. U-20528): Direct Testimony of Devi Glick in the matter of the Application of DTE Electric Company for reconciliation of its power supply cost recovery plan (Case No. U-20527) for the 12-month period ending December 31, 2020. On behalf of Michigan Environmental Council. November 23, 2021.

**Public Utilities Commission of Ohio (Case No. 20-167-EL-RDR):** Direct Testimony of Devi Glick in the Matter of the Review of the Reconciliation Rider of Duke Energy Ohio, Inc. On behalf of The Office of the Ohio Consumer's Counsel. October 26, 2021.

**Public Utilities Commission of Nevada (Docket No. 21-06001):** Phase III Direct Testimony of Devi Glick in the joint application of Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy for approval of their 2022-2041 Triennial Intergrade Resource Plan and 2022-2024 Energy Supply Plan. On behalf of Sierra Club and Natural Resource Defense Council. October 6, 2021.

**Public Service Commission of South Carolina (Docket No, 2021-3-E):** Direct Testimony of Devi Glick in the matter of the annual review of base rates for fuel costs for Duke Energy Carolinas, LLC (for potential increase or decrease in fuel adjustment and gas adjustment). On behalf of the South Carolina Coastal Conservation League and the Southern Alliance for Clean Energy. September 10, 2021.

**North Carolina Utilities Commission (Docket No. E-2, Sub 1272):** Direct Testimony of Devi Glick in the matter of the application of Duke Energy Progress, LLC pursuant to N.C.G.S § 62-133.2 and commission R8-5 relating to fuel and fuel-related change adjustments for electric utilities. On behalf of Sierra Club. August 31, 2021.

Michigan Public Service Commission (Docket No. U-20530): Direct Testimony of Devi Glick in the application of Indiana Michigan Power Company for a Power Supply Cost Recovery Reconciliation proceeding for the 12-month period ending December 31, 2020. On behalf of the Michigan Attorney General. August 24, 2021.

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

North Carolina Utilities Commission (Docket No. E-7, Sub 1250): Direct Testimony of Devi Glick in the Mater of Application Duke Energy Carolinas, LLC Pursuant to §N.C.G.S 62-133.2 and Commission Rule

R8-5 Relating to Fuel and Fuel-Related Charge Adjustments for Electric Utilities. On behalf of Sierra Club. May 17, 2021.

**Public Utility Commission of Texas (PUC Docket No. 51415):** Direct Testimony of Devi Glick in the application of Southwestern Electric Power Company for authority to change rates. On behalf of Sierra Club. March 31, 2021.

Michigan Public Service Commission (Docket No. U-20804): Direct Testimony of Devi Glick in the application of Indiana Michigan Power Company for approval of a Power Supply Cost Recovery Plan and factors (2021). On behalf of Sierra Club. March 12, 2021.

**Public Utility Commission of Texas (PUC Docket No. 50997):** Direct Testimony of Devi Glick in the application of Southwestern Electric Power Company for authority to reconcile fuel costs for the period May 1, 2017- December 31, 2019. On behalf of Sierra Club. January 7, 2021.

**Michigan Public Service Commission (Docket No. U-20224):** Direct Testimony of Devi Glick in the application of Indiana Michigan Power Company for Reconciliation of its Power Supply Cost Recovery Plan. On behalf of the Sierra Club. October 23, 2020.

**Public Service Commission of Wisconsin (Docket No. 3270-UR-123):** Surrebuttal Testimony of Devi Glick in the application of Madison Gas and Electric Company for authority to change electric and natural gas rates. On behalf of Sierra Club. September 29, 2020.

**Public Service Commission of Wisconsin (Docket No. 6680-UR-122):** Surrebuttal Testimony of Devi Glick in the application of Wisconsin Power and Light Company for approval to extend electric and natural gas rates into 2021 and for approval of its 2021 fuel cost plan. On behalf of Sierra Club. September 21, 2020.

**Public Service Commission of Wisconsin (Docket No. 3270-UR-123):** Direct Testimony and Exhibits of Devi Glick in the application of Madison Gas and Electric Company for authority to change electric and natural gas rates. On behalf of Sierra Club. September 18, 2020.

**Public Service Commission of Wisconsin (Docket No. 6680-UR-122):** Direct Testimony and Exhibits of Devi Glick in the application of Wisconsin Power and Light Company for approval to extend electric and natural gas rates into 2021 and for approval of its 2021 fuel cost plan. On behalf of Sierra Club. September 8, 2020.

Indiana Utility Regulatory Commission (Cause No. 38707-FAC125): Direct Testimony and Exhibits of Devi Glick in the application of Duke Energy Indiana, LLC for approval of a change in its fuel cost adjustment for electric service. On behalf of Sierra Club. September 4, 2020.

Indiana Utility Regulatory Commission (Cause No. 38707-FAC123 S1): Direct Testimony and Exhibits of Devi Glick in the Subdocket for review of Duke Energy Indian, LLC's Generation Unit Commitment Decisions. On behalf of Sierra Club. July 31, 2020.

**Indiana Utility Regulatory Commission (Cause No. 38707-FAC124):** Direct Testimony and Exhibits of Devi Glick in the application of Duke Energy Indiana, LLC for approval of a change in its fuel cost adjustment for electric service. On behalf of Sierra Club. June 4, 2020.

**Arizona Corporation Commission (Docket No. E-01933A-19-0028):** Reply to Late-filed ACC Staff Testimony of Devi Glick in the application of Tucson Electric Power Company for the establishment of just and reasonable rates. On behalf of Sierra Club. May 8, 2020.

**Indiana Utility Regulatory Commission (Cause No. 38707-FAC123):** Direct Testimony and Exhibits of Devi Glick in the application of Duke Energy Indiana, LLC for approval of a change in its fuel cost adjustment for electric service. On behalf of Sierra Club. March 6, 2020.

**Public Utility Commission of Texas (PUC Docket No. 49831):** Direct Testimony of Devi Glick in the application of Southwestern Public Service Company for authority to change rates. On behalf of Sierra Club. February 10, 2020.

**New Mexico Public Regulation Commission (Case No. 19-00170-UT):** Testimony of Devi Glick in Support of Uncontested Comprehensive Stipulation. On behalf of Sierra Club. January 21, 2020.

**Nova Scotia Utility and Review Board (Matter M09420):** Expert Evidence of Fagan, B, D. Glick reviewing Nova Scotia Power's Application for Extra Large Industrial Active Demand Control Tariff for Port Hawkesbury Paper. Prepared for Nova Scotia Utility and Review Board Counsel. December 3, 2019.

**New Mexico Public Regulation Commission (Case No. 19-00170-UT):** Direct Testimony of Devi Glick regarding Southwestern Public Service Company's application for revision of its retail rates and authorization and approval to shorten the service life and abandon its Tolk generation station units. On behalf of Sierra Club. November 22, 2019.

**North Carolina Utilities Commission (Docket No. E-100, Sub 158):** Responsive testimony of Devi Glick regarding battery storage and PURPA avoided cost rates. On behalf of Southern Alliance for Clean Energy. July 3, 2019.

**State Corporation Commission of Virginia (Case No. PUR-2018-00195):** Direct testimony of Devi Glick regarding the economic performance of four of Virginia Electric and Power Company's coal-fired units and the Company's petition to recover costs incurred to company with state and federal environmental regulations. On behalf of Sierra Club. April 23, 2019.

**Connecticut Siting Council (Docket No. 470B):** Joint testimony of Robert Fagan and Devi Glick regarding NTE Connecticut's application for a Certificate of Environmental Compatibility and Public Need for the Killingly generating facility. On behalf of Not Another Power Plant and Sierra Club. April 11, 2019.

**Public Service Commission of South Carolina (Docket No. 2019-2-E):** Surrebuttal testimony of Devi Glick in the Annual review of based rates for fuel costs for South Carolina Electric & Gas Company. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. March 29, 2019.

**Public Service Commission of South Carolina (Docket No. 2019-2-E):** Direct testimony of Devi Glick in the Annual review of based rates for fuel costs for South Carolina Electric & Gas Company. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. March 19, 2019.

**Public Service Commission of South Carolina (Docket No. 2018-3-E):** Surrebuttal testimony of Devi Glick regarding annual review of base rates of fuel costs for Duke Energy Carolinas. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. August 31, 2018.

**Public Service Commission of South Carolina (Docket No. 2018-3-E):** Direct testimony of Devi Glick regarding the annual review of base rates of fuel costs for Duke Energy Carolinas. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. August 17, 2018.

**Public Service Commission of South Carolina (Docket No. 2018-1-E):** Surrebuttal testimony of Devi Glick regarding Duke Energy Progress' net energy metering methodology for valuing distributed energy resources system within South Carolina. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. June 4, 2018.

**Public Service Commission of South Carolina (Docket No. 2018-1-E):** Direct testimony of Devi Glick regarding Duke Energy Progress' net energy metering methodology for valuing distributed energy resources system within South Carolina. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. May 22, 2018.

**Public Service Commission of South Carolina (Docket No. 2018-2-E):** Surrebuttal testimony of Devi Glick on avoided cost calculations and the costs and benefits of solar net energy metering for South Carolina Electric and Gas Company. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. April 4, 2018.

**Public Service Commission of South Carolina (Docket No. 2018-2-E):** Direct testimony of Devi Glick on avoided cost calculations and the costs and benefits of solar net energy metering for South Carolina Electric and Gas Company. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. March 23, 2018.

Resume updated September 2025

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### Generating Unit-level Costs and Loadings Estimates by Regulatory Option for the 2024 Final Rule

(Attached as native Excel file)