

Attachment DG-1:

Resume of Devi Glick

Devi Glick, Senior Principal

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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 rebuttal 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 Delmarva 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

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

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 Every 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 Matter 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. 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 August 2023

Attachment DG-2C:
Confidential Discovery
Responses – OVEC
Bills

Attachment DG-3:
Public Discovery
Responses – PJM
market revenues

AEP Ohio
Case No. 21-0477-EL-RDR
CUB-INT-02-008 Attachment 1

	Energy Produced (MWh)	Energy Revenue ¹	Capacity (MW)	Capacity Revenue ²
Jan-20	185,618	\$ (4,206,973.99)	13,011	\$ 1,227,550.40
Feb-20	164,555	\$ (3,355,449.51)	12,171	\$ 1,148,353.60
Mar-20	135,253	\$ (2,468,677.71)	13,011	\$ 1,227,550.40
Apr-20	76,433	\$ (1,276,870.66)	12,591	\$ 1,187,952.00
May-20	86,264	\$ (1,614,575.82)	13,011	\$ 1,227,550.40
Jun-20	166,879	\$ (3,378,406.90)	11,760	\$ 862,070.70
Jul-20	187,746	\$ (4,866,439.96)	12,152	\$ 890,806.39
Aug-20	179,133	\$ (4,299,099.88)	12,152	\$ 890,806.39
Sep-20	132,759	\$ (2,826,240.48)	11,760	\$ 862,070.70
Oct-20	136,739	\$ (3,008,050.90)	12,152	\$ 890,806.39
Nov-20	174,187	\$ (3,753,423.66)	11,760	\$ 862,070.70
Dec-20	226,133	\$ (5,673,743.26)	12,152	\$ 890,806.39

¹ Negative values indicate revenue

² Positive values indicate revenue

Source:

PJM's MSRS system at pjm.com

Ancillary Revenue²

\$	2,176.77
\$	1,828.01
\$	2,321.21
\$	389.07
\$	1,065.38
\$	9,553.49
\$	10,550.43
\$	11,524.83
\$	7,102.19
\$	26,081.23
\$	20,742.88
\$	20,058.78

Attachment DG-3C:
Confidential Discovery
Responses – PJM
market revenues

Attachment DG-4C:
Confidential Discovery
Responses – OVEC and IKEC
Board and Operating
Committee meeting minutes

Attachment DG-5: Public
Discovery Responses – Unit
commitment and dispatch
decision-making

Duke Energy Ohio
Case No. 21-477-EL-RDR
Citizens Utility Board of Ohio and Union of Concerned Scientists
Second Set of Interrogatories
Date Received: March 18, 2022

CUB-INT-02-018
CONFIDENTIAL
AS TO ATTACHMENTS ONLY

REQUEST:

Regarding OVEC's unit commitment decisions during 2020:

- a) Provide the daily commitment status for each OVEC unit for each day in 2020.
- b) Produce all daily economic analyses that the Company used to inform OVEC's unit commitment decisions for the OVEC units in 2020 in native machine readable Excel format.
- c) State whether the Company provided the analysis referenced in part (b) to OVEC for each month 2020.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET
AS TO ATTACHMENTS ONLY

- a) Objection. This Interrogatory is overly broad and unduly burdensome, given that it seeks information that is unlimited as to time and that is neither relevant to this proceeding nor likely to lead to the discovery of admissible evidence in this proceeding.
- b) The Company produces a Daily Profit and Loss Report as referenced in CUB-INT-02-015. Although these reports are produced in readable Excel format, they are only saved in a PDF format. Please refer to CUB-INT-02-001 CONF Attachments 1 through 202 for the daily reports from 2020. The Company will supplement the response to part b with the confidential attachments at a later date.
- c) During April 2020, due to very low market prices from reduced loads in the PJM footprint due to COVID-19 impacts on customer demand, Duke Energy notified OVEC management that it observed a period in which the OVEC units were expected to be out of the money and could potentially be decommitted. OVEC responded by proposing a modification of the Operating Committee process. The matter was voted on by members of the Operating Committee and passed. Although the Company did not share these reports with OVEC management, the reports were the reason for the notification and the results of the report were discussed with OVEC management.

PERSON RESPONSIBLE: John Swez

INTERROGATORY

- CUB-INT-02-015 Regarding the Company's role in unit commitment and dispatch practices for OVEC:
- a) Indicate whether any Company entity performs unit commitment and dispatch practices on behalf of OVEC.
 - b) Indicate whether the Company engaged in any way in oversight or evaluation of the unit commitment and dispatch practices of the OVEC units.
 - c) Indicate whether the Company has any role or knowledge of the unit commitment and operational decisions of the OVEC units.
 - d) State whether Sponsoring Companies have the right or ability to request that OVEC commit its units with an Economic status.

RESPONSE

AEP Ohio further objects that the request is vague, overly broad and unduly burdensome. AEP Ohio further objects that the request calls for a narrative response. AEP Ohio further objects because the request calls for a legal conclusion and that the ICPA and Operating Procedures speak for themselves. Without waiving these objections or any general objections the Company may have, the Company states as follows.

- a) No, the unit commitment in the PJM energy markets is established in the Operating Procedures.
- b) Yes, consistent with the ICPA, the Company representative (supported by AEPSC personnel) in the OVEC Operating Committee participates and votes on issues presented at the Operating Committee level. For the Energy Market in PJM, OVEC is responsible for making the daily offers in PJM on behalf of all of the PJM sponsor companies.
- c) Yes, consistent with the ICPA, the Company representative (supported by AEPSC personnel) in the OVEC Operating Committee participates and votes on issues presented at the Operating Committee level.
- d) Pursuant to Section 9.05 of the Amended and Restated Inter-Company Power Agreement among OVEC, the Company and the other parties thereto, "[t]he decisions of the Operating Committee, including the adoption or modification of any procedure by the Operating Committee pursuant to this Section 9.04, must receive the affirmative vote of at least two-thirds of the members of the Operating Committee present at any meeting." Pursuant to procedures codified in Part E.1 of the "Operating Procedures" of the such Operating Committee, the unanimous approval of the Operating Committee (excluding OVEC's representative) is required to change the commitment status of "Must Run" with respect to the offer of the "PJM Sponsors' aggregate share of reserved Available Energy into PJM's Day-Ahead Energy Market," with limited exceptions expressly set forth therein, including with respect to Clifty Unit No. 6 during ozone season.

INTERROGATORY

CUB-INT-02-016

Regarding OVEC's daily unit commitment decisions:

- a) Explain how OVEC's daily unit commitment decisions are made.
- b) For each month in 2020, state whether OVEC submitted bids into PJM's Day-Ahead market based on each unit's variable unit cost, or self-scheduled (self-committed) the units.
- c) If OVEC plants are self-committed, explain how OVEC decides when to bring units online at their minimum operating levels, when to keep units online, and when to shut units down.

RESPONSE

AEP Ohio further objects that the request is vague, overly broad and unduly burdensome. AEP Ohio further objects that the request calls for a narrative response. AEP Ohio further objects because the request calls for a legal conclusion and that the ICPA and Operating Procedures speak for themselves. Without waiving these objections or any general objections the Company may have, the Company states as follows.

- a) Daily commitment decisions for generating units are based on the provisions of the Operating Procedures, Pursuant to Section 9.05 of the Amended and Restated Inter-Company Power Agreement.
- b) As detailed in the Operating Procedures, in service units are offered into PJM's Day-Ahead Market based on each unit's variable unit cost offer, but with a commitment status of "Must Run." Units that are out of service are returned in the Real-Time Market, and once stable operation has been achieved, committed on a Day-Ahead basis as "Must Run." Exceptions to this offer strategy are further outlined within the Operating Procedures, and an additional temporary exception is outlined in the Company's responses to CUB-INT-02-017 and CUB-INT-02-019.
- c) All available operating units are offered into the PJM Day-Ahead market as detailed in response (b), above. The units are then dispatched to varying load levels as required by PJM load demand, unless operational requirements necessitate non-variable load. The units are dispatched based upon their variable cost, and as a result of this strategy generally operate above low load during favorable market conditions, and at low load during low market pricing intervals.

INTERROGATORY

CUB-INT-02-017 Admit or deny that during each month of 2020, the OVEC units were committed into the PJM day-ahead energy market with a default “must-run” status (except for Clifty Creek Unit 6 during summer ozone non-attainment period). If denied, state which months the units were not committed with a default must-run status.

RESPONSE

AEP Ohio objects that the request is vague, overly broad and unduly burdensome. AEP Ohio further objects that this request for admission is an improper interrogatory. Without waiving these objections or any general objections the Company may have, the request is denied. The Company further states that during 2020, the default method for offering generating units into the PJM Day-Ahead Market was to offer them based on each unit’s variable unit cost offer, but with a commitment status of “Must Run.” However, an additional exception to those outlined in the Operating Procedures was approved by the OVEC Operating Committee, due to the unique and unprecedented circumstances driven primarily by the direct and indirect impacts of the COVID-19 pandemic on energy prices. Under this exception, pursuant to Section E.1.b and E.1.c of the Operating Procedures, sponsors provided OVEC with the flexibility to offer units as either “Economic” or “Must Run” from April 14, 2020 through May 31, 2020, after which the issue was voted on and extended through June 30, 2020. During the timeline of the approved exception to the Operating Procedure, a commitment status of “Economic” was applied to three operating units, for a total of 631 hours. With the expiration of the approved exception to the Operating Procedures on June 30, 2020, the units were returned to their default “Must Run” operating status.

INTERROGATORY

CUB-INT-02-019

- Regarding any changes in OVEC's unit commitment process in 2020:
- a) Describe any changes in 2020 to any of the following: OVEC's process for determining whether to self-schedule a generator in the day-ahead market at the unit's minimum operating level, and allow the unit to dispatch economically above the minimum level; OVEC's process for determining whether to economically dispatch a generator in the day-ahead energy market and the factors that OVEC considers in its unit commitment decision-making process.
 - b) Provide all communications between the Company and OVEC regarding any changes to OVEC unit commitment process in 2020.
 - c) Indicate whether the Company made any recommendations to OVEC regarding the use of a new unit commitment system. If yes, provide the timeline of such conversations.
 - d) Explain why changes to OVEC's unit commitment process were implemented in 2020.
 - e) If changes were implemented but not sustained, explain why OVEC decided to return to the prior unit commitment process, and provide the dates that such changes were made.

RESPONSE

AEP Ohio objects that this request for production of documents is an improper interrogatory. AEP Ohio further objects that the request seeks information that is not relevant or likely to lead to the discovery of admissible information. AEP Ohio further objects that the request is vague, overly broad and unduly burdensome. AEP Ohio further objects that this request seeks confidential information. AEP Ohio further objects that the request calls for a narrative response. The Company further objects that it does not track the requested information in the ordinary course of business. Without waiving these objections or any general objections the Company may have, the Company states as follows.

- a) Please see the Company's response to LEI-DR-01-003 and CUB-INT-02-017.
- b) Please see CUB-INT-01-019 CONFIDENTIAL Attachment 1.
- c) Please see the Company's response to sub-part a).
- d) The revisions to the unit commitment process were always intended to be temporary in nature, and were implemented as a result of the negative impacts of the COVID-19 pandemic to the energy market. The approved process was in effect between April 14, 2020, and May 31, 2020, after which the issue was voted on and extended through June 30, 2020. The units were returned to the commitment strategy outlined in the Operating Procedures on July 1, 2020.
- e) See response to requests 02-019(a) and (d). Further answering, OVEC states that in addition to being required by the Operating Procedures, OVEC returned to "Must Run" operational status

because the units are baseload coal units designed to run efficiently for long periods of time. The units are not designed to be rapidly cycled on and off, and if they were operated in that manner equipment costs and labor costs would increase. There would also be environmental impacts because the environmental control equipment is designed to operate most efficiently when the plant is operated continuously. Finally, must run operational status helps avoid costly outages caused by thermal stress and equipment breakdown. In addition to those operational characteristics, some of OVEC's sponsors rely on OVEC for baseload generation to serve their customers. Short term operational fluctuations solely for the benefit of certain sponsors could cause issues for the sponsors who are reliant on OVEC power.

02-015 Regarding the Company's role in unit commitment and dispatch practices for OVEC:

- a) Indicate whether any Company entity performs unit commitment and dispatch practices on behalf of OVEC.**
- b) Indicate whether the Company engaged in any way in oversight or evaluation of the unit commitment and dispatch practices of the OVEC units.**
- c) Indicate whether the Company has any role or knowledge of the unit commitment and operational decisions of the OVEC units.**
- d) State whether Sponsoring Companies have the right or ability to request that OVEC commit its units with an Economic status.**

RESPONSE:

- a) Each PJM Company in OVEC manages its own respective PJM capacity position and offers their respective share in the RPM capacity auctions. For the Energy Market in PJM, OVEC is responsible for making the daily offers in PJM on behalf of all of the PJM owners.
- b) The Company representative in the OVEC Operating Committee participates and votes on issues presented at the Operating Committee level. For the Energy Market in PJM, OVEC is responsible for making the daily offers in PJM on behalf of all of the PJM sponsor companies.
- c) The Company representative in the OVEC Operating Committee participates and votes on issues presented at the Operating Committee level.
- d) No. The procedures for the scheduling of available energy are set by the Operating Committee. Pursuant to Section 9.05 of the Amended and Restated Inter-Company Power Agreement among OVEC, the Company and the other parties thereto, "[t]he decisions of the Operating Committee, including the adoption or modification of any procedure by the Operating Committee pursuant to this Section 9.04, must receive the affirmative vote of at least two-thirds of the members of the Operating Committee present at any meeting." Pursuant to procedures codified in Part E.1 of the "Operating Procedures" of the such Operating Committee, the unanimous approval of the Operating Committee (excluding OVEC's representative) is required to change the commitment status of "Must Run" with respect to the offer of the "PJM Sponsors' aggregate share of reserved Available Energy into PJM's Day-Ahead Energy Market," with limited exceptions expressly set forth therein, including with respect to Clifty Unit No. 6 during ozone season.

02-016 Regarding OVEC's daily unit commitment decisions:

- a) Explain how OVEC's daily unit commitment decisions are made.**
- b) For each month in 2020, state whether OVEC submitted bids into PJM's Day-Ahead market based on each unit's variable unit cost, or self-scheduled (self-committed) the units.**
- c) If OVEC plants are self-committed, explain how OVEC decides when to bring units online at their minimum operating levels, when to keep units online, and when to shut units down.**

RESPONSE:

- a) Daily commitment decisions for OVEC-IKEC generating units are based on the provisions of the OVEC-IKEC Operating Procedures, Pursuant to Section 9.05 of the Amended and Restated Inter-Company Power Agreement.
- b) As detailed in the OVEC-IKEC Operating Procedures, in service OVEC-IKEC units are offered into PJM's Day-Ahead Market based on each unit's variable unit cost offer, but with a commitment status of "Must Run." Units that are out of service are returned in the Real-Time Market, and once stable operation has been achieved, committed on a Day-Ahead basis as "Must Run." Exceptions to this offer strategy are further outlined within the Operating Procedures, and an additional temporary exception is outlined in response to inquiries 02-017 and 02-019.
- c) All available OVEC-IKEC operating units are offered into the PJM Day-Ahead market as detailed in response (b), above. The units are then dispatched to varying load levels as required by PJM load demand, unless operational requirements necessitate non-variable load. The units are dispatched based upon their variable cost, and as a result of this strategy generally operate above low load during favorable market conditions, and at low load during low market pricing intervals.

02-017 Admit or deny that during each month of 2020, the OVEC units were committed into the PJM day-ahead energy market with a default "must-run" status (except for Clifty Creek Unit 6 during summer ozone non-attainment period). If denied, state which months the units were not committed with a default must-run status.

RESPONSE: Deny. During 2020, the default method for offering OVEC-IKEC generating units into the PJM Day-Ahead Market was to offer them based on each unit's variable unit cost offer, but with a commitment status of "Must Run." However, an additional exception to those outlined in the OVEC-IKEC Operating Procedures was approved by the OVEC Operating Committee, due to the unique and unprecedented circumstances driven primarily by the direct and indirect impacts of the COVID-19 pandemic on energy prices. Under this exception, pursuant to Section E.1.b and E.1.c of the Operating Procedures, sponsors provided OVEC with the flexibility to offer units as either "Economic" or "Must Run" from April 14, 2020, to no later than June 30, 2020. During the timeline of the approved exception to the Operating Procedure, a commitment status of "Economic" was applied to three OVEC-IKEC operating units, for a total of 631 hours. With the expiration of the approved exception to the Operating Procedures on June 30, 2020, the units were returned to their default "must run" operating status.

:

a)

02-019 Regarding any changes in OVEC's unit commitment process in 2020:

- a) Describe any changes in 2020 to any of the following: OVEC's process for determining whether to self-schedule a generator in the day-ahead market at the unit's minimum operating level, and allow the unit to dispatch economically above the minimum level; OVEC's process for determining whether to economically dispatch a generator in the day-ahead energy market and the factors that OVEC considers in its unit commitment decision-making process.**
- b) Provide all communications between the Company and OVEC regarding any changes to OVEC unit commitment process in 2020.**
- c) Indicate whether the Company made any recommendations to OVEC regarding the use of a new unit commitment system. If yes, provide the timeline of such conversations.**
- d) Explain why changes to OVEC' unit commitment process were implemented in 2020.**
- e) If changes were implemented but not sustained, explain why OVEC decided to return to the prior unit commitment process, and provide the dates that such changes were made.**

RESPONSE:

- a) Objection. This request is overbroad, compound, vague, ambiguous, and calls for an improper narrative response. Subject to the foregoing, during 2020, the default method for offering OVEC-IKEC generating units into the PJM Day-Ahead Market was to offer them based on each unit's variable unit cost offer, but with a commitment status of "Must Run." However, an additional

exception to those outlined in the OVEC-IKEC Operating Procedures was approved by the OVEC Operating Committee, due to the unique and unprecedented circumstances driven primarily by the direct and indirect impacts of the COVID-19 pandemic on energy prices. Under this exception, pursuant to Section E.1.b and E.1.c of the Operating Procedures, sponsors provided OVEC with the flexibility to offer units as either “Economic” or “Must Run” from April 14, 2020, to no later than June 30, 2020. During the timeline of the approved exception to the Operating Procedure, a commitment status of “Economic” was applied to three OVEC-IKEC operating units, for a total of 631 hours. With the expiration of the approved exception to the Operating Procedures on June 30, 2020, the units were returned to their default “must run” operating status.

- b) The company rep voted verbally to approve during the operating committee meeting held via phone conference. Please see “C&U – 02-019b Attachment 1 – Confidential”
- c) Objection. This request is overbroad, compound, vague, ambiguous, and calls for an improper narrative response. Subject to the foregoing, see the response to request 02-019(a).
- d) The revisions to the unit commitment process were always intended to be temporary in nature, and were implemented as a result of the negative impacts of the COVID-19 pandemic to the energy market. The approved process was in effect between April 14, 2020, and June 30, 2020, and the units were returned to the commitment strategy outlined in the Operating Procedures on July 1, 2020.
- e) See response to requests 02-019(a) and (d). Further answering, OVEC states that in addition to being required by the Operating Procedures, OVEC returned to “Must Run” operational status because the units are baseload coal units designed to run efficiently for long periods of time. The units are not designed to be rapidly cycled on and off, and if they were operated in that manner equipment costs and labor costs would increase. There would also be environmental impacts because the environmental control equipment is designed to operate most efficiently when the plant is operated continuously. Finally, must run operational status helps avoid costly outages caused by thermal stress and equipment breakdown.

In addition to those operational characteristics, some of OVEC’s sponsors rely on OVEC for baseload generation to serve their customers. Short term operational fluctuations solely for the benefit of certain sponsors could cause issues for the sponsors who are reliant on OVEC power

02-020 For each OVEC unit, provide the following information:

- a) Minimum downtime (hours)**
- b) Minimum runtime (hours)**
- c) Ramp rate (MW/hour)**
- d) Startup time (hot and cold)**
- e) Startup/ shutdown cost (\$)**

RESPONSE: Please see the company’s response to LEI DR-05-005 of LEI’s 1st set of discovery.

Attachment DG-5C:

Confidential Discovery

Responses - Unit commitment
and dispatch decision-making

Attachment DG-6: Public
Discovery Responses –
Environmental regulations and
capital expenditures

Duke Energy Ohio
Case No. 21-477-EL-RDR
Citizens Utility Board of Ohio and Union of Concerned Scientists
Second Set of Interrogatories
Date Received: March 18, 2022

CUB-INT-02-014

REQUEST:

Regarding the Company's role in any operational or planning decision made by OVEC that impact the costs passed on through the Legacy Generation Rider.

- a) State the Company's role and responsibility in the decision-making process.
- b) Indicate whether the Company had any input or vote over any operational or planning decisions made by OVEC.
- c) State the Company's role and responsibility in the decision-making process.
- d) Indicate whether the Company has any input or vote over any operational or planning decision made by OVEC.

RESPONSE:

- a) Decisions with respect to OVEC's operations are made by OVEC's management, with oversight and approval of annual capital expense budgets by OVEC's Board of Directors. The Company currently has one representative on OVEC's 15-member Board of Directors. Certain decisions, including those regarding procedures for scheduling delivery of available energy, and recommendations as to scheduling, operating, testing and maintenance procedures and other related matters, are delegated to the "Operating Committee" pursuant to Section 9.05 of the Amended and Restated Inter-Company Power Agreement among OVEC, the Company, and the other parties thereto, with any such procedures codified in the "Operating Procedures" of said Operating Committee. The Company is entitled to one member on the Operating Committee.
- b) See response to subpart a) above.
- c) See response to subpart a) above.
- d) See response to subpart a) above.

PERSON RESPONSIBLE: John Swez, based on information provided by OVEC

INTERROGATORY

- CUB-INT-02-014 Regarding the Company's role in any operational or planning decision made by OVEC that impact the costs passed on through the Legacy Generation Rider.
- a) State the Company's role and responsibility in the decision-making process.
 - b) Indicate whether the Company had any input or vote over any operational or planning decisions made by OVEC.
 - c) State the Company's role and responsibility in the decision-making process.
 - d) Indicate whether the Company has any input or vote over any operational or planning decision made by OVEC.

RESPONSE

AEP Ohio further objects that the request is vague, overly broad and unduly burdensome. AEP Ohio further objects that the request calls for a narrative response. AEP Ohio further objects because the request calls for a legal conclusion and that the ICPA and Operating Procedures speak for themselves. Without waiving these objections or any general objections the Company may have, the Company states as follows.

- a) Decisions with respect to OVEC's capital expenditures, including those necessary to comply with the Effluent Limitation Guidelines and Coal Combustion Residuals Rule, are made by OVEC's management, with oversight and approval of annual capital expense budgets by OVEC's Board of Directors. The Company currently has representatives on OVEC's 15-member Board of Directors. Certain decisions, including those regarding procedures for scheduling delivery of available energy, and recommendations as to scheduling, operating, testing and maintenance procedures and other related matters, are delegated to the "Operating Committee" pursuant to Section 9.05 of the Amended and Restated Inter-Company Power Agreement among OVEC, the Company, and the other parties thereto, with any such procedures codified in the "Operating Procedures" of said Operating Committee. AEP Ohio and its affiliates are collectively entitled to only one member on the Operating Committee.
- b) See the Company's response to part a.
- c) See the Company's response to part a.
- d) See the Company's response to part a.

**OHIO POWER COMPANY’S RESPONSE TO
THE PUBLIC UTILITIES COMMISSION OF OHIO’S
AUDITOR LONDON ECONOMICS INTERNATIONAL LLC’S
PUCO CASE NO. 21-0477-EL-RDR SET 1**

INTERROGATORY

LEI-DR-04-008 OVEC expected to finalize its EPA Effluent Limitations Guidelines (“ELGs”) compliance strategy after EPA completed its final rulemaking in September 2019. Please describe with photographs/videos how the Kyger Creek and Clifty Creek Power Plants comply with the EPA ELGs for wastewater discharge from steam electric power generating plants.

RESPONSE

OVEC anticipated EPA completing final revisions to the ELG rules applicable to two wastewater discharges, which included bottom ash transport wastewater and FGD wastewater, in September of 2019; however, EPA did not meet that expected timeline. EPA did publish draft ELG rule revisions in the Federal Register on November 22, 2019, and the rules were published as final in the Federal Register on October 13, 2020. Based on requirements in the final rule, OVEC expects to have until no later than December 31, 2025, to modify how it manages both bottom ash transport wastewater and FGD wastewater. OVEC has engaged a third-party engineering firm to assist in developing an overall holistic compliance strategy based on terms of the final ELG rules, and other applicable federal and state regulations that may impact either plant’s ultimate timelines for modifying treatment systems to meet new ELG requirements. Construction activities associated with wastewater treatment system modifications will begin in 2021 and are expected to continue over the next several years, as a result, photographs or videos of the ELG compliance systems that will be installed are not available for the audit period.

Attachment DG-6C:
Confidential Discovery
Response – Environmental
regulations and capital
expenditures

Attachment DG-7: Public
Discovery Responses –
Economic plant analysis

Duke Energy Ohio
Case No. 21-477-EL-RDR
Citizens Utility Board of Ohio and Union of Concerned Scientists
Second Set of Interrogatories
Date Received: March 18, 2022
CUB-INT-02-013

REQUEST:

Indicate whether the Company has asked OVEC whether it has already performed, or would be willing to perform, analysis on the following items:

- a) The net present value and/or going forward-value of the ICPA or OVEC Units (performed more recently than Jan 1, 2018).
- b) The net present value of retiring any OVEC unit by December 31, 2028 to avoid compliance with certain discharge limitations for bottom ash transport wastewater and FGD transport wastewater relative to the net present value of investing in the environmental upgrades and continuing to operate the plant?

RESPONSE:

- a) Objection. This Interrogatory is overly broad and unduly burdensome, given that it seeks information that is neither relevant to this proceeding nor likely to lead to the discovery of admissible evidence in this proceeding with respect to dates outside of the audit period. Without waiving said objection, to the extent discoverable, and in the spirit of discovery, no.
- b) No.

PERSON RESPONSIBLE:

As to objection: Legal

As to response: John Swez

INTERROGATORY

CUB-INT-02-013 Indicate whether the Company has asked OVEC whether it has already performed, or would be willing to perform, analysis on the following items:

- a) The net present value and/or going forward-value of the ICPA or OVEC Units (performed more recently than Jan 1, 2018).
- b) The net present value of retiring any OVEC unit by December 31, 2028 to avoid compliance with certain discharge limitations for bottom ash transport wastewater and FGD transport wastewater relative to the net present value of investing in the environmental upgrades and continuing to operate the plant?

RESPONSE

AEP Ohio objects that the request seeks information that is not relevant or likely to lead to the discovery of admissible information. AEP Ohio further objects that the request is vague, overly broad and unduly burdensome. AEP Ohio further objects that this request seeks confidential information. The Company further objects that it does not track the requested information in the ordinary course of business. Without waiving these objections or any general objections the Company may have, the Company states as follows. The Company has not asked OVEC to perform the requested analysis and is not aware of any such analysis performed by OVEC during the audit period.

RESPONSE: The Company has at several different times solicited interest from the other OVEC sponsor companies in acquiring DP&L's share of OVEC.

02-012 Since Jan 1, 2018 indicate whether the Company performed, had performed on its behalf, or been made aware of any analysis of the net present value and/or going forward-value of the ICPA or OVEC Units? If yes, identify each such analysis and produce such analysis(es) along with any underlying workpapers available to the Company.

RESPONSE: The Company has not performed nor been made aware of any such analysis requested in 02-012.

02-013 Indicate whether the Company has asked OVEC whether it has already performed, or would be willing to perform, analysis on the following items:

- a) The net present value and/or going forward-value of the ICPA or OVEC Units (performed more recently than Jan 1, 2018).
- b) The net present value of retiring any OVEC unit by December 31, 2028 to avoid compliance with certain discharge limitations for bottom ash transport wastewater and FGD transport wastewater relative to the net present value of investing in the environmental upgrades and continuing to operate the plant?

RESPONSE: The Company has not asked OVEC for any such analysis and is unaware of any such analysis performed by OVEC or any other owner.

02-014 Regarding the Company's role in any operational or planning decision made by OVEC that impact the costs passed on through the Legacy Generation Rider.

- a) State the Company's role and responsibility in the decision-making process.
- b) Indicate whether the Company had any input or vote over any operational or planning decisions made by OVEC.
- c) State the Company's role and responsibility in the decision-making process.
- d) Indicate whether the Company has any input or vote over any operational or planning decision made by OVEC.

RE

- a) The Company representative participates in the OVEC Operating Committee. The Company representatives also participate in OVEC Board meetings. Company representatives participate and vote in such meetings. Also, each PJM Company in OVEC manages its own respective PJM capacity position by offering its share of OVEC in the RPM auctions. For the Energy Market in PJM, OVEC is responsible for making the daily offers in PJM on behalf of all of the PJM OVEC sponsor companies.
- b) The Company representative in the OVEC Operating Committee participates and votes on issues presented at the Operating Committee level.
- c) The Company's role and responsibilities in the OVEC decision-making process are outlined in the Operating Committee procedures.
- d) See response b.

**This foregoing document was electronically filed with the Public Utilities
Commission of Ohio Docketing Information System on**

10/10/2023 4:11:05 PM

in

Case No(s). 21-0477-EL-RDR

Summary: Exhibit Exhibit and Document Attachments to the Direct Testimony of
Devi Glick (PUBLIC VERSION) electronically filed by Mr. Trent A. Dougherty on
behalf of Citizens Utility Board of Ohio and Union of Concerned Scientists.