Exhibit No. 100

PSC Staff – Exhibit 100
Claire M. Eubanks
Rebuttal Testimony
File No. EA-2022-0328

Exhibit No.:	
Issue(s):	*General Information & Miscellaneous Certificates of Convenience, Feasibility Analysis*
Witness:	*Claire M. Eubanks*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Rebuttal Testimony*
Case No.:	*EA-2022-0328*
Date Testimony Prepared:	*January 17, 2023*

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENGINEERING ANALYSIS DEPARTMENT

REBUTTAL TESTIMONY

OF

CLAIRE M. EUBANKS, P.E.

EVERGY MISSOURI WEST, INC.,
d/b/a Evergy Missouri West

CASE NO. EA-2022-0328

Jefferson City, Missouri
January 2023

****** Denotes Confidential Information ******

REBUTTAL TESTIMONY

OF

CLAIRE M. EUBANKS

EVERGY MISSOURI WEST, INC.,
d/b/a Evergy Missouri West

CASE NO. EA-2022-0328

Q. Please state your name and business address.

A. My name is Claire M. Eubanks and my business address is Missouri Public Service Commission, P.O. Box 360, Jefferson City, Missouri, 65102.

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

A. I am employed by the Missouri Public Service Commission ("Commission") as the Manager of the Engineering Analysis Department of the Industry Analysis Division.

Q. Please describe your educational background and work experience.

A. Please refer to Schedule CME-r1, attached to this Direct Testimony, for my educational background and work experience and a list of cases in which I have filed testimony or recommendations.

Q. What knowledge, skills, experience, training, and education do you have in the areas of which you are testifying as an expert witness?

A. I have received continuous training at in-house and outside seminars on technical matters since I began my employment at the Commission. I have been employed by this Commission as an Engineer for 10 years, and have submitted testimony numerous times before the Commission. I have also been responsible for the supervision of other Commission employees in rate cases and other regulatory proceedings.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to respond to Evergy Missouri West witness Kayla Messamore regarding whether or not the Persimmon Creek wind farm ("Persimmon Creek") is needed to serve its customers.

Q. Please describe Evergy Missouri West's request in this case.

A. On August 18, 2022, Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("EMW") or ("Evergy") filed an application ("Application") that seeks approval of a certificate of convenience and necessity ("CCN") that authorizes EMW to operate, control, manage and maintain the Persimmon Creek Wind Farm located in Oklahoma ("Asset"). Additionally, EMW requests the Commission grant the authority to complete the asset transfer and merger described in the Application. EMW further asks the Commission find that the granting of the authority requested is required by the public convenience and necessity.

Q. Please describe Persimmon Creek.

A. Persimmon Creek, which became commercially operational in August 2018, is located in parts of Woodward, Ellis, and Dewey Counties, Oklahoma near the town of Vici. Persimmon Creek consists of 80 wind turbine generators with a total capacity of 198.6 megawatts ("MW") (seven turbines have a 2.3 MW capacity and 73 turbines have a 2.5 MW capacity). The Asset includes an underground 34.5 kilo-volt ("kV") collection system, project substation, and a 3-mile 345 kV overhead transmission line. At the 345 kV Guthrie Switchyard, power is aggregated with another wind project and is then transmitted over another 11-mile 345 kV transmission line to the Woodward District substation, owned by Oklahoma Gas and Electric Co. The Woodward District substation is the Point of Interconnection ("POI") with the Southwest Power Pool ("SPP") transmission system.

Q. What is Evergy Missouri West's position on whether or not Persimmon Creek wind farm is needed to serve its customers?

A. Evergy Missouri witness Kayla Messamore asserts that EMW has a need for both capacity and energy.

Q. What does it mean for a utility to have a need for capacity?

A. Capacity is the maximum output a generator can physical produce and is measured in megawatts ("MW"). The capacity of all the resources together forms the capacity for an electric utility's system. Electric utilities must ensure there is enough power being produced and delivered to meet their customers' demand. No generation resource will always produce its maximum output (i.e. planned and unplanned outages are expected to occur); therefore utilities are required to reasonably build more capacity to ensure there are enough resources available at times of peak demand.

Q. What does it mean for a utility to have a need for energy?

A. Energy is the amount of electricity a generator produces over a specific time period. A generator's output may vary for a variety of reasons such as fuel availability and cost, market prices, and, for renewable resources, the variability of wind, sun, or water. The demand for electricity also varies over time and season. To keep the system in balance, there must be enough energy available during all times.

Q. Starting with the need for capacity, what are EMW's specific needs?

A. Ms. Messamore asserts EMW needs capacity by 2024.

Q. Does Staff agree there is a need for capacity for EMW by 2024?

A. Yes but only if the Commission is considering EMW on a stand-alone basis. EMW has a capacity need of 170 MW when considering the resources of EMW only. In other

words, in considering its annual forecasted peak demand and only EMW's owned and planned resources, EMW projects a need for a capacity addition in 2024. However, for resource adequacy purposes, SPP considers the contribution of EMW and Evergy Metro. According to EMW, ** [redacted] **[1] When looking at both Evergy utilities combined with no new wind additions, the first capacity need is in 2033.[2] EMW has other options to consider in meeting its capacity needs. For example, ** [redacted] ** Staff witness J Luebbert further discusses the cost for capacity purchases in comparison to building a new resource.

Q. What is resource adequacy?

A. Resource adequacy is the ability of the electricity system to supply aggregate electric power and energy to meet the requirements of consumers at all times, taking into account scheduled and unscheduled outages of system components.[3]

Q. What is SPP's role in resource adequacy?

A. SPP oversees the bulk electric system and administers the wholesale power market on behalf of a group of electric utilities, including Evergy. Evergy, as a load-responsible entity ("LRE"), must ensure it has enough capacity to serve its load at peak times. SPP through

[1] EMW response to Staff Data Request No. 0248.2 in Case No. ER-2022-0130.

[2] EO-2022-0202 EMW 2022 Annual Update IRP, page 90.

[3] NARUC primer on Resource Adequacy, page 6.

its tariffs requires Evergy to demonstrate its compliance with resource adequacy requirements by identifying its owned resources or by procuring capacity through bilateral contracts.

Q. What contribution to accredited capacity would the Persimmon Creek wind farm provide?

A. Because Persimmon Creek is a wind farm, its full capacity is not the same as the accredited capacity for Southwestern Power Pool (SPP) resource adequacy requirements. Recall capacity is the maximum output from a generating resource. Because wind and solar resources are intermittent generators, the capacity these types of resources are able to deliver is lower than its full capacity. EMW estimates approximately 10% of Persimmon Creek's capacity will be accredited by SPP (i.e. approximately 20 MW). Therefore, EMW will need additional resources (or bilateral capacity purchases) to meet its need of 170 MW in 2024. However, because of recent changes to reserve margin and the implementation of performance-based accreditation for thermal resources[4] by SPP the amount of capacity needed by EMW may change.

Q. How does SPP accredit wind resources?

A. On September 6, 2022, SPP filed with the Federal Energy Regulatory Commission (FERC) to revise Attachment AA of its Open Access Transmission Tariff to allow SPP to accredit wind and solar facilities using an Effective Load Carrying Capability ("ELCC") study.[5] The ELCC study is a probabilistic analysis that uses the Loss of Load Expectation ("LOLE") metric of one day in ten years. As part of the ELCC studies, wind and solar resources will be broken into tiers based on certain criteria including whether or not the resource has firm

[4] Thermal resources include nuclear, coal, natural gas, petroleum, biogas, geothermal, or waste heat.
[5] FERC docket ER22-379.

transmission service to deliver energy and capacity. The ability to deliver capacity and energy from a resource to a load is referred to as Network Integration Transmission Service ("NITS"). Wind resources with NITS will be accredited more capacity under the new accreditation policies. Tier 1 wind facilities are those with NITS up to 35% of the LRE's average seasonal net peak load.[6] Tier 2 facilities are the remaining wind designated resources with NITS in excess of 35%. Persimmon Creek does not currently have firm network service from the Persimmon POI to EMW's load zone[7] and therefore would be a tier 3 wind facility unless Evergy pursues firm transmission service.

Q. Has Evergy incorporated the changes to SPP's reserve margin requirement in its IRP?

A. No. In its *Notification of Preferred Resource Plan Change*, EMW notes that its change only addresses near-term wind acquisition: "Other changes related to changes to the Southwest Power Pool's reserve margin requirement and the passage of the IRA, for example, will be incorporated as a holistic update in EMW's 2023 annual update filing." Staff questions the reasonableness of EMW pursuing a $245 million project prior to its consideration of changes in SPP's reserve margin requirement and the passage of the Inflation Reduction Act. EMW is planning to submit its 2023 annual update on June 15, 2023.[8]

Q. Previously you mentioned EMW asserts it has a need for energy, what is EMW's position in this case?

[6] SPP defines Seasonal Net Peak Load as: the actual demand including a) transmission losses for energy, b) the impacts of Non-Controllable and Non-Dispatchable Behind-The-Meter Generation, c) the impacts of Non-Controllable and Non-Dispatchable Demand Response Programs, and d) the impacts of Demand Response Programs measured over a one clock hour period during either the Summer Season or Winter Season.
[7] Direct Testimony of Jason Humphrey, page 16, lines 9-10.
[8] *Evergy Missouri West's Motion for Variance to Extend time to file Resource Plans*, EO-2023-0213.

A. Regarding the need for energy, Ms. Messamore clarifies that the energy need is "not generally referring to a need for physical energy (i.e. electrons produced at the time EMW needs them) per se, but to the need for economic generation sources to mitigate exposure to market energy costs."[9] In other words, there is not a need for energy. Instead EMW wants to pursue this project as a hedge against market prices. Staff witness J Luebbert further discusses the economic efficiency of using Persimmon Creek/wind resources as a hedge against market prices.

Q. Is Staff fundamentally opposed to the transition of the electric utilities' fleets from fossil fuels to renewables?

A. No. Staff understands that there is a need to reduce carbon emissions. However, Staff is concerned about the potential of moving towards renewables solely for the sake of adding more renewable generation facilities to a utilities' fleet. As an investor-owned utility, EMW is financially incentivized to build rate base to increase shareholder profits and the transition to renewables will require more resources to offer the same quality of service. The Commission should continue to carefully consider the purported need of each resource addition and whether each resource addition promotes the public interest.

Q. Does that conclude your rebuttal testimony?

A. Yes.

[9] Kayla Messamore supplemental direct testimony page 5, lines 9-15.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Permission and Approval of a Certificate of Public Convenience and Necessity Authorizing It to Purchase, Own, Operate, Maintain and Otherwise Control and Manage an Existing Wind Generation Facility in Oklahoma	)	Case No. EA-2022-0328

AFFIDAVIT OF CLAIRE M. EUBANKS, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CLAIRE M. EUBANKS, PE and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Rebuttal Testimony of Claire M. Eubanks, PE*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Claire M Eubanks
CLAIRE M. EUBANKS, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 13th day of January 2023.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

D Suzie Mankin
Notary Public

CLAIRE M. EUBANKS, PE

PRESENT POSITION:

I am the Manager of the Engineering Analysis Department, Industry Analysis Division of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

I received my Bachelor of Science degree in Environmental Engineering from the University of Missouri – Rolla, now Missouri University of Science and Technology, in May 2006. I am a licensed professional engineer in the states of Missouri and Arkansas. Immediately after graduating from UMR, I began my career with Aquaterra Environmental Solutions, Inc., now SCS Aquaterra, an engineering consulting firm based in Overland Park, Kansas. During my time with Aquaterra, I worked on various engineering projects related to the design, construction oversight, and environmental compliance of solid waste landfills. I began my employment with the Commission in November 2012 and was promoted to my current position in April 2020.

Currently, I am the co-chair of the NARUC Staff subcommittee on Electric Reliability & Resilience.

CASE HISTORY:

Case Number	Utility	Type	Issue
EA-2012-0281	Ameren	Rebuttal	Certificate of Convenience and Necessity
EC-2013-0379 EC-2013-0380	KCP&L KCP&L GMO	Rebuttal	RES Compliance
EO-2013-0458	Empire	Memorandum	RES Compliance Plan & Report
EO-2013-0462	Ameren	Memorandum	RES Compliance Report
EO-2013-0503	Ameren	Memorandum	RES Compliance Plan
EO-2013-0504	KCPL	Memorandum	RES Compliance Plan & Report
EO-2013-0505	GMO	Memorandum	RES Compliance Plan & Report
ET-2014-0059	KCP&L GMO	Rebuttal	RES Retail Rate Impact
ET-2014-0071	KCP&L	Rebuttal	RES Retail Rate Impact
ET-2014-0085	Ameren	Rebuttal	RES Retail Rate Impact
ER-2014-0258	Ameren	Cost of Service Report, Surrebuttal	RES, In-Service

Case Number	Utility	Type	Issue
EO-2014-0151	KCP&L GMO	Memorandum	RESRAM
EO-2014-0357	Electric	Memorandum	Solar Rebates Payments
EO-2014-0287	KCPL	Memorandum	RES Compliance Plan
EO-2014-0288	GMO	Memorandum	RES Compliance Plan
EO-2014-0289	KCPL	Memorandum	RES Compliance Report
EO-2014-0290	GMO	Memorandum	RES Compliance Plan
ER-2014-0370	KCP&L	Cost of Service Report	RES
EX-2014-0352	N/A	Live Comments	RES rulemaking
EC-2015-0155	GMO	Memorandum	Solar Rebate Complaint
EO-2015-0260	Empire	Memorandum	RES Compliance Plan & Report
EO-2015-0263	KCPL	Memorandum	RES Compliance Report
EO-2015-0264	GMO	Memorandum	RES Compliance Report
EO-2015-0265	KCPL	Memorandum	RES Compliance Plan
EO-2015-0266	GMO	Memorandum	RES Compliance Plan
EO-2015-0267	Ameren	Memorandum	RES Compliance Plan & Report
EO-2015-0252	GMO	Staff Report	Integrated Resource Plan – Renewable Energy Standard
EO-2015-0254	KCPL	Staff Report	Integrated Resource Plan – Renewable Energy Standard
EA-2015-0256	KCP&L GMO	Live Testimony	Greenwood Solar CCN
EO-2015-0279	Empire	Memorandum	RES Compliance Plan & Report
ET-2016-0185	KCP&L	Memorandum	Solar Rebate Tariff Suspension
EO-2016-0280	KCPL	Memorandum	RES Compliance Report
EO-2016-0281	GMO	Memorandum	RES Compliance Report
EO-2016-0282	KCPL	Memorandum	RES Compliance Plan
EO-2016-0283	GMO	Memorandum	RES Compliance Plan
EO-2016-0284	Ameren	Memorandum	RES Compliance Plan & Report
ER-2016-0023	Empire	Report	RES
ER-2016-0156	KCP&L GMO	Rebuttal	RESRAM Prudence Review

Case Number	Utility	Type	Issue
EA-2016-0208	Ameren	Rebuttal	Certificate of Convenience and Necessity
ER-2016-0285	KCPL	Cost of Service Report	In-Service, Greenwood Solar
ER-2016-0179	Ameren	Rebuttal	In-Service, Labadie Landfill
EW-2017-0245	Electric	Report	Working Case on Emerging Issues in Utility Regulation
EO-2017-0268	Ameren	Memorandum	RES Compliance Plan & Report
EO-2017-0269	KCPL	Memorandum	RES Compliance Report
EO-2017-0271	KCPL	Memorandum	RES Compliance Plan
GR-2017-0215 & GR-2017-0216	Spire	Rebuttal & Surrebuttal	CHP for Critical Infrastructure
GR-2018-0013	Liberty Utilities (Midstates Natural Gas)	Rebuttal	CHP Outreach Initiative for Critical Infrastructure Resiliency
EO-2018-0287	Ameren	Memorandum	RES Compliance Plan & Report
EO-2018-0288	KCPL	Memorandum	RES Compliance Report
EO-2018-0290	KCPL	Memorandum	RES Compliance Plan
EA-2016-0207	Ameren	Memorandum	Certificate of Convenience and Necessity
ER-2018-0146	GMO	Cost of Service Report	RESRAM Prudence Review
ER-2018-0145 ER-2018-0146	KCPL GMO	Class Cost of Service Report, Rebuttal	Solar Subscription Pilot Rider, Standby Service Rider
EA-2018-0202	Ameren	Staff Report	Certificate of Convenience and Necessity
EE-2019-0076	Ameren	Memorandum	Variance Request – Reliability Reporting
EA-2019-0021	Ameren	Staff Report	Certificate of Convenience and Necessity
EA-2019-0010	Empire	Staff Report	Certificate of Convenience and Necessity
EX-2019-0050	N/A	Live Comments	Renewable Energy Standard

Case Number	Utility	Type	Issue
EO-2019-0315	KCPL	Memorandum in Response to Commission Questions	Renewable Energy Standard
EO-2019-0316	GMO	Memorandum	Renewable Energy Standard
EO-2019-0317	KCPL	Memorandum in Response to Commission Questions	Renewable Energy Standard
EO-2019-0318	GMO	Memorandum	Renewable Energy Standard
ER-2019-0335	Ameren	Cost of Service Report	Renewable Energy Standard, In-Service Criteria
EA-2019-0371	Ameren	Staff Report	Certificate of Convenience and Necessity
EO-2020-0329	Evergy Missouri Metro	Memorandum	Renewable Energy Standard
EO-2020-0330	Evergy Missouri West	Memorandum	Renewable Energy Standard
EE-2021-0237	Evergy Missouri Metro	Memorandum	Cogeneration Tariff
EE-2021-0238	Evergy Missouri West	Memorandum	Cogeneration Tariff
EE-2021-0180	Ameren Missouri	Memorandum	Electric Meter Variance
ET-2021-0151 and 0269	Evergy	Memorandum, Rebuttal Report	Transportation Electrification
AO-2021-0264	Various	Staff Report	February 2021 Cold Weather Event
EW-2021-0104	n/a	Staff Report	RTO Membership
EW-2021-0077	n/a	Staff Report	FERC Order 2222
EO-2021-0339	Evergy Missouri West	Memorandum	Territorial Agreement
GR-2021-0108	Spire	Rebuttal	Automated Meter Reading Opt-out Tariff
EA-2021-0087	ATXI	Rebuttal Report	Certificate of Convenience and Necessity
ER-2021-0240	Ameren Missouri	Cost of Service Report Rebuttal	In-Service Bat Mitigation

Case Number	Utility	Type	Issue
ER-2021-0312	Empire	Cost of Service Report	Construction Audit – Engineering Review, In-service
EO-2022-0061	Evergy Missouri West	Surrebuttal	Special Rate/ Renewable Energy Standard
EA-2022-0099	ATXI	Rebuttal	Certificate of Convenience and Necessity
ER-2022-0129	Evergy Missouri West	Direct Rebuttal	Advanced Metering Infrastructure, Reliability, Transmission & Distribution Investment, PISA reporting, Misc. Tariff issues
ER-2022-0130	Evergy Missouri Metro	Direct Rebuttal Surrebuttal/True-Up	Advanced Metering Infrastructure, Reliability, Transmission & Distribution Investment, PISA reporting, Misc. Tariff issues
EE-2022-0329	Ameren Missouri	Memorandum	Variance Request
GR-2022-0179	Spire Missouri	Direct Rebuttal	Metering Infrastructure
ER-2022-0337	Ameren Missouri	Direct Testimony	Rush Island, High Prairie, Smart Energy Plan