

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company d/b/a)
Ameren Missouri's 2020 Utility Resource Filing)
Pursuant to 20 CSR 4240 – Chapter 22)

Case No. EO-2021-0021

**CLEAN GRID ALLIANCE'S REPLY TO
RESPONSE OF AMEREN MISSOURI TO ALLEGED DEFICIENCIES AND
CONCERNS**

Dated: July 19, 2021

Clean Grid Alliance, by its counsel, respectfully submits its reply (pursuant to 20 CSR 4240-22.080 and Notice issued by the Commission on June 21, 2021) to Union Electric Company d/b/a Ameren Missouri's response filed on June 18, 2021.

Clean Grid Alliance agrees with and supports Ameren Missouri's response to Staff's Deficiency 1. (See Ameren Missouri Response, Exhibit A at 2-15). Ameren Missouri analyzed renewable and non-renewable resources in an equivalent basis and therefore no further hearings or briefing regarding Staff Deficiency 1 are necessary.

Background

In its report, Staff argues that Ameren Missouri's integrated resource plan ("IRP") does not conform to the requirements of 20 CSR 4240-22.010(2)(A), which states:

Consider and analyze demand-side resources, renewable energy, and supply-side resources on an equivalent basis, subject to compliance with all legal mandates that may affect the selection of utility electric energy resources, in the resource planning process

Staff argues that Ameren Missouri evaluated non-renewable supply-side resources at a minimum size of 300 MW but did not analyze renewable resources based on Ameren's projected capacity need. (Staff Report at 6 and 8).

Argument

Ameren Missouri analyzed all resources under equivalent scenarios. Ameren's scenarios identified a pending energy shortfall. (Ameren IRP, fig. 10.3 and 10.4). Ameren Missouri analyzed all of the supply-side resources and selected the least cost resources to meet the energy supply need. (Ameren IRP, ch. 10:2-3, and 22). Table 6.7 of the IRP identified the cost of each supply-side resource. Staff did not challenge these costs.

Table 6.7 Levelized Cost of Energy Component Analysis²⁰

Potential Resource	Levelized Cost of Energy (¢/kWh)								
	Capital	Fixed O&M	Variable O&M	Fuel	Resource Specific Cost*	CO ₂	SO ₂	NO _x	Total Cost
Solar (100MW)	4.28	0.20	--	--	--	--	--	--	4.49
Solar (10 MW)	4.50	0.26	--	--	--	--	--	--	4.75
Wind	3.82	1.05	0.00	--	--	--	--	--	4.87
Solar + BESS (100MW+25MW)	5.36	0.31	0.00	--	--	--	--	--	5.66
Solar + BESS (10MW+2.5MW)	6.12	0.36	0.00	--	--	--	--	--	6.48
Combined Cycle: Two 1x1x1	3.47	0.91	0.32	2.02	--	0.30	0.00	0.00	7.01
Hydro: Pomme de Terre	7.40	0.69	0.00	--	--	--	--	--	8.10
Hydro: Mississippi L&D 21	9.48	0.67	0.00	--	--	--	--	--	10.15
Storage: Pumped Hydro	8.09	0.23	0.40	--	3.81	--	--	--	12.53
Hydro: Clearwater	11.76	1.04	--	--	--	--	--	--	12.80
Landfill Gas	5.80	1.85	1.53	4.03	--	--	0.00	0.00	13.22
Nuclear	11.69	1.93	0.31	0.75	0.21	--	--	--	14.89
Storage: Li-Ion Battery (4h)	14.50	0.08	0.00	--	2.98	--	--	--	17.55
Simple Cycle	17.50	2.32	1.35	3.18	--	0.46	0.00	0.00	24.81

* Nuclear Decommissioning, Hydro Pumping, Battery Charging

Ameren Missouri selected the least cost resources to meet the projected energy shortfall, but also evaluated the risk around that addition relative to external market factors -- including market for development of renewable and non-renewable resources, transmission expansion, likely federal energy and environmental policies, corporate and residential customer interest in consuming lower emission resources, and value of available tax credits – in coordination with continued use of its existing generating resources. (Ameren IRP, ch. 7, 9 and 10). Ameren Missouri also analyzed its system’s reliability and resource adequacy needs when adding the least cost renewable resources, and found that it could modify the use of existing resources to cost effectively address reliability and resource adequacy needs. (Ameren IRP, ch. 10:13, 14-15, and 23). While CGA believes different choices should have been made by Ameren Missouri with respect to issues CGA raised in its initial comments, CGA’s understanding of the IRP is that

Ameren Missouri analyzed resources in an equivalent manner. Ameren Missouri did so by evaluating resource costs on an equivalent basis, selecting resources with the least cost impact to ratepayers, while also considering external factors, and cost effectively complying the mandates related to reliability and resource adequacy.

CONCLUSION

Wherefore, the Commission does not need to take further evidence or briefing on Staff Deficiency 1.

Dated: July 19, 2021

Respectfully submitted,

Clean Grid Alliance

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