Date Filed: March 31, 2026

Witness: GLADEY, DAVID L
Request from: Public Utilities Regulatory Authority

Question:

Att. 16, pp. 3-5. Justify the Company's 22.5 MWh sizing of the battery storage solution to the Campville14R31 ROW grid need by providing:

a. A narrative description of how the Company arrived at the value of 22.5 MWh as the minimum required size of the battery storage solution;
b. The peak load profiles demonstrating that a minimum of 6.25 MVA for four hours is required to eliminate overload conditions;
c. An explanation of why the Company assumed a 10-year growth rate of 1.43% and any historical data and forecast information to support this assumption.

Response:

The Campville 14R31 ROW project has been updated to reflect the completion of CD02350 which was placed in service in 2025. The project revisions reflect a reduction in the overload magnitude on the 14R31 circuit and include updated 2025 summer peak load data within the project load sheet. The overall scope of the project has not changed, the NWS battery size has been reduced in Option 5 from 22.5 MWh to 7.5 MWh. In order to evaluate all the options equally, aging infrastructure replacements in the ROW were included within the NWS option as the overall scope of the project addresses both overload and aging infrastructure.

a. The minimum required battery capacity was determined by forecasting the identified contingency overload over a ten-year planning period, resulting in a projected overload of 1.5 MVA. This capacity was then multiplied by a five-hour outage duration of overload, yielding an estimated battery energy storage requirement of approximately 7.5 MWh.

b. The peak load profile demonstrates that a minimum of 1.5 MVA for five hours is required to eliminate overload conditions. The 1.5 MVA is based on 1.3 MW, a 90% power factor and anticipated 10-year load growth.

14R31-61R Load profile (Amps at 27.6 kV) while supporting the 11M62 and 11M3 load



c. The Company forecasts that load on the Campville 14R Substation will grow by approximately 0.43% annually over the ten-year planning period. This forecast is derived from a ten-year compound annual growth rate (CAGR) analysis specific to the Campville 14R Substation.

CAGR Analysis for Campville 14R

Station	Campville_14R		**Total**	
Year	Load	%chg	**Load**	**%chg**
2024	60.08765		**60.08765**	
2025	59.82087	-0.44%	**59.82087**	**-0.44%**
2026	59.74355	-0.13%	**59.74355**	**-0.13%**
2027	59.91223	0.28%	**59.91223**	**0.28%**
2028	60.16153	0.42%	**60.16153**	**0.42%**
2029	60.539	0.63%	**60.539**	**0.63%**
2030	61.06592	0.87%	**61.06592**	**0.87%**
2031	61.71041	1.06%	**61.71041**	**1.06%**
2032	62.51769	1.31%	**62.51769**	**1.31%**
2033	63.50988	1.59%	**63.50988**	**1.59%**

Station	CF 25-34	LF 24-33	CF Selected Years
Campville_14R	0.43%	0.62%	0.77%
Total	**0.43%**	**0.62%**	**0.77%**