

The Empire District Electric Company d/b/a Liberty Case No. ER-2024-0261 Missouri Public Service Commission Data Request - 0191.2

Data Request Received: 2025-03-27Response Date: 2025-04-16Request No. 0191.2Witness/Respondent: Candice KellySubmitted by: Tyrone Thomason, Tyrone.Thomason@psc.mo.gov

REQUEST:

Pertaining to the list of causes for missing AMI interval reads provided in response to DR 191.1: Were interval AMI reads being missed for these reasons prior to the conversion to SAP? If so, please explain how this issue was handled prior to Customer First, whether or not the process was automated or manual, and why a similar approach has not been implemented with SAP.

RESPONSE:

The legacy CIS system had the same issues with readings from the AMI meters. The difference is that in the legacy system, "register read estimations" was not implemented. The legacy CIS system process would take the difference of the (On peak reads + Off peaks reads) and measure them against the register read. The delta would be applied to the on-peak and off-peak reads based on a load shape algorithm. The percentage of on/off peak usage based on the total of the on/off peak usage was applied to the difference between the on/off peak usage total and the register consumption. Example: Register usage for the billing period was 1,000 kWh. On-Peak 500 kWh Off-Peak 300 kWh totaling 800 kWh. Of the 800 kWh the On-Peak percentage 63%, the Off-Peak percentage 37%. The 200kWh difference was then allocated by adding 63% of 200 kWh to the On-Peak value: 626 kWh, allocated 37% of 200 kWh to the Off-Peak value: 354 kWh. This was an automated process in the legacy CIS system.

A similar approach was implemented in March 2025, but is not fully automated. Currently, a daily process is run to apply the percentages to the reads until automation is in place.