Ameren Missouri's
Response to MPSC Data Request - MPSC
GR-2024-0369
In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust Its Revenues for Natural Gas Service

No.: MPSC 0251

Reference pages 12 and 13 of the direct testimony of Pamela Harrison. 1) Please provide a description of Ameren Missouri's load modeling process, including the timing of the models, the intervals for which Ameren Missouri performs load analysis, and the personnel involved. 2) Please provide Ameren Missouri's historical load models for the northeast system that were finalized as of September 30 and December 31 for each year from 2015 to current. Provide the load models in Microsoft Excel format with formulas intact and all assumptions identified. 3) Please explain in detail, including a narrative timeline of events regarding when Ameren Missouri became aware of capacity issues regarding its gas operations, the planning and execution of the Wentzville expansion project, including but not limited to the need for separate phases of the Project.

RESPONSE

Prepared By: Pam Harrison
Title: Sr. Director, Missouri Gas Operations
Date: 01/15/25

1) Ameren Missouri's Integrity group is responsible for system planning and performing gas engineering and planning studies to identify areas of the gas distribution and transmission system that may require enhancements or additions to meet the system load requirements under peak day conditions. They utilize comprehensive gas system models that simulate the performance of the gas system under a variety of temperature and operating conditions. During the simulation, the model predicts pressures and flows and will identify any locations on the system where gas pressure is low and system enhancement may be required. These load models are performed as-needed on systems with known capacity constraints and any time new significant loads are introduced onto a system.
2) Historical load models are not readily downloaded into excel formats. Ameren Missouri Integrity personnel would suggest scheduling an opportunity to provide PSC staff a demonstration to review the historical load models that have been developed for the Northeast Territory Gas System Reliability Upgrade Project including the outputs and assumptions used in the models.

3) Ameren Missouri experienced outages on 1/1/2018 and 1/16/2018 during extremely cold temperatures on the Northeast system. The outages impacted customers located in 2 residential subdivisions in Wentzville south of Interstate 70.
    a. Following those outages in 2018, flow models were updated and indicated the need for system capacity reinforcements on the system to maintain service throughout the system during peak days and meet future demand.
    b. Throughout 2018 & 2019, a team including representatives from gas operations, gas engineering, gas supply, legal and the project management office developed potential solutions to addressing both short-term and long-term system capacity concerns and performed an alternative analysis on long term solution options for the Northeast system.
    c. In 2018, additional distribution system enhancements were made to provide loop feeds into the subdivisions where the outages occurred.
    d. A temporary Liquid Natural Gas (LNG) facility was established to provide distribution system support for the 2019-2020 winter season.
    e. In 2019, an uprate of the downstream feeder system was performed to provide additional downstream pressure support.
    f. Late in 2019, work order J0NHT was opened to begin preliminary design work on the Gas Reliability Upgrade Project.
    g. Procurement of engineering services and project design started in early 2020.
    h. For the 2020-2021 winter season, Gas Supply was able to contract for additional supply from MO Gas Pipeline which eliminated the need to utilize LNG for pressure support on peak days.
    i. The project team began evaluating a phased approach to the project in late 2020 considering factors such as demand, constructability and incremental capacity gains and settled upon a 3-phase approach to the project.
    j. CPOC Gate 1 approval was obtained in April 2022 for phase 1 and 2; CPOC Gate 2 approval was obtained for phase 1 and phase 2 in March 2023; Finance Committee approval obtained in May 2023 and CPOC Gate 3 approval in October 2023.
    k. Construction package for phase 1 and 2 was put out for bid in fall of 2022 and contract awarded in fall of 2023.
    l. Material procurement and construction mobilization began in late 2023 for phase 1.
    m. Phase 1 project was put in service in Sept 2024.
    n. Phase 2 material procurement began in late 2024 with construction mobilization beginning in Jan 2025.