



Evergy Missouri Metro
Case Name: 2026 Evergy MO Metro Rate Case
Case Number: ER-2026-0143

Requestor Alvarez P -
Response Provided June 09, 2026

Question:5006

Refer to the responses to OPC 2015 (a) and (b), which indicate the Company replaced 30 substation transformers during 2021-2025.

a. Describe the Company's substation transformer replacement program. Provide the approved capital spending request and all associated materials for the capital expenditures made under this program. If completed annually, provide the approved capital spending requests by year from 2021-2025.

b. Refer to the Company's responses to subparts (a) above. Provide each and every benefit-cost analysis the Company completed, and identify each which indicated that the benefits of the program were likely to exceed costs. If the Company completed no such analysis, please explain why not.

c. Provide a list of substation transformer replacement projects the Company 1) placed into service since the Company's last rate case through the end of the test year in this case; and ii) has placed or expects to place into service during the post-test year period. For each project please provide:

i. The year and month the project was placed, or that is projected for placement, into service.

ii. The capital cost of the project.

iii. The alphanumeric identifier for the project's substation or circuit such that the identifier matches those used in response to your responses to OPC 2004 and OPC 2006.

iv. Your justification for why the transformer replacement was required for safe and reliable service.

v. The 'score' for the asset replaced or the project (from Asset Lens?).

vi. The inputs into each of the six score drivers (as described in the Company's response to OPC 2020).

vii. Each and every benefit-cost analysis completed on the project (including workpapers, assumptions, inputs, etc.)

RESPONSE: (do not edit or delete this line or anything above this)

Confidentiality: PUBLIC

Statement: This response is Public. No Confidential Statement is needed.

Response:



- a) The Company's substation transformer replacement program is based on a condition-based and predictive maintenance framework. Replacement needs are identified through ongoing monitoring and diagnostic testing, particularly transformer oil analysis and related condition assessments, which are used to detect deterioration and elevated risk of failure.

Under this program, transformers are evaluated using asset condition indicators derived from these diagnostic results, as well as operational considerations. When condition assessments indicate an increased likelihood of failure or reduced performance, the transformer is prioritized for proactive replacement.

The Company's approach emphasizes engineering judgment and asset health metrics to inform replacement decisions, rather than reliance on fixed age thresholds or purely reactive replacement following failure.

The primary objective of the program is to avoid in-service transformer failures and to preserve or improve system reliability. By replacing transformers prior to failure, the Company seeks to reduce the risk of unplanned outages, minimize potential equipment damage, and maintain consistent service to customers.

The Company conducts asset replacement activities as part of its broader capital investment programs. Capital expenditures are generally approved at the project level and often encompass multiple asset types within a single scope.

In addition, the Company maintains certain asset-specific funding authorizations for replacement activities. However, these authorizations capture only a portion of total expenditures. A substantial number of asset replacements are performed within larger, multi-scope capital projects (e.g., facility upgrades or system improvements), and associated costs are not separately tracked or reported by individual asset type.

Accordingly, the Company does not maintain capital spending requests or reporting specific solely to individual asset types.

- b.) The Company did not complete any formal benefit-cost analyses for the proactive, planned replacement of substation transformers.

These replacement decisions are based on condition-based and predictive maintenance practices, specifically the results of transformer oil testing and related diagnostic assessments, which are used to identify elevated risk of failure.

As such, the Company relies on engineering judgment and asset condition indicators rather than formal economic modeling to support replacement decisions.

The primary benefit of proactive replacement is the avoidance of in-service failures and the preservation or improvement of customer reliability. While these reliability benefits are material, they are not readily quantifiable on a project-specific basis and therefore have not been incorporated into a formal benefit-cost framework.

- c.) (Response for i. - iii.)

While certain transformer replacements may be executed under asset-specific funding authorizations, a significant number are performed within larger, multi-scope capital



projects (e.g., substation upgrades or system improvements), where transformer replacements are one component of the overall work and are not separately tracked or reported.

Accordingly, the Company does not maintain a comprehensive, consolidated list of transformer replacement projects specific to this request.

iv.) Proactive transformer replacements are required to support safe and reliable service by mitigating the risk of in-service transformer failure. Transformer failures can result in extensive, unplanned customer outages, as well as potential equipment damage and safety risks to personnel and the public.

In addition to reliability impacts, unplanned failures typically require emergency response, expedited procurement, and complex restoration activities, all of which increase operational risk and cost. Industry experience indicates that recovery from unplanned transformer failures can cost approximately three to five times more than planned replacements under controlled conditions.

Proactive replacement under planned conditions allows for controlled outages, improved coordination, and reduced system risk, thereby supporting the safe, reliable, and cost-effective operation of the electric system.

v.) Asset Lens is not utilized in the evaluation or prioritization of substation transformer replacement projects; therefore, no such score is available.

vi.) The inputs to each of the six score drivers are described in the Company's prior response to OPC 2020, which outlines the data and considerations underlying each driver.

vii.) See response to subpart (b) regarding benefit-cost analyses.

Information provided by: Jesse Whipple

Attachment(s):



Missouri Verification:

I have read the Information Request and answer thereto and find answer to be true, accurate, full and complete, and contain no material misrepresentations or omissions to the best of my knowledge and belief; and I will disclose to the Commission Staff any matter subsequently discovered which affects the accuracy or completeness of the answer(s) to this Information Request(s).

Signature /s/ *Brad Lutz*
Director Regulatory Affairs