Sub Regional RTEP Committee: Western Dayton Supplemental Projects

Solutions

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process





- Need Number: Dayton-2021-009
- Process Stage: Solution Meeting 10/15/2021
- Previously Presented: Need Meeting 8/16/2021
- Project Driver: Source for underlying distribution
- Specific Assumption Reference: Dayton Local Plan Assumptions (Slide 5)
- Problem Statement:
- ➤ A major customer served from Xenia substation is planning to add approximately 4MW of load by 2023. This potential growth paired with the development of two nearby industrial parks will trigger the need for potential system reinforcements east of Xenia.
- ➤ AES Ohio is planning to build a new 69kV ring bus substation called Jasper in 2023 (s2255.1) to eliminate a three terminal line and to improve reliability on the 6636 Jamestown-Cedarville-Xenia-Glady Run circuit. The 6636 transmission line is a 31-mile circuit constructed primarily with wood poles. The yellow star shown on the map is an approximate location of Jasper Substation and is centrally located to serve future load growth.
 - ➤ There have been a total of 17 outages on this circuit for a total of 1245 minutes over the last 5 years.
 - ➤ The performance of this line will improve with the addition of Jasper Substation but Xenia Substation will still have exposure to transmission outages with the distribution transformers tapped from a line position between Xenia and Jasper.

Dayton d/b/a AES Ohio Transmission Zone M-3 Process Dayton, Ohio

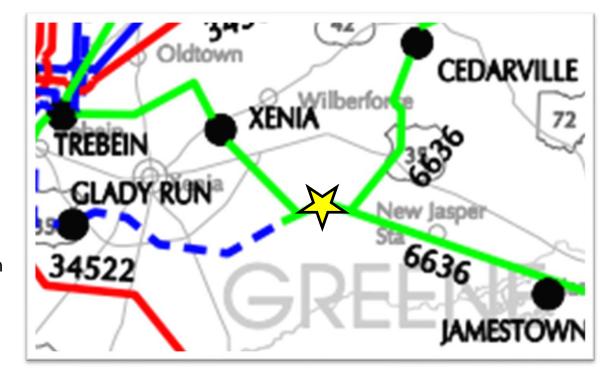


Figure 1 : Area Map









Dayton d/b/a AES Ohio Transmission Zone M-3 Process Dayton, Ohio

Need Number: Dayton-2021-009

Process Stage: Solutions Meeting 10/15/2021

Selected Solution:

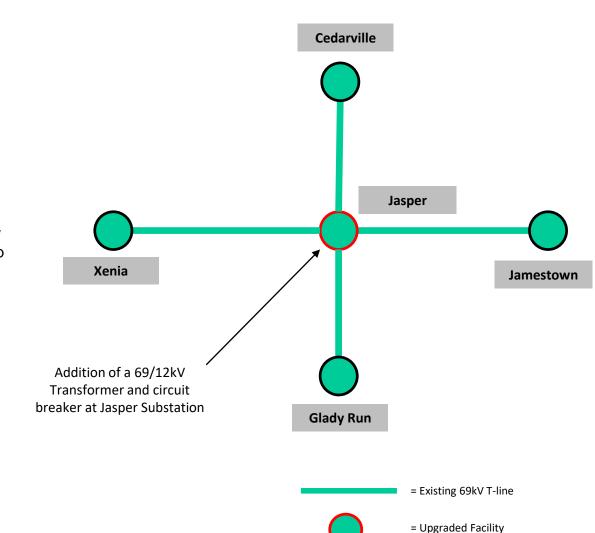
➤ Jasper Substation: A new 69/12kV transformer will be installed at Jasper Substation and terminated into a new 69kV breaker position. This will expand Jasper Substation from a four breaker 69kV ring bus to a five breaker 69kV ring bus. This transformer will increase capacity to serve the new customer load addition coming online and will also support growth in the nearby industrial parks. Further, this will enhance operational flexibility via adding new switching capability between Jasper and Xenia Substations to perform maintenance and help reduce extended outage times due to enhanced switching between the substations.

> Estimated cost: \$310K

Projected In-Service: 12/31/2023

Project Status: Conceptual

➤ Model: 2021 RTEP – 2026 Summer Case





Appendix

High Level M-3 Meeting Schedule

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| Activity | Timing |
|---|------------------------------------|
| Posting of TO Assumptions Meeting information | 20 days before Assumptions Meeting |
| Stakeholder comments | 10 days after Assumptions Meeting |

Needs

| Activity | Timing |
|--|------------------------------|
| TOs and Stakeholders Post Needs Meeting slides | 10 days before Needs Meeting |
| Stakeholder comments | 10 days after Needs Meeting |

Solutions

| Activity | Timing |
|--|----------------------------------|
| TOs and Stakeholders Post Solutions Meeting slides | 10 days before Solutions Meeting |
| Stakeholder comments | 10 days after Solutions Meeting |

Submission of Supplemental Projects & Local Plan

| Activity | Timing |
|---|---|
| Do No Harm (DNH) analysis for selected solution | Prior to posting selected solution |
| Post selected solution(s) | Following completion of DNH analysis |
| Stakeholder comments | 10 days prior to Local Plan Submission for integration into RTEP |
| Local Plan submitted to PJM for integration into RTEP | Following review and consideration of comments received after posting of selected solutions |

Revision History

10/5/2021 – V1 – Original version posted to pjm.com